

# What We Heard: Community Consultations on a New Ministerial Order Marine Protected Area in Tuvaijuittuq

April 3-18, 2023



Arctic Bay – April 3, 2023



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## Acknowledgements

The Tuvaijuittuq Working Group would like to thank the communities of Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord for their time and hospitality during our community visits. We would especially like to thank the Hunters and Trappers Associations (HTAs), Hamlet Councils, and Mayoral offices for their participation and knowledge-sharing. Finally, we would like to acknowledge the Qikiqtani Inuit Association for leading the coordination of these meetings.

## Our Team

The Tuvaijuittuq Working Group has members from the Qikiqtani Inuit Association (QIA), Fisheries and Oceans Canada (DFO), Parks Canada Agency (PCA), and the Government of Nunavut (GN). Four participants included representatives from each organization involved in the Working Group.



*Tuvaijuittuq Working Group members attending consultations in Clyde River, Arctic Bay and Pond Inlet (left photo) and in Resolute Bay and Grise Fiord (right photo). Left Photo, left to right: Syzula Ikkidluak (QIA), Delaney Ewing (DFO), Madelaine Kellett (DFO), Bernie MacIsaac (GN), and Justin Hack (GN). Right Photo, left to right: Sarah Kennedy (DFO), Bethany Schroeder (DFO), Iselena Natsiapik (QIA), Daniel Haney (GN), and Bernie MacIsaac (GN).*



## Executive Summary

The Tuvaijuittuq Working Group, with members from QIA, DFO, PCA, and GN, conducted community consultations in Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord between April 3 - 18, 2023. Arctic Bay consultations were held on April 3, 2023.

The purpose of these consultations was to discuss a request by QIA to establish a new Ministerial Order Marine Protected Area (MPA) to explore an Inuit-led Protected and Conserved Area (IPCA) for Tuvaijuittuq. The Working Group also shared information on our proposed approach to regulations for this new short-term MPA, and sought community feedback and support on the proposal. The purpose of this report is to summarize the feedback provided by community members who attended the meetings in Arctic Bay, to provide transparency in the process, to provide a record of the discussions and concerns shared by the community, and to provide additional information to questions raised during consultations. To ensure we have accurately captured what we heard, this report has been circulated to the Ikajutit HTA and Arctic Bay Hamlet Council for review. Individual reports were developed for each community and after HTAs and hamlet councils have had an opportunity to comment, these reports will be shared with all five communities.

There were no objections from the Ikajutit HTA and Arctic Bay Hamlet Council for pursuing a new Ministerial Order MPA in Tuvaijuittuq, which will protect the area for up to five years while partners explore an IPCA. There is interest in the community of Arctic Bay in protecting Tuvaijuittuq in the short-term as well as into the long-term, given the area's importance, concerns about climate change and shipping impacts, and to protect Tuvaijuittuq from the interests of other countries to the extent possible. Economic opportunities are also important for future generations of Inuit and there is concern that long-term protection might limit these. It will be important to consider these issues when exploring long-term options for the area. Tuvaijuittuq has been used by past generations of Inuit for hunting and has significance to Inuit. Nearshore areas of Tuvaijuittuq are particularly important for animals who depend on holes in the ice because multi-year ice is too thick. The community would like more information on the impacts of climate change in this area and across the Arctic, and supports continued research in Tuvaijuittuq. The community has noticed a shift in animals moving north while new animals are coming to Arctic Bay from the south.

### What We Heard From Communities Overall

A common theme heard from communities was a desire to learn more about the MPA, including the animals and habitats that occur there, potential for future economic opportunities, and the types of research done in the area. There is interest from all five communities to protect Tuvaijuittuq in both the short-term and long-term, but also in balancing protection with economic opportunities for future generations. Interest in protecting the area is based on Tuvaijuittuq's ecological importance, its significance to Inuit, and interest in the area's resources by other countries.



## Introduction and Approach

The Tuvaijuittuq Working Group, conducted community consultations in Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord between April 3 - 18, 2023. Arctic Bay consultations were held on April 3, 2023. The purpose of these consultations was to discuss a proposed new Ministerial Order MPA in Tuvaijuittuq, to share information on the proposed approach to regulations for this new short-term protection measure, and to seek community feedback and support on this proposal. In each community, two gatherings were held; an initial meeting with the HTA, hamlet council, Mayor, Nauttiqsuqtiit and other relevant community groups, and an evening community open house which was open to the public.

At both meetings, information was shared on the significance of Tuvaijuittuq, its boundaries, reasons why the area is being considered for protection, the steps involved in establishing a new Ministerial Order MPA and proposed regulations for this short-term protection measure. The presentation materials and relevant assessments, including a summary of Natural Resources Canada's resource and economic assessment for the area<sup>1</sup> and an ecological and biological overview, were made available to community members in both English and Inuktitut. Two-page summaries of what we heard during November consultations were also provided. Simultaneous interpretation was provided at each meeting.

The Tuvaijuittuq Working Group committed to circulating a "What We Heard" report to each community for their review and approval summarizing their feedback during these consultations. If community members or organizations feel that their feedback was misinterpreted or misrepresented, the Working Group will revise the report as requested and re-circulate to the community. Please contact Chandra Chambers ([chandra.chambers@dfo-mpo.gc.ca](mailto:chandra.chambers@dfo-mpo.gc.ca)) if you have any questions or concerns. After communities have had a chance to review and approve their What We Heard reports, the Working Group will provide copies of all reports to each community.

DFO committed to following up with communities on outstanding questions that were asked during community meetings. Answers to these questions were circulated to each community HTA, hamlet council, and mayor in an email on June 28, 2023, and this information is included in Appendix 1 of this report. A copy of the MPA regulations that are being proposed for the new Ministerial Order MPA are also included in Appendix 2 of this report.

The HTAs and/or hamlet councils in some communities could not form quorum during the April meetings. The Working Group followed up with these HTAs and hamlet councils virtually and received permission from each to seek a formal letter of support for the new regulation.

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<sup>1</sup> The full Natural Resources Canada resource assessment was also made available and can be accessed at: [https://publications.gc.ca/collections/collection\\_2022/rncan-nrcan/m183-2/M183-2-8897-eng.pdf](https://publications.gc.ca/collections/collection_2022/rncan-nrcan/m183-2/M183-2-8897-eng.pdf)

## Hunters and Trappers Association (HTA) and Hamlet Council Meeting

The Working Group and local Nauttiqsuqtiit members met with the Ikajutit HTA and Arctic Bay Hamlet Council on April 3, 2023 at 2:00 pm at the Qaggivik Hall. Other community groups were also invited to attend. Approximately 13 people were present for this meeting. The attending members had no objections to the Working Group's proposal for a new Ministerial Order MPA in Tuvaijuittuq. The HTA and hamlet gave the Working Group permission to engage the larger community during an open-house meeting that evening.



*Ikajutit HTA and Hamlet Council members meet with the Tuvaijuittuq Working Group members and Nauttiqsuqtiit, April 3, 2023.*

### ***What we heard:***

#### *Importance to Inuit*

- Tuvaijuittuq is important to community members and Inuit feel a responsibility to support protection because the area occurs within their region.
- Tuvaijuittuq has been used by past generations of Inuit for hunting.
- There is interest in protecting Tuvaijuittuq in the short term as well as into the long term. One board member indicated support for protecting Tuvaijuittuq even when there is no more ice in the area.
- Establishing a protected area in Tuvaijuittuq is seen as important to protect the area from other countries' interests. An example provided by one board member was interest by other countries in exploring for oil and gas.
- The IIBA should be considered when discussing the feasibility of protecting Tuvaijuittuq. It was recommended that every possibility is considered for protecting Inuit when establishing a protected area.

#### *Ecological Significance*

- The thick multi-year ice in Tuvaijuittuq is difficult for animals to make holes in, and as a result they stay in the near-shore areas and have adapted to using both the ice in Tuvaijuittuq and the land beside it.

#### *Response:*

- Information related to animals, habitats and climate trends within Tuvaijuittuq is available at the following websites: <https://www.dfo-mpo.gc.ca/csas->

[sccs/Publications/ScR-RS/2020/2020\\_056-eng.html](https://sccs/Publications/ScR-RS/2020/2020_056-eng.html) (DFO 2020; Inuktitut version available); [https://publications.gc.ca/collections/collection\\_2021/mpo-dfo/Fs97-6-3408-eng.pdf](https://publications.gc.ca/collections/collection_2021/mpo-dfo/Fs97-6-3408-eng.pdf) (Charette et al. 2020); and <http://wwwdev.ncr.dfo-mpo.ca/oceans/mpa-zpm/tuvaijuittuq/index-eng.html>.

- The information above is meant to build on presentations made to the community on November 15, 2022 in which information on the ecological significance and assessments of petroleum and economic potential of the area was shared.

### *Economic Opportunities and Activities*

- The community would like to see research continue in Tuvaijuittuq, particularly on the impacts of climate change. There has been a noticeable shift in animals moving north, and new animals coming into the Arctic Bay area from the south. For example, a salmon was caught in nets around Arctic Bay.

#### Response:

- Please note that additional information related to research in Tuvaijuittuq is provided in Appendix 1.
- Economic opportunities are important for future generations of Inuit and there is concern that long-term protection would limit these. An example given by QIA's Vice President and resident of Arctic Bay was a clause or regulation that could allow for oil and gas or mining exploration. Some community members participated in Panarctic Oils Limited explorations on Ellesmere Island in the 1980s.
- There was a request for information about the clean-up of past military and oil exploration materials, such as toxic waste, that were left behind on Ellesmere Island. It was mentioned that Eureka was established due to the Cold War, and there was a lot of military presence in the area during that time. One board member indicated that they had worked for an oil exploration company in the area and had been responsible for cleaning up the area where explorations had taken place, but a lot of things were still left behind.

#### Response:

- Please note that information in response to this question is provided in Appendix 1.

### *Concerns*

- Climate change is not the only thing causing changes in Tuvaijuittuq, but it is a concern and should be addressed collaboratively. More information should be gathered on the impacts of climate change.
- Shipping activities and their impacts to old ice in Tuvaijuittuq is a concern.

## Community Open House

A community open house meeting was held on April 3, 2023 at 7:00 pm, at the Qaggivik Hall. Approximately 18 adults were in attendance. Children and youth were also welcomed.

**What we heard:**

- Tuvaijuittuq is very far from Inuit communities such as Arctic Bay. One community member had only heard about the area once previously in her 100 years of life.

**Next Steps**

The next steps to pursue establishment of a new Ministerial Order MPA will be to seek stakeholder input on the proposal, seek formal community support, complete assessments and other approvals needed under the Nunavut Agreement such as conformity determination by the Nunavut Planning Commission and Nunavut Wildlife Management Board approval, and complete DFO's regulatory process. Formal letters of support will be sought from community hamlets and HTAs. Community members are encouraged to communicate their feedback on the proposal to these organizations to inform their decision. DFO will notify communities and stakeholders prior to the proposal being published online for a 30-day public comment period – additional input can be provided at that time as well.



*Qaggivik Hall, Arctic Bay, April 3, 2023.*

It is important to us that we have summarized your input on this proposal correctly. If you feel that we have missed any input provided during our meetings or captured information incorrectly, please reach out to the email address provided above for correction.

The Tuvaijuittuq Working Group would like to thank all of the community members who attended these meetings - your feedback is vital and appreciated.

**Thank you.**

## Appendix 1. Follow-up questions and answers from the April 2023 consultations on a new Ministerial Order MPA in Tuvaijuittuq.

\*Please note, an additional question and answer have been added (Question #8) and Question #15 has been expanded upon since it was sent to the HTA and hamlet.

### 1) What is the purpose of protecting Tuvaijuittuq?

Researchers agree that summer sea ice will remain the longest in Tuvaijuittuq (Figure 1) as it continues to decline in other areas of the Arctic due to climate change. Because of this, the area is expected to become an important refuge for ice-dependent species. The area has a very diverse ecosystem, and contains a number of unique communities of organisms, including communities on the ice, in the ice, and below the ice. Habitat in Tuvaijuittuq is important to marine mammals and sea birds. For all of these reasons, DFO and its partners believe that the area, its habitat, and the wildlife within it, would benefit from protection. The proposed Ministerial Order MPA is a short-term protection tool which will protect the area for up to five years. The purpose of this short-term protection tool is to prohibit new activities in the area that may cause negative impacts while additional information is collected to support a better understanding of the conservation and protection needs of the area before longer-term protection measures are considered.

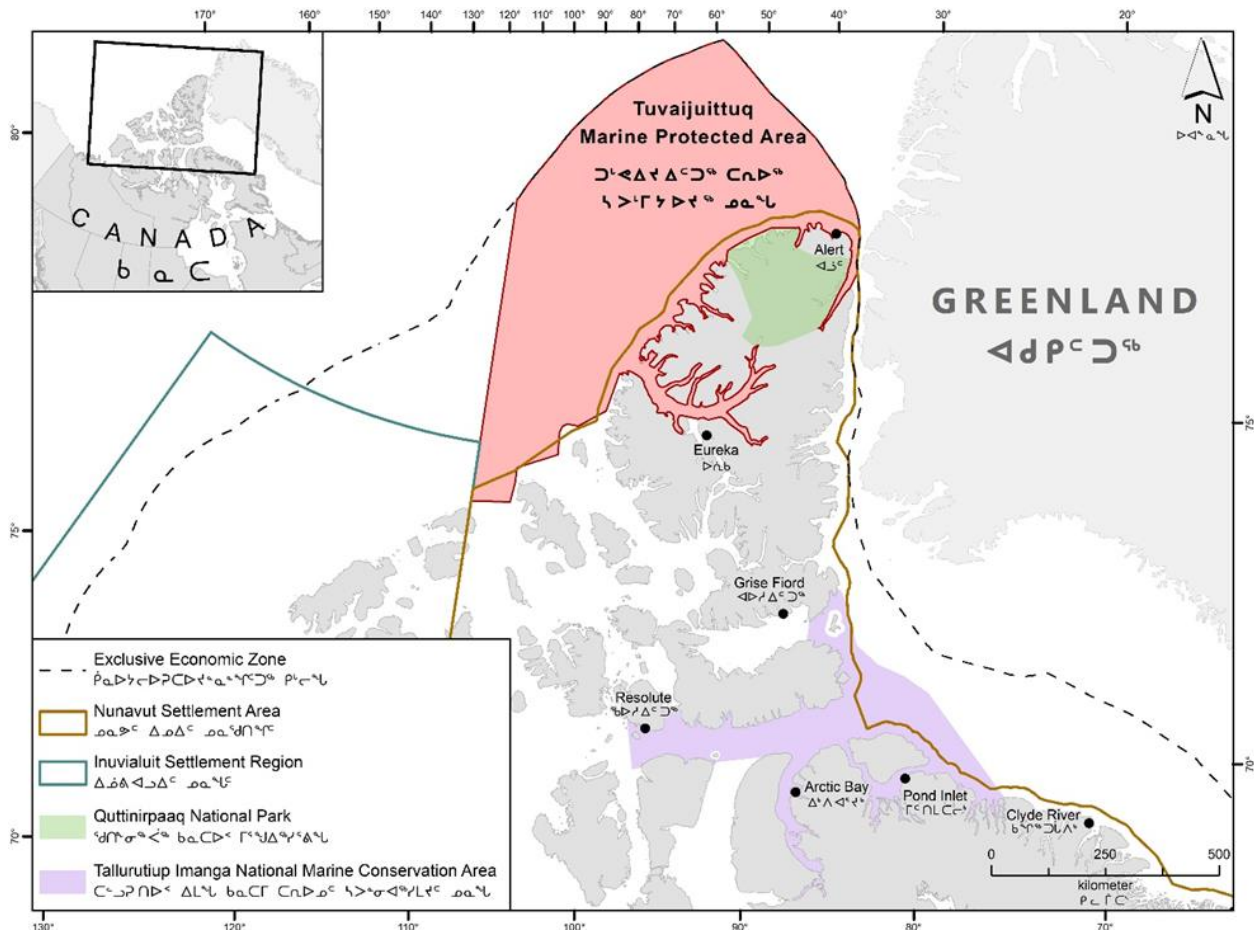


Figure 1. Map of Tuvaijuittuq MPA by Ministerial Order

**2) How was the Tuvaijuittuq boundary determined? Why are the rest of the Queen Elizabeth Islands not included in the boundary?**

The Tuvaijuittuq MPA includes the marine waters off northern Ellesmere Island, starting from the low water mark and extending to the outer 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. The initial boundaries of Tuvaijuittuq were based on the 2011 Canadian Science Advisory Report ([2011/55](#)), which identified key multi-year ice habitat. The boundary was later extended to the nearshore areas off Ellesmere Island within the Nunavut Settlement Area as more of the area was understood. The marine area around the Queen Elizabeth Islands south of Ellesmere Island supports different communities of organisms than those within Tuvaijuittuq. This area was not considered for inclusion in Tuvaijuittuq as it has different conservation needs. Partners agreed to settle on the boundary as it is now and consider the remaining islands at a later time as possible new protected areas. Some of the Queen Elizabeth Islands overlap with the Inuvialuit Settlement Region, which is not included in the Tuvaijuittuq boundary.

**3) What does “freezing the footprint of ongoing activities” mean?**

Freezing the footprint of ongoing activities means allowing activities that are already lawfully occurring in the area to continue and preventing any new activities that may damage, disturb, destroy or remove important habitats, features and organisms. Ongoing activities in Tuvaijuittuq were identified using a number of different methods, including community consultation (in Arctic Bay, Resolute Bay and Grise Fiord in 2019 and in Arctic Bay, Resolute Bay, Grise Fiord, Pond Inlet and Clyde River in 2022), consultation with QIA, and consultation with DFO Science and other federal departments and agencies including the Department of National Defence, Parks Canada Agency, and Canadian Coast Guard. DFO gathered further information about ongoing activities by seeking input on the proposed regulations from industry and other stakeholders (e.g., non-governmental organizations), and from studies such as an assessment of vessel traffic using Automatic Identification System (AIS) signals in the area between 2012-2019. This study is currently being updated so DFO has the most up-to-date information.

Based on available information, DFO determined that ongoing activities in Tuvaijuittuq include:

- (a) national defence activities carried out by the Department of National Defence; and
- (b) marine scientific research activities.

The regulations also include exemptions and exclusions helping to respect commitments Canada has made both domestically and internationally.

The full regulations are provided as a separate attachment in both English and Inuktitut.

**4) Does freezing the footprint of activities affect wildlife harvesting rights of Inuit in this area?**

The Ministerial Order MPA does not apply with respect to the wildlife harvesting rights of Nunavut Inuit in the Nunavut Settlement Area, as provided for in the Nunavut Agreement. This means that the Ministerial Order regulations do not affect the wildlife harvesting rights of Inuit within the Nunavut Settlement Area (NSA).

There appear to be no provisions within the Nunavut Agreement that extend Inuit harvesting rights beyond the NSA portion of Tuvaijuittuq. As a result, the regulations would apply to everyone in the area of Tuvaijuittuq that falls outside of the NSA. However, we would be interested in further discussing the matter if there are provisions in the Nunavut Agreement you believe have been overlooked.

**5) Why are there exemptions for foreign states in the Ministerial Order MPA regulations?**

Under the United Nations Convention on the Law of the Sea (UNCLOS), which is an international agreement, Canada must allow certain activities such as navigation (vessels transiting through) and laying of cables and pipelines, from foreign states in certain maritime zones. Because of this, those foreign activities are exempted from the application of the Ministerial Order MPA in Tuvaijuittuq. The exclusive economic zone, an area of the sea beyond the territorial sea extending out to 200 nautical miles from the coastline (Figure 2), is not Canadian territory, and in that area Canada only has jurisdiction over economic resources such as fishing, oil and gas, and mineral exploitation.

Under Canadian law, Canada has the authority to prohibit domestic vessel navigation and other activities in this area. Since the purpose of the short-term Ministerial Order MPA is to conserve and protect the vulnerable habitats and organisms in Tuvaijuittuq while we collect additional information to inform decisions about long-term protection, we aim to limit any activity, including domestic activities, that may negatively impact the area. Although foreign navigation is allowed in the MPA, foreign countries will typically comply with voluntary measures, if guidance is provided to avoid certain areas within the MPA.

**6) Can the old sea ice (multi-year ice) be broken by ice-breakers?**

While some ice-breakers can break through thick multi-year ice, there are different classes of ice-breakers built for different purposes and ice thicknesses. Not all ice-breakers can break through thick multi-year ice. To our knowledge, the few vessels that have travelled to Tuvaijuittuq for activities such as national defence, safety, marine research, and foreign vessel travel, have stayed within the nearshore areas during the open water season and did not actively conduct ice-breaking activities.

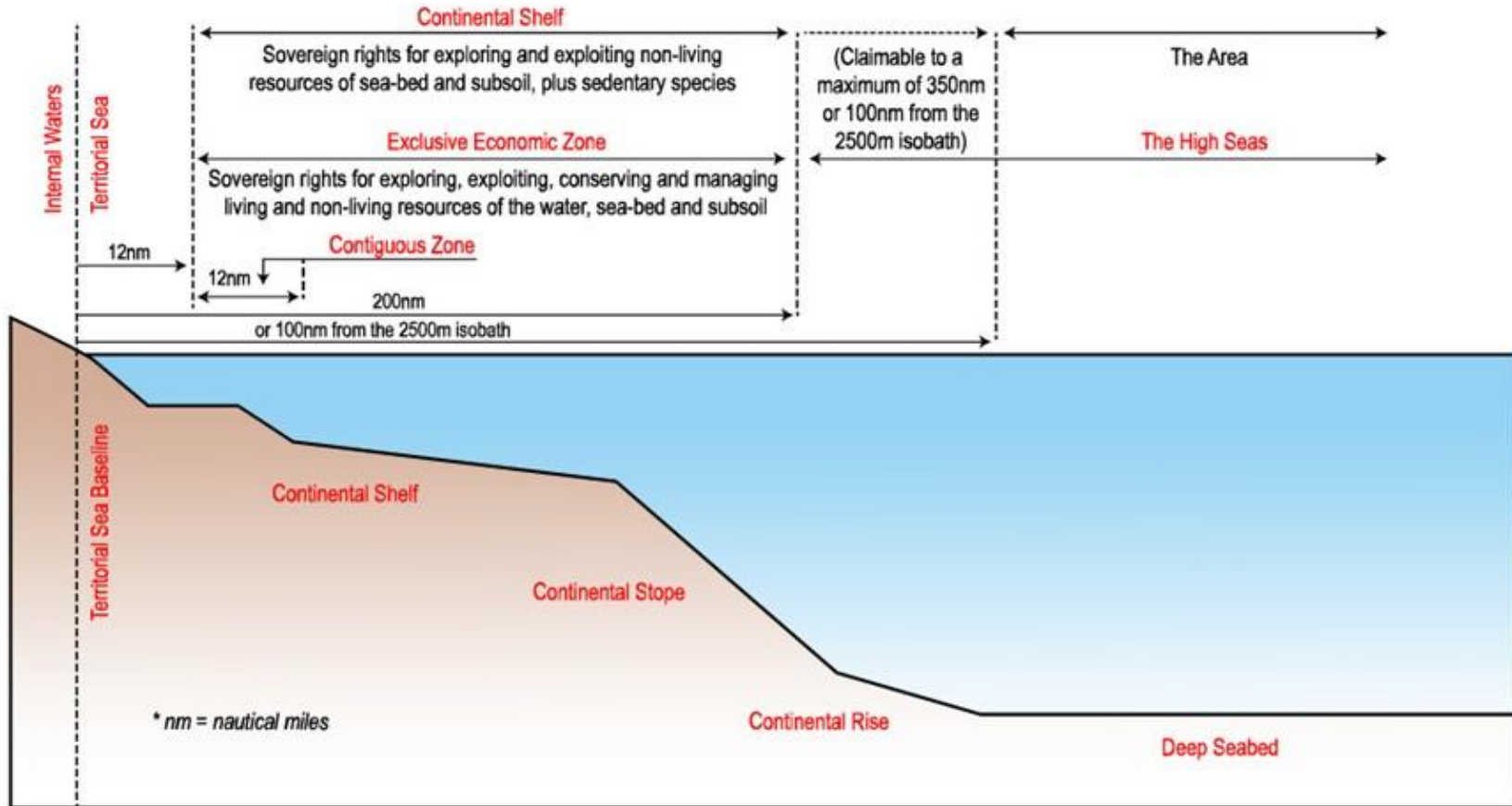


Figure 2. Canada's Maritime Zones

## 7) How can Inuit visit Tuvaijuittuq?

Tuvaijuittuq is an area of the sea that is a mainly ice-covered all year round and is very remote. There is one military research station in Alert called Canadian Forces Station (CFS) Alert located outside of Tuvaijuittuq on northern Ellesmere Island and a small research base in Eureka on Fosheim Peninsula. There are no communities nearby – the closest community is Grise Fiord, which is approximately 327 km as the crow flies from the MPA's southern-most boundary. Activity in Tuvaijuittuq is limited to national defence activities and marine scientific research, mainly due to the extensive ice cover in this marine area. In 2019, the communities of Arctic Bay, Resolute Bay and Grise Fiord indicated that the area is difficult to reach by skidoo; however, some community members in Grise Fiord had travelled, or knew of people that had travelled, as far as Eureka (which is south of the proposed area) by dogsled in the past.

There are however, opportunities for involvement in research activities in Tuvaijuittuq, which are based out of CFS Alert. For more information on participating in research activities in Tuvaijuittuq, please contact Chandra Chambers ([Chandra.Chambers@df-mpo.gc.ca](mailto:Chandra.Chambers@df-mpo.gc.ca)).

## 8) Fisheries quotas to Inuit

It is important to note that Tuvaijuittuq is largely ice-covered all year round and is not accessible to fishing vessels. As a result, no large-scale commercial fishing activities are possible in the area under current conditions. It is unknown if ice conditions would support small-scale on ice fisheries, and no data are available to understand whether a fishery (small or large-scale) would be possible.

When we visited communities in April 2023, we received a question relating to fisheries quotas in general and how these are allocated to Inuit.

Fisheries and Oceans Canada continues to respect and implement the obligations under Nunavut Agreement including provisions related to offshore commercial fisheries access that give special consideration to Nunavut. Through implementation of the Nunavut Agreement over the years, the share of adjacent resources to Qikiqtani Inuit has significantly increased, such that Qikiqtani Inuit fishers now have 80% of Turbot and 42% of shrimp resources including 100% of all fisheries resources within the Nunavut Settlement Area.

## 9) What kind of Inuit Qaujimaqatugangit (IQ) is used? What is studied?

- Oral History passed down over centuries of Inuit Knowledge.
- Inuit knowledge living and adapting, part of present day life. It is in how Inuit live and see the world today.
- QIA would like to gather IQ for Tuvaijuittuq.

## 10) Can more information be provided about the infrastructure that QIA refers to? Would QIA make buildings or houses for Tuvaijuittuq purposes?

- Multi-use facilities to address Inuit Stewardship and community needs (office space, equipment storage, garage, country food processing, community outreach, elder gatherings, etc.).

- Additional infrastructure that supports Inuit stewardship activities and the Nauttigsuqtiit program, such as housing and supplementing the facilities in the Tallurutiup Imanga communities as appropriate.
- Infrastructure requirements for Inuit stewardship that arise due to changing socio-economic or environmental conditions.

### 11) When will the regional governance model will be in effect?

At this time, this is still at the negotiation table. However, QIA is seeking this Regional Governance model for future IIBAs as well as existing IIBAs that will be renegotiated over time.

### 12) Status update on the harbour planned for Resolute Bay.

Transport Canada (TC), the Government of Nunavut (GN), and the Qikiqtani Inuit Association (QIA) have been working together towards the development of community harbours in Grise Fiord and Resolute Bay and have developed an Infrastructure Investment Plan (IIP) that was adopted in October 2022.

The IIP was completed based on community engagements and other work to date and informed the Agreement for Resolute Bay and Grise Fiord Community Harbour Development.

The Agreement for Resolute Bay and Grise Fiord Community Harbour Development was signed by TC and the GN on January 16, 2023 and will provide up to \$76,281,900 to the GN for the design and construction of the two community harbours in Grise Fiord and Resolute Bay. The current funding for community harbours will cover the cost of constructing at least one breakwater, a parking area, dredging, a boat launch, and floating docks.

TC has provided a copy of the agreement to the QIA representative, to be kept in confidence.

We understand from the GN that:

- A Project Manager with GN's Department of Community and Government Services has been assigned to the projects.
- The exact procurement approach for construction has not been finalized, but it is likely to follow the GN's standard procurement practices.
- The first step is expected to be a Request for Proposal for engineering and design services.

For more information, please contact Matthew Bowler ([MBowler@GOV.NU.CA](mailto:MBowler@GOV.NU.CA)) or Miguel Parent ([miguel.parent@tc.gc.ca](mailto:miguel.parent@tc.gc.ca)).

### 13) What type of research is occurring in Tuvaijuittuq?

Research in Tuvaijuittuq is led by DFO through the Multidisciplinary Arctic Program (MAP) - Last Ice and this team includes researchers from universities and organizations all over the world. The program brings together a number of different specialists to study different features in Tuvaijuittuq. For example, experts in sea ice, water, fish, marine mammals, and those who study organisms such as algae and krill that form the basis of the High Arctic



food web. Some of this work is done during a late winter/early spring seasonal field camp, where researchers work together as a team to collect samples and do their research. Others, like marine mammal surveys, are conducted around the same time but not as part of the field camp, and in the fall. The program began in 2018 and experienced some delays due to COVID-19 but is continuing. A new ship-based program called ArcticCore will begin this year and will include Archer Fiord and adjacent areas around Tuvaijuittuq (as sea-ice permits). This new program will study physical (currents/movement), chemical (nutrients, ocean acidification), and biological (primary production, zooplankton, benthos) oceanography and will also include marine mammal surveys and sea ice studies. If long-term protection is put into place in the future, then more formal management and monitoring plans would be developed for Tuvaijuittuq, in collaboration with partners and communities.

Research partners in MAP-Last Ice:

DFO  
Department of National Defence  
Defence Research and Development Canada  
Université Laval  
University of Essex  
Université du Québec à Rimouski  
Environment and Climate Change Canada  
Mediterranean Institute of Oceanography  
Polar Continental Shelf Program  
Alfred Wegener Institute  
University of Bristol  
Resolute HTA Board of Directors

Type of research conducted as part of MAP-Last Ice:

- Sea ice distribution, physical properties (thickness, composition), productivity (algal communities, biomass)
- Evolution of the ice and under-ice habitat over time
- Continuous atmospheric, oceanographic and sea ice observations
- Zooplankton, fish and benthic organisms
- Marine mammal and habitat surveys
- Physical (currents/movement), chemical (nutrients, ocean acidification), and biological (primary production) oceanography

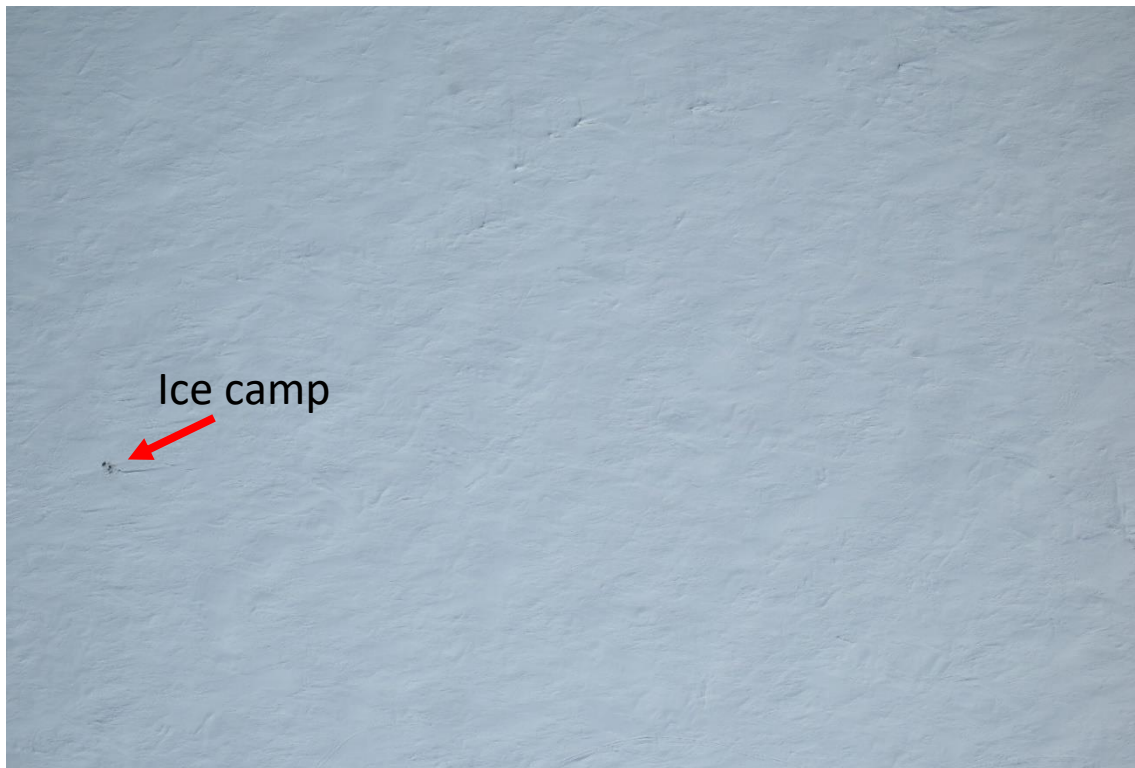
Collection of ice cores during the MAP-Last Ice and ArcticCORE programs:

We are very conscious of potential disturbances to the environment and during our sampling we take action to minimize these disturbances. When we collect ice cores, we sample only a part of the core and we replace the rest of the core to its original hole. Once replaced in its original hole, the core refreezes quickly, typically within a few hours.

The ice cores that we collect are small, at 9 cm diameter. This means that the surface area of one core is 5 times smaller than that of a hole cut out with an 8-inch auger, and about 10-12 times smaller than that of a seal breathing hole. While the seals keep their holes open,

we “close” our holes after sampling (with the original ice core from which we cut off one or a few sections). If we add the area of all the cores that we collect during one sampling season, it would typically add up to much less than 1 square meter, at most 2 m<sup>2</sup>.

In the photo below, we can see our ice camp on the sea ice north of Ellesmere Island. In another photo taken a few days after we took out camp, it was not possible to identify the site where the ice camp had been set up.



**Figure 3. Aerial view showing the ice camp on the sea ice north of Ellesmere Island. A few days after taking out the camp, the site of the ice camp was not visible anymore.**

#### **14) Interest in learning more about Canada’s Polar Continental Shelf Program**

##### **Polar Continental Shelf Program:**

Natural Resources Canada’s Polar Continental Shelf Program (PCSP) supports Arctic science by providing logistics planning, coordination and advice to Canadian government, non-government, university and international researchers. The PCSP supports projects in the Arctic from Churchill, Manitoba, to the northern tip of Ellesmere Island, Nunavut, and from the Yukon/Alaska border to as far as Greenland, on occasion.

Support can include air transportation, as well as fuel, field equipment for loan, field communications and safety, logistics advice for field studies, the use of the PCSP facility in Resolute, Nunavut, and shipping and receiving coordination and advice. The PCSP facility in Resolute is typically open from late January to September each year and is comprised of

an accommodations area that can house up to 237 guests, lounge areas, a fitness room, office spaces, kitchen and dining facilities, an operations centre and a laboratory.

The PCSP provides employment, student training and business opportunities for northern residents. The PCSP also helps with science outreach through publishing an annual science report and connecting researchers with northern community organizations.

The table below includes PCSP projects that occurred close to Grise Fiord and/or Tuvaijuittuq in recent years. Please feel free to reach out to the project leads if you have an interest in specific projects.

As a contact at the Polar Continental Shelf Program, please feel free to reach out to **Michael Meunier**, Manager of the Program Coordination and Outreach unit ([michael.meunier@nrcan-rncan.gc.ca](mailto:michael.meunier@nrcan-rncan.gc.ca)) or the PCSP Ottawa mailbox ([pcspottawa-ppcpottawa@nrcan-rncan.gc.ca](mailto:pcspottawa-ppcpottawa@nrcan-rncan.gc.ca)). Michael and his group would be pleased to connect with you and discuss your priorities.

Here are some additional resources that may be of interest:

- A list of all 2019 and 2020 projects supported by PCSP can be found at the following link: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/polar-continental-shelf-program/current-projects/10009>.
- More information on the PCSP can be found at: [https://natural-resources.canada.ca/sites/nrcan/files/earthsciences/files/pdf/polar/PCSP-Brochure\\_eng.pdf](https://natural-resources.canada.ca/sites/nrcan/files/earthsciences/files/pdf/polar/PCSP-Brochure_eng.pdf)
- Information on project support applications can be found here: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/research-support-arctic-logistics-and-field-equipment-for-across-canada/10003>.
- Annual Science Reports can be found at the following link: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/polar-continental-shelf-program/pcsp-publications/10011>.

**Table 1. List of PCSP-supported projects in the Arctic Archipelago, many near Grise Fiord and/or Tuvaijuittuq MPA in recent years**

Primary Investigator	Institution	Study Location(s)	Project Title
Hsin Chiang	McGill University	McGill Arctic Research Station, Expedition Fjord	A new window on the universe: radio astronomy from northern Canada
Cory Matthews	Fisheries and Oceans Canada	Grise Fiord	Aerial survey of High Arctic walrus and narwhal stocks
Michael Maurice	Environment and Climate Change Canada	Svarvevaeg, Eureka, Isachsen, Grise Fiord, Mould Bay, Rea Point, Cape Providence, Resolute Bay, Steffanson Island, Cape Liverpool, Fort Ross, Gateshead	Annual Maintenance of Environment and Climate Change Canada's Automatic Weather Station array - Arctic Archipeligo

Primary Investigator	Institution	Study Location(s)	Project Title
Christine Michel	Natural Resources Canada	Eureka	Arctic CORE (Conservation, Observation, Research, and Engagement)
Lyle Whyte	McGill University	Assistance Bay	Assessment of Bioremediation Potential of Marine Fuels on NWP Arctic Beaches
Joseph Monteith	Crown-Indigenous Relations and Northern Affairs Canada	Alert, Eureka	Baffin/High Arctic Inspections 2022
Alexander Culley	Université Laval	Ward Hunt Island	Characterizing viral impact in the Last Ice Area
Christopher Omelon	Queen's University	Expedition Fiord, Resolute Bay	Climate Change Research at the McGill Arctic Research Station
David Didier	Université du Québec à Rimouski	Sydkap Glacier and surrounding area, Starnes Fiord and surrounding area, Jakeman Glacier and surrounding area, Grise Fiord	Coastal dynamics and hazards in Grise Fiord and Jones Sound
Mark Skidmore	Montana State University	Truelove Lowlands, Croker Bay, Resolute, Gascoyne inlet	Exploration of Saline Cryospheric Habitats with Europa Relevance (ESCHER): An approach using airborne and submarine semiautonomous systems
Erin MacNeil	Natural Resources Canada	Gascoyne Inlet	Defence of North America
Lyle Whyte	McGill University	Devon Island lakes site	Developing new technologies to access and investigate the hypersaline, subzero Devon Island Subglacial Lake System, a unique Mars and icy moon analogue
Denis Lacelle	University of Ottawa	Eureka	Effect of degrading ice wedge polygon landscapes on local topography, hydrology, and water quality.
Susan Kutz	University of Calgary	East wind lake, Eureka, Resolute Bay	Emerging Infectious Disease in High Arctic Ungulates - Terrestrial Investigations
Amelie Roberto-Charron	Government of Nunavut	Eureka Weather Station, Resolute Bay	Emerging Infectious Diseases in High Arctic Ungulates – Aerial assessment

Primary Investigator	Institution	Study Location(s)	Project Title
Clément Chevallier	Environment and Climate Change Canada	Cape Verra, Cape Verra, Nirjutiqarvik, Cape Liddon, Houbhouse Inlet, Prince Leopold Island, Baillarge Bay	Fulmar colony surveys in Lancaster Sound
Myriam Lemelin	Université de Sherbrooke	T-MARS camp, McGill Arctic Research Station, Axel Heiberg Island	Geological study and mapping of hydrothermal deposits and gossans, Expedition Fiord, Axel Heiberg Island, Nunavut, as analogues for Mars
Christine Dow	University of Waterloo	Devon Ice Cap camp	Geophysical imaging of the Devon sub-glacial lakes
Luke Copland	University of Ottawa	Manson Icefield, Sydkap base camp, Sydkap ice marginal lake complex, Grise Fiord	Glacier monitoring on southern Ellesmere Island
Maya Bhatia	University of Alberta	Sydkap Glacier and surrounding area, Starnes Fiord and surrounding area, Jakeman Glacier and surrounding area, Grise Fiord	Glacier-ocean interactions in the Canadian high Arctic
Daniel Fortier	University of Montreal	Ward Hunt Island	Ground ice of eastern Canadian High Arctic polar desert
Cortney Wheeler	Fisheries and Oceans Canada	Elwin Bay, Creswell Bay	High Arctic Beluga Whale Stock Structure
Greg Henry	University of British Columbia	Sverdrup Pass, Knud Peninsula, PCSP Eureka, Bache Peninsula, Princess Marie Bay, Alexandra Fiord, Cape Bounty	High Arctic tundra ecosystem responses to 30 years of experimental and observed climate change
Masaki Uchida	National Institute of Polar Research, Japan	Oobloyah Bay	Identifying and understanding the effect of temporal and spatial changes towards the biodiversity and carbon sequestration processes in the high Arctic
John Moores	York University	Expedition Fjord	Identifying putative microbial drivers of methane flux on Earth and on Mars
Raoul-Marie Couture	Université Laval	Ward Hunt Island	Impact of oxygen pulses on redox-sensitive chemicals and microbiome in Canada's northernmost lake
Cory Matthews	Fisheries and Oceans Canada	Goose Fiord, Brooman Point, Kearney Cove	Improving High Arctic walrus stock assessment using satellite telemetry, genetics, and time-lapse photography
Lyle Whyte	McGill University	Lost Hammer, Thompson Glacier, White Glacier,	

Primary Investigator	Institution	Study Location(s)	Project Title
		Expedition Fjord, Gypsum Hill, Color Peak	Investigations of microbial activity in cryoenvironments in the Canadian High Arctic
Laura Brown	University of Toronto Mississauga	Nanuit Itillinga (Polar Bear Pass), Nanuit Itillinga (Polar Bear Pass), Cornwallis Island Lakes	Lake Ice in the Canadian High Arctic
Scott Lamoureux	Queen's University	Cape Bounty, Melville Island, Resolute vicinity	Land and water impacts and response to climate and permafrost changes in the High Arctic
Laura Thomson	Natural Resources Canada	Muller Ice Cap, Expedition Fiord	Mass Balance and Energy fluxes of White Glacier, Axel Heiberg Island, NU
Catherine Girard	Université du Québec à Chicoutimi (UQAC)	Ward Hunt Island, Resolute Bay vicinity	Microbes on the go: Release of cryospheric microbes to downstream habitats
Derek Mueller	Carleton University	Milne Ice Shelf, Milne Fiord, Purple Valley, Eureka, Resolute	Milne Fiord ice-ocean interactions: Implications for the stability of ice shelves and glaciers in the Polar Regions
Dave Burgess	Natural Resources Canada	Agassiz Ice Cap, Meighen Ice Cap, Grise Fiord, Devon Ice Cap, Melville Ice Cap	National Glaciology Project - Queen Elizabeth Islands, NU & NT
Warwick Vincent	Université Laval	Resolute (Cornwallis Island), Thores Lake (Ellesmere Island) and Ward Hunt Island	Northern Ellesmere Island in the Global Environment - Sentinel North
Valerie Amarualik	Parks Canada	Young Inlet, Dundee Bight, Dome Camp	Qausuittuq National Park Operations 2022/2023
Adam Ferguson	Parks Canada	Fort Conger, Lake Hazen, Ruggles River, Tanquary Fiord, Resolute Bay	Quttinirpaaq National Park Operations 2022
Gordon Osinski	University of Western Ontario	Haughton River Valley	Reconstructing the post-impact history of the Haughton impact structure, Nunavut
Lynda Gullason	Inuit Heritage Trust Incorporated	Resolute, Morin Point, Devon Island, Pond Inlet	Saving Morin Point: Climate Change Risk Assessment and Archaeological Heritage Recovery
Dermot Antoniades	Université Laval	Stuckberry Valley, Lake Hazen	The functioning and evolution of the ecosystems of Stuckberry Valley, northern Ellesmere Island

Primary Investigator	Institution	Study Location(s)	Project Title
Joshua King	Environment and Climate Change Canada	Eureka, Nunavut	Development of a new Canadian Arctic Archipelago sea ice product from ICESat-2 (Ice Cloud and Land Elevation Satellite-2)
Michael Brohart	Environment and Climate Change Canada	Eureka, Nunavut	Instrument calibration at Eureka weather station as part of the Canadian Brewer Spectrophotometer Network operation
Alison Criscitiello	University of Alberta	Grise Fiord and Resolute, Nunavut	Airborne gravity survey over Devon Ice Cap
Rich DeVall	Environment and Climate Change Canada	Isachsen (Ellef Ringnes Island), Rea Point (Melville Island), Stefansson Island, Fort Ross (Somerset Island), Gateshead Island, Cape Liverpool (Bylot Island), Svarteveg (Axel Heiberg Island) and Grise Fiord (Ellesmere Island), Nunavut	Annual maintenance of ECCC's automatic weather station array – Arctic Archipelago
Grant Gilchrist	Environment and Climate Change Canada	Grise Fiord, Nunavut	Population surveys of endangered ivory gulls on Ellesmere Island and Devon Islands
Alexander Culley	Université Laval	Expedition Fiord (Axel Heiberg Island), Resolute (Cornwallis Island), Ward Hunt Island and Thores Lake (Ellesmere Island), Nunavut	Viral ecology of the high Canadian Arctic in water, ice and aerosols
Mark Lamothe	Natural Resources Canada	Eureka and Resolute, Nunavut	Eureka geomagnetic electronic replacement
Nicolas Lecomte	Université de Montreal	Bylot Island, Igloolik Island and Eureka, Nunavut	Arctic IMPACTS: tracking impacts of ecosystem changes in the Arctic
Christine Michel	Fisheries and Oceans Canada	Alert, Nunavut	Multidisciplinary Arctic Program (MAP) – Last Ice
Wayne Pollard	McGill University	Eureka and Expedition Fiord (Axel Heiberg Island), Nunavut	The vulnerability and resiliency of ice-rich permafrost in cold polar desert environments in response to changing climate
Vincent St. Louis	University of Alberta	Lake Hazen, Quttinirpaaq National Park, Nunavut	The impacts of rapidly receding glaciers on downstream freshwater resources and ecological services

### 15) What is being done to clean up past military, research and Government of Canada sites left on Ellesmere Island?

There were a number of sites in Quttinirpaaq National Park that required remediation. These sites have been remediated, with the exception of Fort Conger, which now has a long-term monitoring strategy in place.

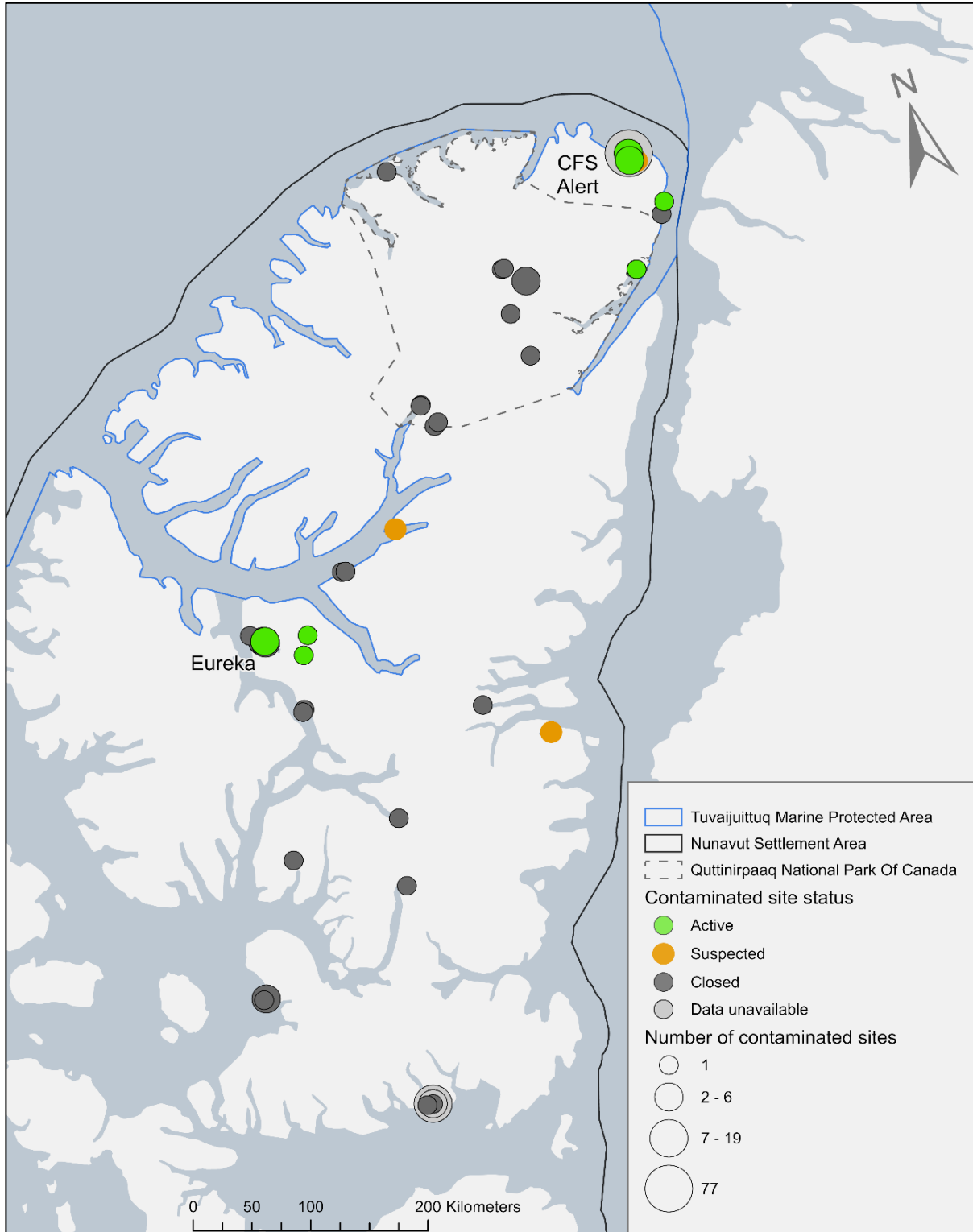
Fort Conger is a historical site situated on the shore of Discovery Harbour on Lady Franklin Bay, (N 81° 45.13', W 64° 49.56'). The site was used as a base by early Arctic expeditions and a scientific research camp. The site was also visited by early twentieth-century expeditions and later by government and military personnel, researchers, Inughuit hunters and tourists. A human health and ecological risk assessment conducted for the area identified risks from contamination at the site and a Risk Management and Remediation Plan has been developed. While some remediation has been completed, additional work is not an option at this time due to the remoteness of the site and the risks to cultural artifacts. Therefore, a long-term monitoring plan was developed so that, if the site becomes more accessible and remediation is possible, the proposed risk management and remediation strategy could be reviewed and updated. For more information on these sites, please contact Jane Chisholm at [jane.chisholm@pc.gc.ca](mailto:jane.chisholm@pc.gc.ca).

Additional information has been gathered on other sites on Ellesmere Island from the Government of the Northwest Territories (GNWT) Spills Database and the Federal Contaminated Sites Inventory (FCSI). The available data are summarized together in Figure 4, Table 2. The GNWT Spills Database is a collection of reported petroleum and other hazardous material spills in Nunavut and the Northwest Territories. The FCSI includes information on all known and suspected contaminated sites under the management of federal departments, agencies and consolidated Crown corporations.

The majority of contaminated sites on Ellesmere Island have been closed following historical reviews, testing, clean-ups or long-term monitoring activities. Available information from these two databases indicates that there are ten active sites (five in or near CFS Alert, four in or near Eureka, and one in Fort Conger) and three suspected sites (one at the Alexandra Fiord RCMP Detachment Site, one at D'Iberville Fjord, and one at Alert). Site status and actions data are unavailable from the GNWT Spills Database.

Site numbers that start with “spill-“ are from the GNWT Spills Database, and all other sites are from the FCSI. The site status refers to what is currently happening with the site. An “active” site is a confirmed contaminated site where remediation action is or may be required; a “closed” site is a site that requires no further action; and a “suspected” site requires further assessment work to confirm whether the site is considered a contaminated site. Actions tell us what has been done to the site, for example remediation efforts or testing.

The GNWT Spills database can be found at <https://www.gov.nt.ca/ecc/en/spills>, and the FCSI data can be found at <https://www.tbs-sct.gc.ca/fcsi-rscf/home-accueil-eng.aspx> and <https://www.tbs-sct.gc.ca/fcsi-rscf/numbers-numeros-eng.aspx?qid=1680451>. Information on the Federal Contaminated Sites Action Plan (FCSAP) can be found at <https://www.canada.ca/en/environment-climate-change/services/federal-contaminated-sites/action-plan.html>.



**Figure 4. Map showing closed, active and suspected contaminated sites on Ellesmere Island, NU. Source data: Government of Northwest Territories (GNWT) Spills Database and the Federal Contaminated Sites Inventory (FCSI), accessed May 2023**

**Table 2. List of active and suspected contaminated sites located on Ellesmere Island, including information on reporting organization (Crown Indigenous Relations and Northern Affairs Canada [CIRNAC]; Fisheries and Oceans Canada [DFO]; National Defence [DND]; Environment and Climate Change Canada [ECCC]; Parks Canada Agency [PCA]; Royal Canadian Mounted Police [RCMP]), contaminants (petroleum hydrocarbons [PHCs]; benzene, toluene, ethylbenzene, and xylene [BTEXs]; polycyclic aromatic hydrocarbons [PAHs), quantity, and actions.**

Site Number	Site Name / Location	Site Status	Occurrence Date	Latitude	Longitude	Reporting Organization	Contaminants	Quantity (cubic metres)	Actions
286	Lincoln Bay	Active	Data unavailable	82.0833	-62.0000	CIRNAC	PHCs	12	Initial testing completed. Detailed testing underway.
2747	Eureka High Arctic Weather Station	Active	Data unavailable	79.9908	-85.8586	ECCC	PHCs, BTEXs, PAHs, Metal, metalloid, and organometallic	15750	Remediation / risk management completed. Confirmatory sampling underway.
8328	Fort Conger Historic Site	Active	Data unavailable	81.7522	-64.8261	PCA	PAHs, Metal, metalloid, and organometallic	1265	Remediation / risk management completed. Confirmatory sampling underway.
24258	Romulus - Panarctic C-42 Well Site	Active	Data unavailable	79.8526	-84.3764	CIRNAC	BTEXs, PAHs, Metal, metalloid, and organometallic	3500	Remediation / risk management completed. Confirmatory sampling underway.
24259	Gemini - Panarctic E-10 Well Site	Active	Data unavailable	79.9902	-84.0690	CIRNAC	PHCs, Metal, metalloid, and organometallic	1500	Initial testing completed. Detailed testing underway.
27530	Neil Trivet Gaw Lab (Bapmon - Alert)	Active	Data unavailable	82.4535	-62.5135	ECCC	PHCs	0	Initial testing completed. Detailed testing underway.
20247006	Alert Main Station	Active	Data unavailable	82.4981	-62.3367	DND	PHCs, PAHs, Metal, metalloid, and organometallic	14500	Confirmatory sampling completed. Long term monitoring underway.

Site Number	Site Name / Location	Site Status	Occurrence Date	Latitude	Longitude	Reporting Organization	Contaminants	Quantity (cubic metres)	Actions
20247025	Alert Tx Site	Active	Data unavailable	82.4528	-62.5020	DND	PHCs	600	Detailed testing completed. Remedial action plan under development.
20247029	Alert Airfield	Active	Data unavailable	82.4998	-62.3611	DND	PHCs, BTEXs, Metal, metalloid, and organometallic	3	Confirmatory sampling completed. Long term monitoring underway.
70069014	Eureka - North Airstrip Apron	Active	Data unavailable	79.9977	-85.8406	DND	PHCs, BTEXs and PAHs	1755	Confirmatory sampling completed. Long term monitoring underway.
1091	Alexandra Fiord Rcmp Detachment Site	Suspected	Data unavailable	78.8798	-75.7546	RCMP	Data unavailable	0	Historical review planned.
16525	D'Iberville Fjord (Unassessed)	Suspected	Data unavailable	80.6069	-79.4792	DFO	Data unavailable	0	Historical review completed. Initial testing underway.
25114	Alert - Unauthorized Firing Range	Suspected	Data unavailable	82.4246	-62.1835	DND	Data unavailable	0	Historical review planned.

\*Closed sites were not included in this table as they have either been cleaned up and/or require no further action. Sites for which no data are available with respect to status were also not included.



## Appendix 2. Tuvaijuittuq Ministerial Order Regulations

\***NOTE:** The regulations can also be found at this website: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2019-282/page-1.html>

### SOR/2019-282

### OCEANS ACT

#### Registration 2019-07-30

#### Order Designating the Tuvaijuittuq Marine Protected Area

Whereas this Order designates the Tuvaijuittuq Marine Protected Area in a manner that is not inconsistent with a land claims agreement that has been given effect and has been ratified or approved by an Act of Parliament;

Therefore, the Minister of Fisheries and Oceans, pursuant to 35.1(2)<sup>a</sup> of the Oceans Act<sup>b</sup>, makes the annexed Order Designating the Tuvaijuittuq Marine Protected Area.

- <sup>a</sup>S.C. 2019, c. 8, s. 5
- <sup>b</sup>S.C. 1996, c. 31

Ottawa, July 29, 2019

Jonathan Wilkinson  
Minister of Fisheries and Oceans

#### Definition of *Marine Protected Area*

1 In this Order, **Marine Protected Area** means the area of the sea that is designated by section 2.

#### Marine Protected Area

2 (1) The area of the sea in the Arctic Ocean consisting of the waters off northern Ellesmere Island, as described in plan number FB42596, certified on July 16, 2019 and depicted in plan number CLSR 108395, which plans are deposited in the Canada Lands Surveys Records, is designated as the Tuvaijuittuq Marine Protected Area.

#### Seabed, subsoil and water column

(2) The Marine Protected Area consists of 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.

#### Ongoing activities

3 For the purposes of subsection 35.1(2) of the Oceans Act, the following classes of activities are ongoing activities in the Marine Protected Area:

- (a) national defence activities carried out by the Department of National Defence;
- and



(b) marine scientific research activities.

### Prohibitions

**4 (1)** It is prohibited in the Marine Protected Area to carry out any activity — other than those set out in section 3 — that disturbs, damages, destroys or removes from the Marine Protected Area any unique geological or archeological features or any living marine organism or any part of its habitat, or is likely to do so.

### Exemption

**(2)** Despite subsection (1), the following activities may be carried out in the Marine Protected Area:

(a) marine navigation by a foreign national, a foreign ship or a foreign state, or an entity incorporated or formed by or under the laws of a country other than Canada; and

(b) the laying, maintenance and repair of cables and pipelines by a foreign state.

### Non-application – Nunavut Agreement

**5** This Order does not apply with respect to the wildlife harvesting rights of the Inuit in the Nunavut Settlement Area, as provided for in the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada, as approved, given effect and declared valid by the [Nunavut Land Claims Agreement Act](#).

### Coming into force

**6** This Order comes into force on the day on which it is registered.

# What We Heard: Community Consultations on a New Ministerial Order Marine Protected Area in Tuvaijuittuq

April 3-18, 2023



Clyde River – April 5, 2023



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## Acknowledgements

The Tuvaijuittuq Working Group would like to thank the communities of Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord for their time and hospitality during our community visits. We would especially like to thank the Hunters and Trappers Associations (HTAs), hamlet councils, and Mayoral offices for their participation and knowledge-sharing. Finally, we would like to acknowledge the Qikiqtani Inuit Association for leading the coordination of these meetings.

## Our Team

The Tuvaijuittuq Working Group has members from the Qikiqtani Inuit Association (QIA), Fisheries and Oceans Canada (DFO), Parks Canada Agency (PCA), and the Government of Nunavut (GN). Our participants included representatives from each organization involved in the Working Group.



*Tuvaijuittuq Working Group members attending consultations in Clyde River, Arctic Bay and Pond Inlet (left photo) and in Resolute Bay and Grise Fiord (right photo). Left Photo, left to right: Syzula Ikkidluak (QIA), Delaney Ewing (DFO), Madelaine Kellett (DFO), Bernie MacIsaac (GN), and Justin Hack (GN). Right Photo, left to right: Sarah Kennedy (DFO), Bethany Schroeder (DFO), Iselena Natsiapik (QIA), Daniel Haney (GN), and Bernie MacIsaac (GN).*



## Executive Summary

The Tuvaijuittuq Working Group, with members from QIA, DFO, PCA, and GN, conducted community consultations in Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord between April 3 - 18, 2023. Clyde River consultations were held on April 5, 2023 and a follow-up meeting with the Nangmoutaq HTA and Clyde River Hamlet Council was held virtually on May 19, 2023.

The purpose of these consultations was to discuss a request by QIA to establish a new Ministerial Order Marine Protected Area (MPA) to explore an Inuit-led Protected and Conserved Area (IPCA) for Tuvaijuittuq. The Working Group also shared information on our proposed approach to regulations for this new short-term MPA, and sought community feedback and support on the proposal. The purpose of this report is to summarize the feedback provided by community members who attended the meetings in Clyde River, to provide transparency in the process, to provide a record of the discussions and concerns shared by the community, and to provide additional information to questions raised during consultations. To ensure we have accurately captured what we heard, this report has been circulated to the Nangmoutaq HTA and Clyde River Hamlet Council for review. Individual reports were developed for each community and after HTAs and hamlets councils have had an opportunity to comment, these reports will be shared with all five communities.

While the Clyde River Hamlet Council was able to form quorum during the meeting, the Nangmoutaq HTA was unable to. The Working Group met virtually with the HTA on May 19, 2023 to present the proposal again and seek feedback. The Nangmoutaq HTA and Clyde River Hamlet Council gave the Working Group permission to seek a letter of support to pursue a new Ministerial Order MPA in Tuvaijuittuq, which will protect the area for up to five years while partners explore an IPCA. Several community members present at the public open house meeting expressed support for the proposal, and no concerns or objections were expressed. We heard information on the sea ice in Clyde River, and that Inuit have lived in the Tuvaijuittuq area in the past. There is an interest in learning more about QIA's regional governance model and the Inuit Qaujimajatuqangit that will inform decisions for this area. Animals use Tuvaijuittuq for feeding, and depend on habitat above and below the ice. The community would like to learn more about the animals in Tuvaijuittuq, climate change impacts, research and other activities there. Clyde River has expressed concerns about climate change, the future of sea ice, and the impact of ice-breakers. Community members are also interested in economic and employment opportunities in Tuvaijuittuq. Clyde River feels strongly that Grise Fiord and Resolute Bay should be involved in decision-making for the area.

### What We Heard From Communities Overall

A common theme heard from communities was a desire to learn more about the MPA, including the animals and habitats that occur there, potential for future economic opportunities, and the types of research done in the area. There is interest from all five communities to protect Tuvaijuittuq in both the short-term and long-term, but also in balancing protection with economic opportunities for future generations. Interest in protecting the area is based on Tuvaijuittuq's ecological importance, its significance to Inuit, and interest in the area's resources by other countries.



## Introduction and Approach

The Tuvaijuittuq Working Group conducted community consultations in Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord between April 3 and April 18, 2023. Clyde River consultations were held on April 5, 2023. The purpose of these consultations was to discuss a proposed new Ministerial Order MPA in Tuvaijuittuq, to share information on the proposed approach to regulations for this new short-term protection measure, and to seek community feedback and support on this proposal. In each community, two gatherings were held; an initial meeting with the HTA, hamlet council, Mayor, Nauttiqsuqtiit and other relevant community groups, and an evening community open house which was open to the public.

At both meetings, information was shared on the significance of Tuvaijuittuq, its boundaries, reasons why the area is being considered for protection, the steps involved in establishing a new Ministerial Order MPA and proposed regulations for this short-term protection measure. The presentation materials and relevant assessments, including a summary of Natural Resources Canada's resource and economic assessment for the area<sup>1</sup> and an ecological and biological overview, were made available to community members in both English and Inuktitut. Two-page summaries of what we heard during November consultations were also provided. Simultaneous interpretation was also provided at each meeting.

The Tuvaijuittuq Working Group committed to circulating a "What We Heard" report to each community for their review and approval summarizing their feedback during these consultations. If community members or organizations feel that their feedback was misinterpreted or misrepresented, the Working Group will revise the report as requested and re-circulate to the community. Please contact Chandra Chambers ([chandra.chambers@dfo-mpo.gc.ca](mailto:chandra.chambers@dfo-mpo.gc.ca)) if you have any questions or concerns. After communities have had a chance to review and approve their What We Heard reports, the Working Group will provide copies of all reports to each community.

DFO committed to following up with communities on outstanding questions that were asked during community meetings. Answers to these questions were circulated to each community HTA, hamlet council and mayor in an email on June 28, 2023, this information is included in Appendix 1 of this report. A copy of the MPA regulations that are being proposed for the new Ministerial Order MPA are also included in Appendix 2 of this report.

The HTAs and/or hamlet councils in some communities could not form quorum during the April meetings. The Working Group followed up with these HTAs and hamlet councils virtually and received permission from each to seek a formal letter of support for the new regulation.

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<sup>1</sup> The full Natural Resources Canada resource assessment was also made available and can be accessed at: [https://publications.gc.ca/collections/collection\\_2022/mcan-nrcan/m183-2/M183-2-8897-eng.pdf](https://publications.gc.ca/collections/collection_2022/mcan-nrcan/m183-2/M183-2-8897-eng.pdf)



## Hunters and Trappers Association (HTA) and Hamlet Council Meeting

The Working Group and local Nauttiguqtiit met with the Nangmoutaq HTA and Clyde River Hamlet Council on April 5, 2023 at 2:00 pm at the Hamlet Office. Other community groups were invited to attend. Approximately nine people were present for this meeting.

The Clyde River Hamlet Council expressed support for the proposal, and indicated an interest in knowing if other communities are also supportive. The Nangmoutaq HTA was unable to form quorum for the meeting but was supportive of scheduling a virtual follow-up call at a later date. The Working Group subsequently met virtually with the HTA on May 19, 2023 to present the proposal again and seek feedback. The HTA members gave permission for the Working Group to seek a letter of support for the proposal, and to engage the larger community at an open house meeting that evening.

### ***What we heard:***

#### *Importance to Inuit*

- During the consultation, the Hamlet Council felt strongly that Grise Fiord and Resolute Bay should be consulted on this process and involved in decision-making for this area as they are closest to Tuvaijuittuq, and because Inuit were relocated to those communities. Board members asked to know whether Grise Fiord and Resolute Bay give their approval on this process.

#### Response:

- The communities of Arctic Bay, Clyde River, Grise Fiord, Pond Inlet and Resolute Bay will be involved in decisions regarding the establishment and co-management of a protected area in Tuvaijuittuq.
- Grise Fiord and Resolute Bay HTAs and hamlet councils gave the Working Group permission to seek letters of support for the proposed new Ministerial Order MPA.

#### *Ecological Significance*

- Animals use Tuvaijuittuq as a feeding area because it has ice year-round. For example, polar bears eat the walrus and seals that travel up to Tuvaijuittuq to feed. Seals travel up to Tuvaijuittuq by following the ice, and fatten up before heading back down south. It is possible the animals will stay up in Tuvaijuittuq in the future because it is the “last ice”. Animals use the water under the sea ice as well.
- The community is interested in learning more about the research in Tuvaijuittuq, including the species found in Tuvaijuittuq (such as Arctic Char, polar bears and narwhal), and predictions on when the ice would break up.

#### Response:

- Research in Tuvaijuittuq is led by DFO through an ongoing research program called the Multidisciplinary Arctic Program (MAP) – Last Ice. This program

undertakes seasonal marine mammal, sea ice, lower trophic level, and other types of research.

- Information related to the MAP – Last Ice Program, and the animals, habitats and climate trends within Tuvaijuittuq is available at the following websites: [https://www.dfo-mpo.gc.ca/csas-sccs/Publications/ScR-RS/2020/2020\\_056-eng.html](https://www.dfo-mpo.gc.ca/csas-sccs/Publications/ScR-RS/2020/2020_056-eng.html) (DFO 2020; Inuktitut version available); [https://publications.gc.ca/collections/collection\\_2021/mpo-dfo/Fs97-6-3408-eng.pdf](https://publications.gc.ca/collections/collection_2021/mpo-dfo/Fs97-6-3408-eng.pdf) (Charette et al. 2020); and <http://wwwdev.ncr.dfo-mpo.ca/oceans/mpa-zpm/tuvaijuittuq/index-eng.html>. Climate models predict that summer sea ice may disappear in the Arctic Ocean by mid-century; however, it is unknown if or when the Tuvaijuittuq area might be ice-free (Charette et al. 2020). Additional information related to research in Tuvaijuittuq is provided in Appendix 1.
- The information above is meant to build on presentations made to the community on November 15, 2022 in which information on the ecological significance and assessments of petroleum and economic potential of the area was shared.

### *Economic Opportunities and Activities*

- Clyde River community members would like to know more about the types of activities that occur in Tuvaijuittuq.

#### Response:

- Tuvaijuittuq is an area that is largely ice-covered all year round and as a result, activities in this area are minimal. Ongoing activities in Tuvaijuittuq were determined in 2019 to be national defence activities carried out by the Department of National Defence and marine scientific research activities. We heard from communities during consultations in 2019 that Inuit had not traveled there recently. Between 2012 and 2019, vessels accessed Tuvaijuittuq only five times; all within nearshore areas in August/September. All but one vessel (a transiting passenger ice-breaker) were Canadian Coast Guard ships. The passenger vessel briefly accessed Greely Fiord in 2016. Available data indicates that between 2019 and 2023, three vessels accessed nearshore areas in Tuvaijuittuq. All were Canadian Coast Guard ships and all accessed the area in August (one in 2019, two in 2022). No tourist or recreational activities are currently occurring within Tuvaijuittuq. Ward Hunt Island, located outside of Tuvaijuittuq and administered by PCA as part of Quittinirpaaq National Park, has been used in the past as a launch point for expeditions to the North Pole. It is likely that these expeditions involved travelling over sea ice in Tuvaijuittuq; however, the activity is not currently ongoing.
- Additional information regarding ongoing activities, including research within Tuvaijuittuq is provided in Appendix 1.
- The community would consider a commercial fishery in Tuvaijuittuq if it becomes possible in the future.

- There is interest in learning more about the oil and gas and mineral resources in the area and whether resource exploration is feasible since no one lives in the area.

**Response:**

- Tuvaijuittuq is largely ice covered all year round, and Geological Survey of Canada experts' analysis indicates that the combination of ice-conditions, technology, and market values do not make the area economically viable today. However, as climate change continues to impact the area we cannot predict the future.
- Additional information about petroleum potential can be accessed here: [https://publications.gc.ca/collections/collection\\_2022/rncan-nrcan/m183-2/M183-2-8897-eng.pdf](https://publications.gc.ca/collections/collection_2022/rncan-nrcan/m183-2/M183-2-8897-eng.pdf).
- The community would like to see additional employment opportunities created if the area becomes protected.

**Concerns**

- There is concern for the future of sea ice and the impacts of climate change.

## Community Open House

The Working Group hosted an Open House meeting for the general public on April 5, 2023 at 7:00 pm. The meeting took place at the Quluuq School where approximately 16 adults were in attendance. Children and youth were also welcomed. Several community members present at the meeting expressed support for pursuing a new Ministerial Order MPA in Tuvaijuittuq. No concerns or objections were expressed.



*Community members meet with the Tuvaijuittuq Working Group members, April 5, 2023.*

***What we heard:***

***Importance to Inuit***

- The community would like to learn more about the Inuit Qaujimagatunqangit being used to inform Tuvaijuittuq.
- It is important that information is passed along from Elders to younger generations. The real hunters are not around anymore, and now there are only people who went to school and do not have the old knowledge.

- Inuit used to live in the area in the 1500s and 1600s, and only recently stopped living there. Old Inuit buildings can still be found in the area.
- The ice in Clyde River comes from Tuvaijuittuq, and over time the sea ice has changed and there is less ice. It was suggested that the changes in ice may not be from climate change, it could just be how the Arctic is – some years are colder and some years are warmer. We heard that this may be hard to know because the Elders that knew best are not around anymore.

### *Ecological Significance*

- Similar interest was expressed during the community open house about the desire to learn more about whether climate change could be slowed or prevented, and about why Tuvaijuittuq is important.

#### Response:

- If you would like more information than what is provided above under “Hunters and Trappers Organization (HTO) & Hamlet Meeting”, and in Appendix 1, please contact [Chandra.Chambers@df-mpo.gc.ca](mailto:Chandra.Chambers@df-mpo.gc.ca).

### *Economic Opportunities and Activities*

- The community would like to learn more about the types of activities occurring in Tuvaijuittuq such as shipping activities, and wildlife harvesting rights.

#### Response:

- If you would like more information than what is provided above under “Hunters and Trappers Organization (HTO) & Hamlet Meeting”, and in Appendix 1, please contact [Chandra.Chambers@df-mpo.gc.ca](mailto:Chandra.Chambers@df-mpo.gc.ca).
- A suggestion was made that young Inuit should be involved in the work and research being conducted in the area, such as through employment opportunities.

### *Concerns*

- There is concern that ice-breakers could break the old multi-year sea ice. There was concern expressed about an increased number of ships, such as ice-breakers, accessing the area and harming the animals and releasing pollution into the water.

## Virtual Hunters and Trappers Association (HTA) Meeting

The Working Group met virtually with the Nangmoutaq HTA on May 19, 2023 at 10:00 AM to share information on the proposed new Ministerial Order MPA and seek feedback. Four HTA members were in attendance. The HTA members advised that although the chairman and vice chair were unable to attend, the members present were comfortable communicating the information to the absent members rather than schedule an additional meeting. The HTA members gave permission for the Working Group to seek formal approval.

## **What we heard:**

### *Importance to Inuit*

- Community leaders restated the importance of seeking feedback from communities and settlements close to Tuvaijuittuq, including Grise Fiord, Resolute Bay, Arctic Bay, CFS Alert, and Eureka.

#### Response:

- Eureka is not considered to be a community or settlement. It is run as a seasonal research station.

### *Economic Opportunities and Activities*

- There is interest in learning if there have been complaints from industry, such as mining and oil and gas, since the MPA was first established in 2019.

#### Response:

- There were no existing exploration licences in Tuvaijuittuq when the MPA was established in 2019, and no expressions of interest or applications had been received. Leading up to 2019, there was (and still is) a moratorium preventing new oil and gas exploration and production in Arctic offshore waters. This moratorium is reconsidered every five years. No complaints have been raised by the oil and gas or mining industries to DFO with respect to this MPA.

### *Regional Governance Model*

- The HTA is interested having an Inuit Qaujimagatuqangit advisor on the regional governance initiative being led by QIA because Inuit Qaujimagatuqangit plays a large role in Inuit-led governance.

## **Next Steps**

The next steps to pursue establishment of a new Ministerial Order MPA will be to seek stakeholder input on the proposal, seek formal community support, complete assessments and approvals needed under the Nunavut Agreement such as conformity determination by the Nunavut Planning Commission and Nunavut Wildlife Management Board approval, and complete DFO's regulatory process. Formal letters of support will be sought from community hamlets and HTAs. Community members are encouraged to communicate their feedback on the proposal to these organizations to inform their decision. DFO will notify communities and stakeholders prior to the proposal being published online for a 30-day public comment period – additional input can be provided at that time as well.

It is important to us that we have summarized your input on this proposal correctly. If you feel that we have missed any input provided during our meetings or captured information incorrectly, please reach out to the email address provided above for correction.



The Tuvaijuittuq Working Group would like to thank all of the community members who attended these meetings - your feedback is vital and appreciated.

Thank You.

## Appendix 1. Follow-up questions and answers from the April 2023 consultations on a new Ministerial Order MPA in Tuvaijuittuq.

\*Please note, an additional question and answer have been added (Question #8) and Question #15 has been expanded upon since it was sent to the HTA and hamlet.

### 1) What is the purpose of protecting Tuvaijuittuq?

Researchers agree that summer sea ice will remain the longest in Tuvaijuittuq (Figure 1) as it continues to decline in other areas of the Arctic due to climate change. Because of this, the area is expected to become an important refuge for ice-dependent species. The area has a very diverse ecosystem, and contains a number of unique communities of organisms, including communities on the ice, in the ice, and below the ice. Habitat in Tuvaijuittuq is important to marine mammals and sea birds. For all of these reasons, DFO and its partners believe that the area, its habitat, and the wildlife within it, would benefit from protection. The proposed Ministerial Order MPA is a short-term protection tool which will protect the area for up to five years. The purpose of this short-term protection tool is to prohibit new activities in the area that may cause negative impacts while additional information is collected to support a better understanding of the conservation and protection needs of the area before longer-term protection measures are considered.

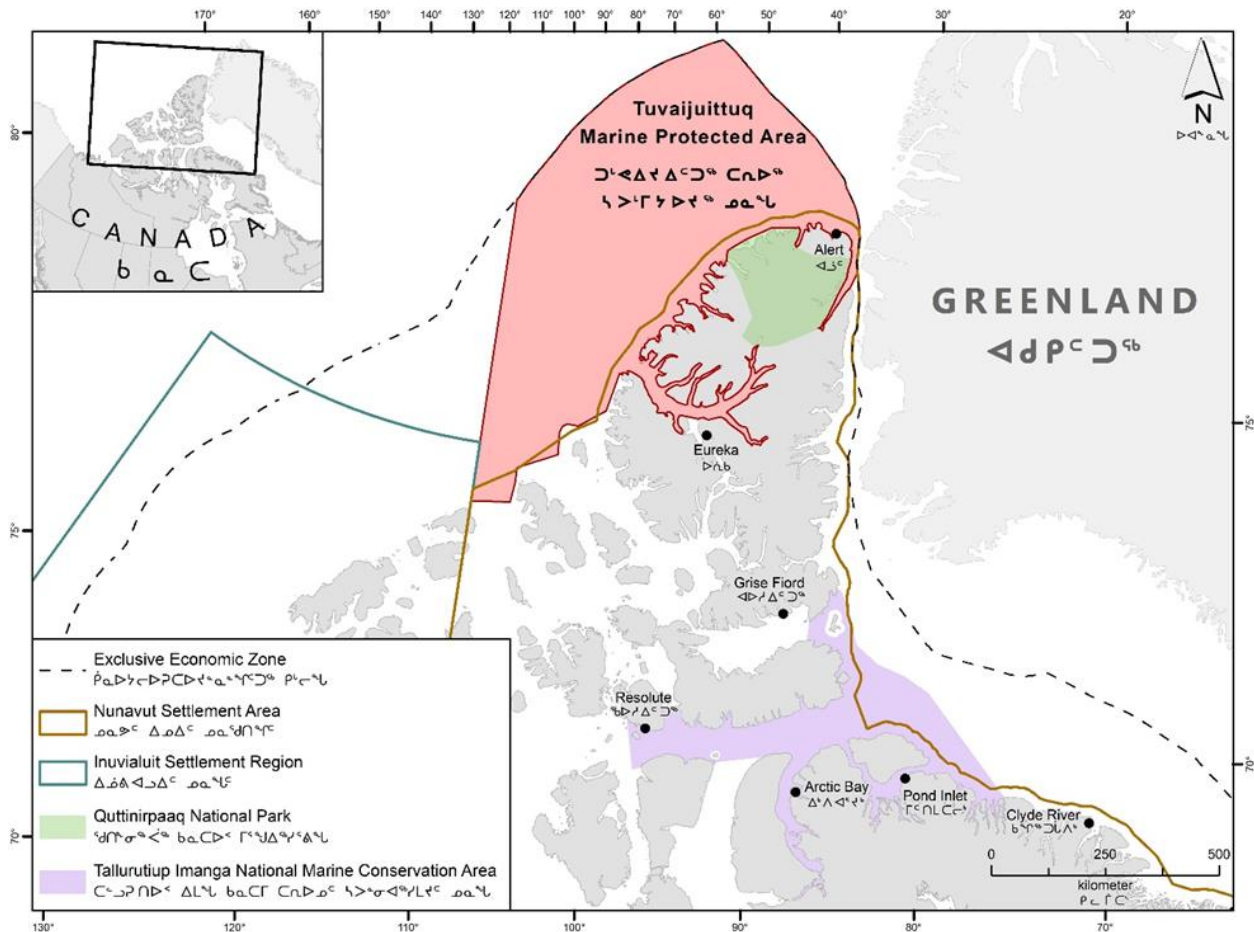


Figure 1. Map of Tuvaijuittuq MPA by Ministerial Order

**2) How was the Tuvaijuittuq boundary determined? Why are the rest of the Queen Elizabeth Islands not included in the boundary?**

The Tuvaijuittuq MPA includes the marine waters off northern Ellesmere Island, starting from the low water mark and extending to the outer 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. The initial boundaries of Tuvaijuittuq were based on the 2011 Canadian Science Advisory Report ([2011/55](#)), which identified key multi-year ice habitat. The boundary was later extended to the nearshore areas off Ellesmere Island within the Nunavut Settlement Area as more of the area was understood. The marine area around the Queen Elizabeth Islands south of Ellesmere Island supports different communities of organisms than those within Tuvaijuittuq. This area was not considered for inclusion in Tuvaijuittuq as it has different conservation needs. Partners agreed to settle on the boundary as it is now and consider the remaining islands at a later time as possible new protected areas. Some of the Queen Elizabeth Islands overlap with the Inuvialuit Settlement Region, which is not included in the Tuvaijuittuq boundary.

**3) What does “freezing the footprint of ongoing activities” mean?**

Freezing the footprint of ongoing activities means allowing activities that are already lawfully occurring in the area to continue and preventing any new activities that may damage, disturb, destroy or remove important habitats, features and organisms. Ongoing activities in Tuvaijuittuq were identified using a number of different methods, including community consultation (in Arctic Bay, Resolute Bay and Grise Fiord in 2019 and in Arctic Bay, Resolute Bay, Grise Fiord, Pond Inlet and Clyde River in 2022), consultation with QIA, and consultation with DFO Science and other federal departments and agencies including the Department of National Defence, Parks Canada Agency, and Canadian Coast Guard. DFO gathered further information about ongoing activities by seeking input on the proposed regulations from industry and other stakeholders (e.g., non-governmental organizations), and from studies such as an assessment of vessel traffic using Automatic Identification System (AIS) signals in the area between 2012-2019. This study is currently being updated so DFO has the most up-to-date information.

Based on available information, DFO determined that ongoing activities in Tuvaijuittuq include:

- (a) national defence activities carried out by the Department of National Defence; and
- (b) marine scientific research activities.

The regulations also include exemptions and exclusions helping to respect commitments Canada has made both domestically and internationally.

The full regulations are provided as a separate attachment in both English and Inuktitut.

**4) Does freezing the footprint of activities affect wildlife harvesting rights of Inuit in this area?**

The Ministerial Order MPA does not apply with respect to the wildlife harvesting rights of Nunavut Inuit in the Nunavut Settlement Area, as provided for in the Nunavut Agreement. This means that the Ministerial Order regulations do not affect the wildlife harvesting rights of Inuit within the Nunavut Settlement Area (NSA).

There appear to be no provisions within the Nunavut Agreement that extend Inuit harvesting rights beyond the NSA portion of Tuvaijuittuq. As a result, the regulations would apply to everyone in the area of Tuvaijuittuq that falls outside of the NSA. However, we would be interested in further discussing the matter if there are provisions in the Nunavut Agreement you believe have been overlooked.

**5) Why are there exemptions for foreign states in the Ministerial Order MPA regulations?**

Under the United Nations Convention on the Law of the Sea (UNCLOS), which is an international agreement, Canada must allow certain activities such as navigation (vessels transiting through) and laying of cables and pipelines, from foreign states in certain maritime zones. Because of this, those foreign activities are exempted from the application of the Ministerial Order MPA in Tuvaijuittuq. The exclusive economic zone, an area of the sea beyond the territorial sea extending out to 200 nautical miles from the coastline (Figure 2), is not Canadian territory, and in that area Canada only has jurisdiction over economic resources such as fishing, oil and gas, and mineral exploitation.

Under Canadian law, Canada has the authority to prohibit domestic vessel navigation and other activities in this area. Since the purpose of the short-term Ministerial Order MPA is to conserve and protect the vulnerable habitats and organisms in Tuvaijuittuq while we collect additional information to inform decisions about long-term protection, we aim to limit any activity, including domestic activities, that may negatively impact the area. Although foreign navigation is allowed in the MPA, foreign countries will typically comply with voluntary measures, if guidance is provided to avoid certain areas within the MPA.

**6) Can the old sea ice (multi-year ice) be broken by ice-breakers?**

While some ice-breakers can break through thick multi-year ice, there are different classes of ice-breakers built for different purposes and ice thicknesses. Not all ice-breakers can break through thick multi-year ice. To our knowledge, the few vessels that have travelled to Tuvaijuittuq for activities such as national defence, safety, marine research, and foreign vessel travel, have stayed within the nearshore areas during the open water season and did not actively conduct ice-breaking activities.

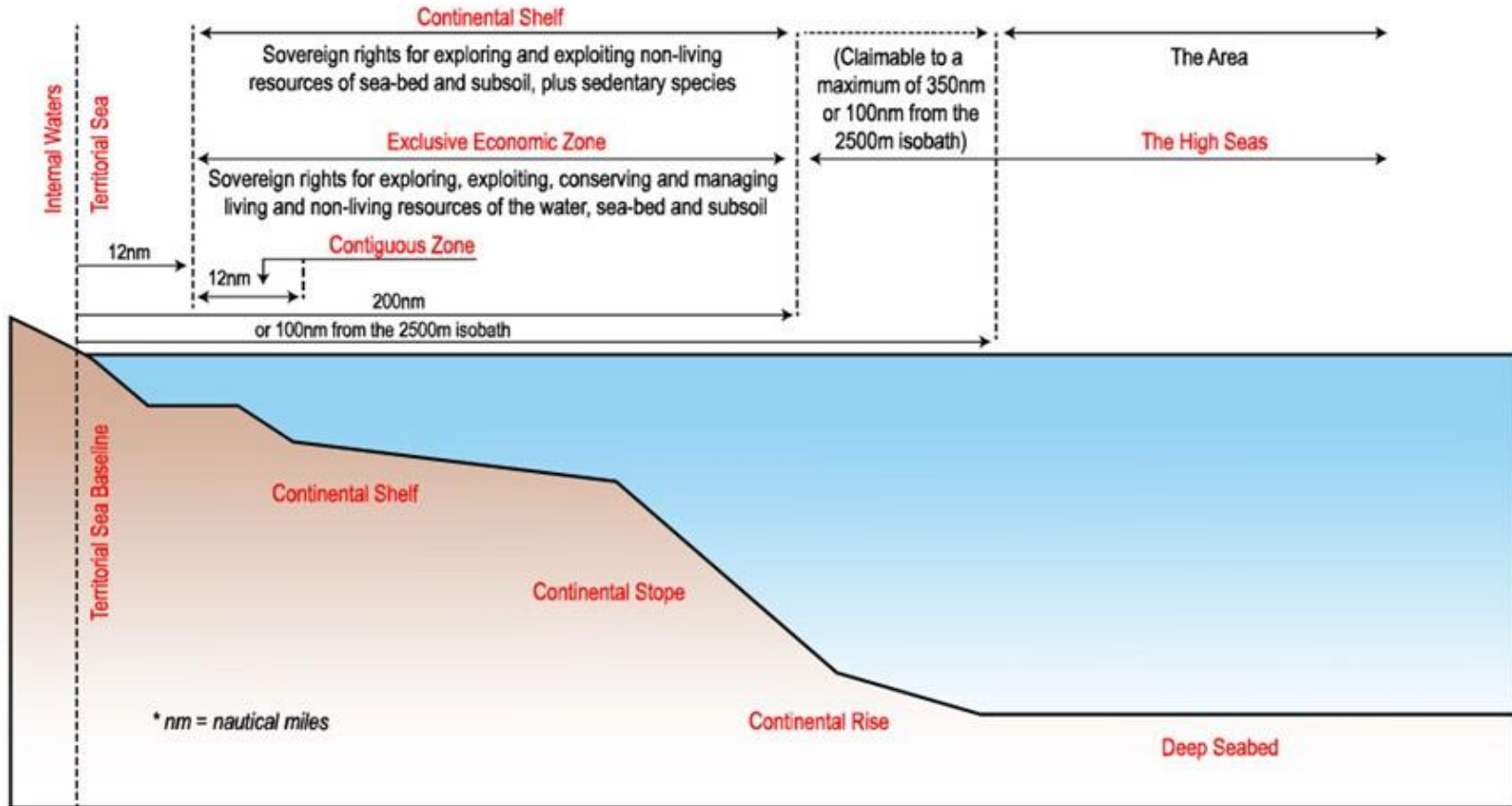


Figure 2. Canada's Maritime Zones

## 7) How can Inuit visit Tuvaijuittuq?

Tuvaijuittuq is an area of the sea that is a mainly ice-covered all year round and is very remote. There is one military research station in Alert called Canadian Forces Station (CFS) Alert located outside of Tuvaijuittuq on northern Ellesmere Island and a small research base in Eureka on Fosheim Peninsula. There are no communities nearby – the closest community is Grise Fiord, which is approximately 327 km as the crow flies from the MPA's southern-most boundary. Activity in Tuvaijuittuq is limited to national defence activities and marine scientific research, mainly due to the extensive ice cover in this marine area. In 2019, the communities of Arctic Bay, Resolute Bay and Grise Fiord indicated that the area is difficult to reach by skidoo; however, some community members in Grise Fiord had travelled, or knew of people that had travelled, as far as Eureka (which is south of the proposed area) by dogsled in the past.

There are however, opportunities for involvement in research activities in Tuvaijuittuq, which are based out of CFS Alert. For more information on participating in research activities in Tuvaijuittuq, please contact Chandra Chambers ([Chandra.Chambers@df0-mpo.gc.ca](mailto:Chandra.Chambers@df0-mpo.gc.ca)).

## 8) Fisheries quotas to Inuit

It is important to note that Tuvaijuittuq is largely ice-covered all year round and is not accessible to fishing vessels. As a result, no large-scale commercial fishing activities are possible in the area under current conditions. It is unknown if ice conditions would support small-scale on ice fisheries, and no data are available to understand whether a fishery (small or large-scale) would be possible.

When we visited communities in April 2023, we received a question relating to fisheries quotas in general and how these are allocated to Inuit.

Fisheries and Oceans Canada continues to respect and implement the obligations under Nunavut Agreement including provisions related to offshore commercial fisheries access that give special consideration to Nunavut. Through implementation of the Nunavut Agreement over the years, the share of adjacent resources to Qikiqtani Inuit has significantly increased, such that Qikiqtani Inuit fishers now have 80% of Turbot and 42% of shrimp resources including 100% of all fisheries resources within the Nunavut Settlement Area.

## 9) What kind of Inuit Qaujimaqatqangit (IQ) is used? What is studied?

- Oral History passed down over centuries of Inuit Knowledge.
- Inuit knowledge living and adapting, part of present day life. It is in how Inuit live and see the world today.
- QIA would like to gather IQ for Tuvaijuittuq.

## 10) Can more information be provided about the infrastructure that QIA refers to? Would QIA make buildings or houses for Tuvaijuittuq purposes?

- Multi-use facilities to address Inuit Stewardship and community needs (office space, equipment storage, garage, country food processing, community outreach, elder gatherings, etc.).

- Additional infrastructure that supports Inuit stewardship activities and the Nauttigsuqtiit program, such as housing and supplementing the facilities in the Tallurutiup Imanga communities as appropriate.
- Infrastructure requirements for Inuit stewardship that arise due to changing socio-economic or environmental conditions.

### **11) When will the regional governance model will be in effect?**

At this time, this is still at the negotiation table. However, QIA is seeking this Regional Governance model for future IIBAs as well as existing IIBAs that will be renegotiated over time.

### **12) Status update on the harbour planned for Resolute Bay.**

Transport Canada (TC), the Government of Nunavut (GN), and the Qikiqtani Inuit Association (QIA) have been working together towards the development of community harbours in Grise Fiord and Resolute Bay and have developed an Infrastructure Investment Plan (IIP) that was adopted in October 2022.

The IIP was completed based on community engagements and other work to date and informed the Agreement for Resolute Bay and Grise Fiord Community Harbour Development.

The Agreement for Resolute Bay and Grise Fiord Community Harbour Development was signed by TC and the GN on January 16, 2023 and will provide up to \$76,281,900 to the GN for the design and construction of the two community harbours in Grise Fiord and Resolute Bay. The current funding for community harbours will cover the cost of constructing at least one breakwater, a parking area, dredging, a boat launch, and floating docks.

TC has provided a copy of the agreement to the QIA representative, to be kept in confidence.

We understand from the GN that:

- A Project Manager with GN's Department of Community and Government Services has been assigned to the projects.
- The exact procurement approach for construction has not been finalized, but it is likely to follow the GN's standard procurement practices.
- The first step is expected to be a Request for Proposal for engineering and design services.

For more information, please contact Matthew Bowler ([MBowler@GOV.NU.CA](mailto:MBowler@GOV.NU.CA)) or Miguel Parent ([miguel.parent@tc.gc.ca](mailto:miguel.parent@tc.gc.ca)).

### **13) What type of research is occurring in Tuvaijuittuq?**

Research in Tuvaijuittuq is led by DFO through the Multidisciplinary Arctic Program (MAP) - Last Ice and this team includes researchers from universities and organizations all over the world. The program brings together a number of different specialists to study different features in Tuvaijuittuq. For example, experts in sea ice, water, fish, marine mammals, and those who study organisms such as algae and krill that form the basis of the High Arctic



food web. Some of this work is done during a late winter/early spring seasonal field camp, where researchers work together as a team to collect samples and do their research. Others, like marine mammal surveys, are conducted around the same time but not as part of the field camp, and in the fall. The program began in 2018 and experienced some delays due to COVID-19 but is continuing. A new ship-based program called ArcticCore will begin this year and will include Archer Fiord and adjacent areas around Tuvaijuittuq (as sea-ice permits). This new program will study physical (currents/movement), chemical (nutrients, ocean acidification), and biological (primary production, zooplankton, benthos) oceanography and will also include marine mammal surveys and sea ice studies. If long-term protection is put into place in the future, then more formal management and monitoring plans would be developed for Tuvaijuittuq, in collaboration with partners and communities.

Research partners in MAP-Last Ice:

DFO  
Department of National Defence  
Defence Research and Development Canada  
Université Laval  
University of Essex  
Université du Québec à Rimouski  
Environment and Climate Change Canada  
Mediterranean Institute of Oceanography  
Polar Continental Shelf Program  
Alfred Wegener Institute  
University of Bristol  
Resolute HTA Board of Directors

Type of research conducted as part of MAP-Last Ice:

- Sea ice distribution, physical properties (thickness, composition), productivity (algal communities, biomass)
- Evolution of the ice and under-ice habitat over time
- Continuous atmospheric, oceanographic and sea ice observations
- Zooplankton, fish and benthic organisms
- Marine mammal and habitat surveys
- Physical (currents/movement), chemical (nutrients, ocean acidification), and biological (primary production) oceanography

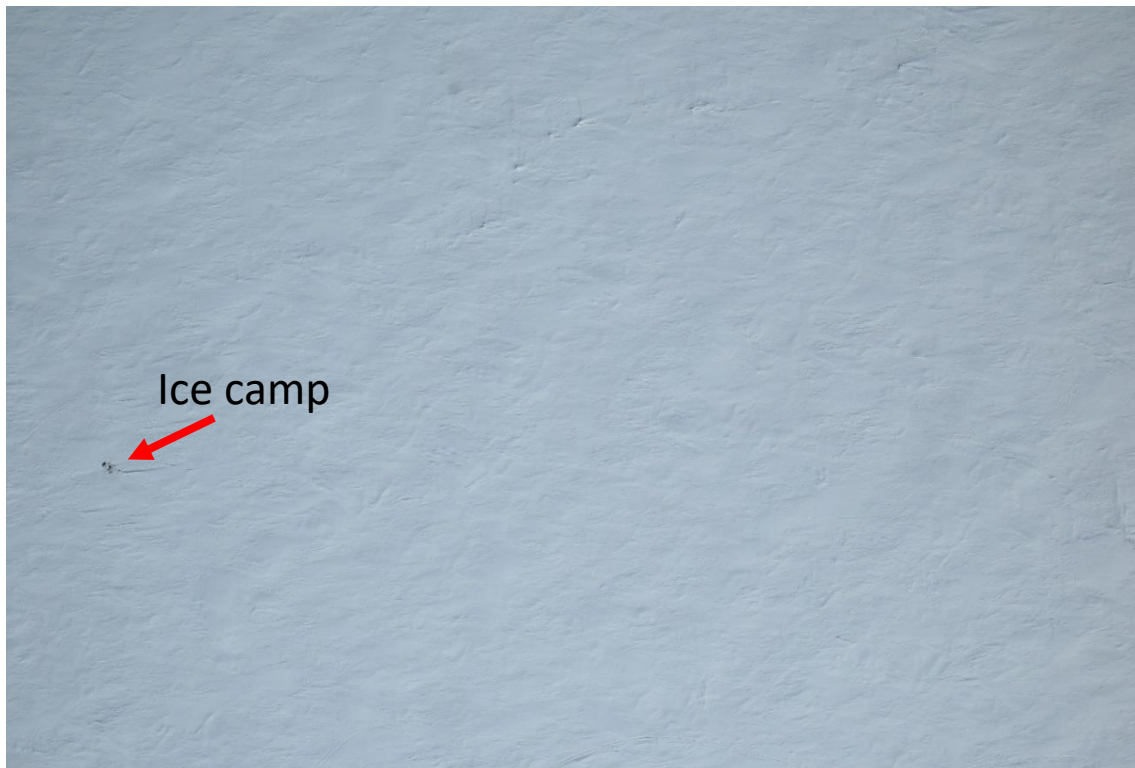
Collection of ice cores during the MAP-Last Ice and ArcticCORE programs:

We are very conscious of potential disturbances to the environment and during our sampling we take action to minimize these disturbances. When we collect ice cores, we sample only a part of the core and we replace the rest of the core to its original hole. Once replaced in its original hole, the core refreezes quickly, typically within a few hours.

The ice cores that we collect are small, at 9 cm diameter. This means that the surface area of one core is 5 times smaller than that of a hole cut out with an 8-inch auger, and about 10-12 times smaller than that of a seal breathing hole. While the seals keep their holes open,

we “close” our holes after sampling (with the original ice core from which we cut off one or a few sections). If we add the area of all the cores that we collect during one sampling season, it would typically add up to much less than 1 square meter, at most 2 m<sup>2</sup>.

In the photo below, we can see our ice camp on the sea ice north of Ellesmere Island. In another photo taken a few days after we took out camp, it was not possible to identify the site where the ice camp had been set up.



**Figure 3. Aerial view showing the ice camp on the sea ice north of Ellesmere Island. A few days after taking out the camp, the site of the ice camp was not visible anymore.**

#### **14) Interest in learning more about Canada’s Polar Continental Shelf Program**

##### **Polar Continental Shelf Program:**

Natural Resources Canada’s Polar Continental Shelf Program (PCSP) supports Arctic science by providing logistics planning, coordination and advice to Canadian government, non-government, university and international researchers. The PCSP supports projects in the Arctic from Churchill, Manitoba, to the northern tip of Ellesmere Island, Nunavut, and from the Yukon/Alaska border to as far as Greenland, on occasion.

Support can include air transportation, as well as fuel, field equipment for loan, field communications and safety, logistics advice for field studies, the use of the PCSP facility in Resolute, Nunavut, and shipping and receiving coordination and advice. The PCSP facility in Resolute is typically open from late January to September each year and is comprised of



an accommodations area that can house up to 237 guests, lounge areas, a fitness room, office spaces, kitchen and dining facilities, an operations centre and a laboratory.

The PCSP provides employment, student training and business opportunities for northern residents. The PCSP also helps with science outreach through publishing an annual science report and connecting researchers with northern community organizations.

The table below includes PCSP projects that occurred close to Grise Fiord and/or Tuvaijuittuq in recent years. Please feel free to reach out to the project leads if you have an interest in specific projects.

As a contact at the Polar Continental Shelf Program, please feel free to reach out to **Michael Meunier**, Manager of the Program Coordination and Outreach unit ([michael.meunier@nrcan-rncan.gc.ca](mailto:michael.meunier@nrcan-rncan.gc.ca)) or the PCSP Ottawa mailbox ([pcspottawa-ppcpottawa@nrcan-rncan.gc.ca](mailto:pcspottawa-ppcpottawa@nrcan-rncan.gc.ca)). Michael and his group would be pleased to connect with you and discuss your priorities.

Here are some additional resources that may be of interest:

- A list of all 2019 and 2020 projects supported by PCSP can be found at the following link: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/polar-continental-shelf-program/current-projects/10009>.
- More information on the PCSP can be found at: [https://natural-resources.canada.ca/sites/nrcan/files/earthsciences/files/pdf/polar/PCSP-Brochure\\_eng.pdf](https://natural-resources.canada.ca/sites/nrcan/files/earthsciences/files/pdf/polar/PCSP-Brochure_eng.pdf)
- Information on project support applications can be found here: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/research-support-arctic-logistics-and-field-equipment-for-across-canada/10003>.
- Annual Science Reports can be found at the following link: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/polar-continental-shelf-program/pcsp-publications/10011>.

**Table 1. List of PCSP-supported projects in the Arctic Archipelago, many near Grise Fiord and/or Tuvaijuittuq MPA in recent years**

Primary Investigator	Institution	Study Location(s)	Project Title
Hsin Chiang	McGill University	McGill Arctic Research Station, Expedition Fjord	A new window on the universe: radio astronomy from northern Canada
Cory Matthews	Fisheries and Oceans Canada	Grise Fiord	Aerial survey of High Arctic walrus and narwhal stocks
Michael Maurice	Environment and Climate Change Canada	Svartevaeg, Eureka, Isachsen, Grise Fiord, Mould Bay, Rea Point, Cape Providence, Resolute Bay, Steffanson Island, Cape Liverpool, Fort Ross, Gateshead	Annual Maintenance of Environment and Climate Change Canada's Automatic Weather Station array - Arctic Archipeligo

Primary Investigator	Institution	Study Location(s)	Project Title
Christine Michel	Natural Resources Canada	Eureka	Arctic CORE (Conservation, Observation, Research, and Engagement)
Lyle Whyte	McGill University	Assistance Bay	Assessment of Bioremediation Potential of Marine Fuels on NWP Arctic Beaches
Joseph Monteith	Crown-Indigenous Relations and Northern Affairs Canada	Alert, Eureka	Baffin/High Arctic Inspections 2022
Alexander Culley	Université Laval	Ward Hunt Island	Characterizing viral impact in the Last Ice Area
Christopher Omelon	Queen's University	Expedition Fiord, Resolute Bay	Climate Change Research at the McGill Arctic Research Station
David Didier	Université du Québec à Rimouski	Sydkap Glacier and surrounding area, Starnes Fiord and surrounding area, Jakeman Glacier and surrounding area, Grise Fiord	Coastal dynamics and hazards in Grise Fiord and Jones Sound
Mark Skidmore	Montana State University	Truelove Lowlands, Croker Bay, Resolute, Gascoyne inlet	Exploration of Saline Cryospheric Habitats with Europa Relevance (ESCHER): An approach using airborne and submarine semiautonomous systems
Erin MacNeil	Natural Resources Canada	Gascoyne Inlet	Defence of North America
Lyle Whyte	McGill University	Devon Island lakes site	Developing new technologies to access and investigate the hypersaline, subzero Devon Island Subglacial Lake System, a unique Mars and icy moon analogue
Denis Lacelle	University of Ottawa	Eureka	Effect of degrading ice wedge polygon landscapes on local topography, hydrology, and water quality.
Susan Kutz	University of Calgary	East wind lake, Eureka, Resolute Bay	Emerging Infectious Disease in High Arctic Ungulates - Terrestrial Investigations
Amelie Roberto-Charron	Government of Nunavut	Eureka Weather Station, Resolute Bay	Emerging Infectious Diseases in High Arctic Ungulates – Aerial assessment

Primary Investigator	Institution	Study Location(s)	Project Title
Clément Chevallier	Environment and Climate Change Canada	Cape Verra, Cape Verra, Nirjutiqarvik, Cape Liddon, Houbhouse Inlet, Prince Leopold Island, Baillarge Bay	Fulmar colony surveys in Lancaster Sound
Myriam Lemelin	Université de Sherbrooke	T-MARS camp, McGill Arctic Research Station, Axel Heiberg Island	Geological study and mapping of hydrothermal deposits and gossans, Expedition Fiord, Axel Heiberg Island, Nunavut, as analogues for Mars
Christine Dow	University of Waterloo	Devon Ice Cap camp	Geophysical imaging of the Devon sub-glacial lakes
Luke Copland	University of Ottawa	Manson Icefield, Sydkap base camp, Sydkap ice marginal lake complex, Grise Fiord	Glacier monitoring on southern Ellesmere Island
Maya Bhatia	University of Alberta	Sydkap Glacier and surrounding area, Starnes Fiord and surrounding area, Jakeman Glacier and surrounding area, Grise Fiord	Glacier-ocean interactions in the Canadian high Arctic
Daniel Fortier	University of Montreal	Ward Hunt Island	Ground ice of eastern Canadian High Arctic polar desert
Cortney Wheeler	Fisheries and Oceans Canada	Elwin Bay, Creswell Bay	High Arctic Beluga Whale Stock Structure
Greg Henry	University of British Columbia	Sverdrup Pass, Knud Peninsula, PCSP Eureka, Bache Peninsula, Princess Marie Bay, Alexandra Fiord, Cape Bounty	High Arctic tundra ecosystem responses to 30 years of experimental and observed climate change
Masaki Uchida	National Institute of Polar Research, Japan	Oobloyah Bay	Identifying and understanding the effect of temporal and spatial changes towards the biodiversity and carbon sequestration processes in the high Arctic
John Moores	York University	Expedition Fjord	Identifying putative microbial drivers of methane flux on Earth and on Mars
Raoul-Marie Couture	Université Laval	Ward Hunt Island	Impact of oxygen pulses on redox-sensitive chemicals and microbiome in Canada's northernmost lake
Cory Matthews	Fisheries and Oceans Canada	Goose Fiord, Brooman Point, Kearney Cove	Improving High Arctic walrus stock assessment using satellite telemetry, genetics, and time-lapse photography
Lyle Whyte	McGill University	Lost Hammer, Thompson Glacier, White Glacier,	

Primary Investigator	Institution	Study Location(s)	Project Title
		Expedition Fjord, Gypsum Hill, Color Peak	Investigations of microbial activity in cryoenvironments in the Canadian High Arctic
Laura Brown	University of Toronto Mississauga	Nanuit Itillinga (Polar Bear Pass), Nanuit Itillinga (Polar Bear Pass), Cornwallis Island Lakes	Lake Ice in the Canadian High Arctic
Scott Lamoureux	Queen's University	Cape Bounty, Melville Island, Resolute vicinity	Land and water impacts and response to climate and permafrost changes in the High Arctic
Laura Thomson	Natural Resources Canada	Muller Ice Cap, Expedition Fiord	Mass Balance and Energy fluxes of White Glacier, Axel Heiberg Island, NU
Catherine Girard	Université du Québec à Chicoutimi (UQAC)	Ward Hunt Island, Resolute Bay vicinity	Microbes on the go: Release of cryospheric microbes to downstream habitats
Derek Mueller	Carleton University	Milne Ice Shelf, Milne Fiord, Purple Valley, Eureka, Resolute	Milne Fiord ice-ocean interactions: Implications for the stability of ice shelves and glaciers in the Polar Regions
Dave Burgess	Natural Resources Canada	Agassiz Ice Cap, Meighen Ice Cap, Grise Fiord, Devon Ice Cap, Melville Ice Cap	National Glaciology Project - Queen Elizabeth Islands, NU & NT
Warwick Vincent	Université Laval	Resolute (Cornwallis Island), Thores Lake (Ellesmere Island) and Ward Hunt Island	Northern Ellesmere Island in the Global Environment - Sentinel North
Valerie Amarualik	Parks Canada	Young Inlet, Dundee Bight, Dome Camp	Qausuittuq National Park Operations 2022/2023
Adam Ferguson	Parks Canada	Fort Conger, Lake Hazen, Ruggles River, Tanquary Fiord, Resolute Bay	Quttinirpaaq National Park Operations 2022
Gordon Osinski	University of Western Ontario	Haughton River Valley	Reconstructing the post-impact history of the Haughton impact structure, Nunavut
Lynda Gullason	Inuit Heritage Trust Incorporated	Resolute, Morin Point, Devon Island, Pond Inlet	Saving Morin Point: Climate Change Risk Assessment and Archaeological Heritage Recovery
Dermot Antoniades	Université Laval	Stuckberry Valley, Lake Hazen	The functioning and evolution of the ecosystems of Stuckberry Valley, northern Ellesmere Island

Primary Investigator	Institution	Study Location(s)	Project Title
Joshua King	Environment and Climate Change Canada	Eureka, Nunavut	Development of a new Canadian Arctic Archipelago sea ice product from ICESat-2 (Ice Cloud and Land Elevation Satellite-2)
Michael Brohart	Environment and Climate Change Canada	Eureka, Nunavut	Instrument calibration at Eureka weather station as part of the Canadian Brewer Spectrophotometer Network operation
Alison Criscitiello	University of Alberta	Grise Fiord and Resolute, Nunavut	Airborne gravity survey over Devon Ice Cap
Rich DeVall	Environment and Climate Change Canada	Isachsen (Ellef Ringnes Island), Rea Point (Melville Island), Stefansson Island, Fort Ross (Somerset Island), Gateshead Island, Cape Liverpool (Bylot Island), Svarteveg (Axel Heiberg Island) and Grise Fiord (Ellesmere Island), Nunavut	Annual maintenance of ECCC's automatic weather station array – Arctic Archipelago
Grant Gilchrist	Environment and Climate Change Canada	Grise Fiord, Nunavut	Population surveys of endangered ivory gulls on Ellesmere Island and Devon Islands
Alexander Culley	Université Laval	Expedition Fiord (Axel Heiberg Island), Resolute (Cornwallis Island), Ward Hunt Island and Thores Lake (Ellesmere Island), Nunavut	Viral ecology of the high Canadian Arctic in water, ice and aerosols
Mark Lamothe	Natural Resources Canada	Eureka and Resolute, Nunavut	Eureka geomagnetic electronic replacement
Nicolas Lecomte	Université de Montreal	Bylot Island, Igloolik Island and Eureka, Nunavut	Arctic IMPACTS: tracking impacts of ecosystem changes in the Arctic
Christine Michel	Fisheries and Oceans Canada	Alert, Nunavut	Multidisciplinary Arctic Program (MAP) – Last Ice
Wayne Pollard	McGill University	Eureka and Expedition Fiord (Axel Heiberg Island), Nunavut	The vulnerability and resiliency of ice-rich permafrost in cold polar desert environments in response to changing climate
Vincent St. Louis	University of Alberta	Lake Hazen, Quttinirpaaq National Park, Nunavut	The impacts of rapidly receding glaciers on downstream freshwater resources and ecological services



**15) What is being done to clean up past military, research and Government of Canada sites left on Ellesmere Island?**

There were a number of sites in Quttinirpaaq National Park that required remediation. These sites have been remediated, with the exception of Fort Conger, which now has a long-term monitoring strategy in place.

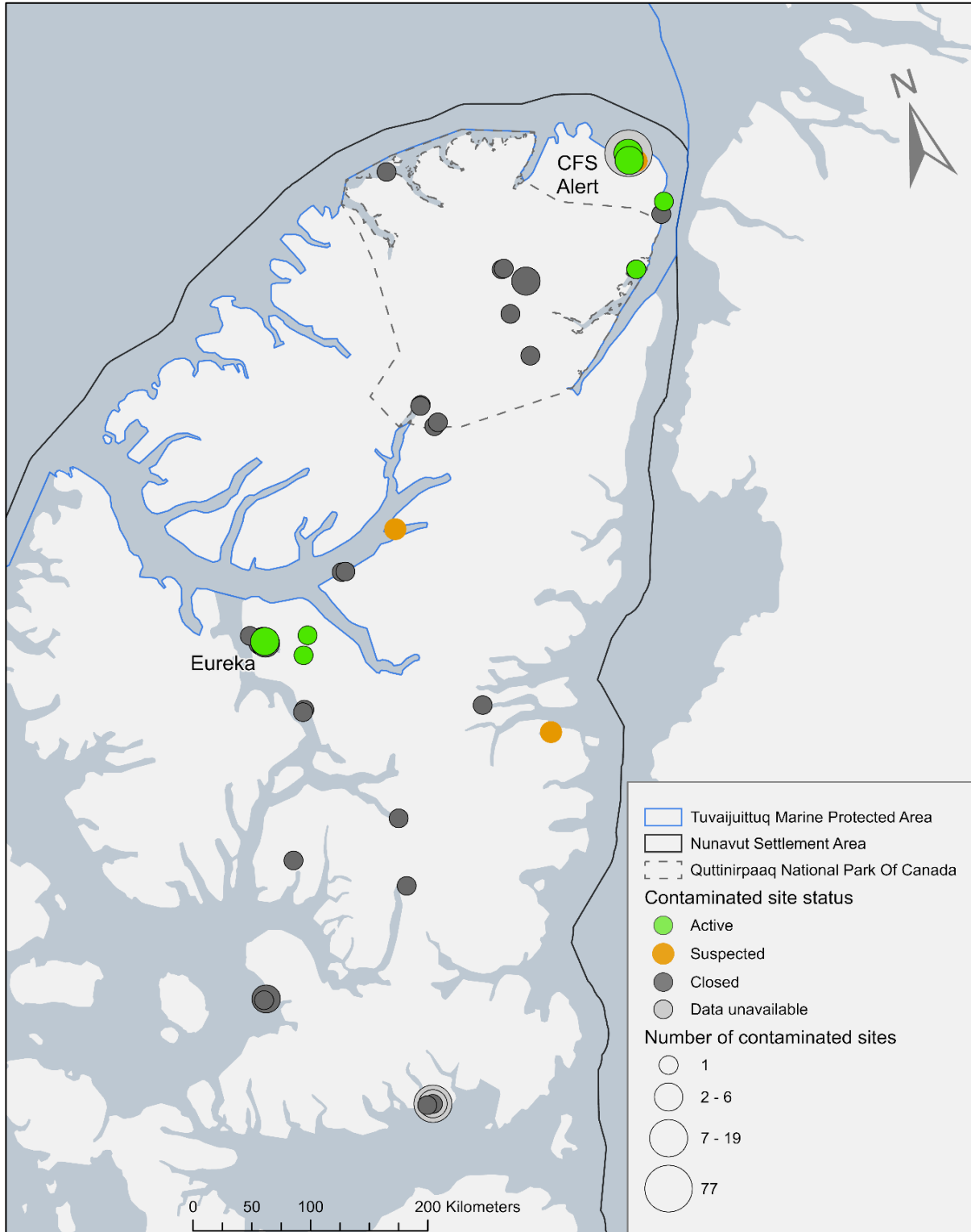
Fort Conger is a historical site situated on the shore of Discovery Harbour on Lady Franklin Bay, (N 81° 45.13', W 64° 49.56'). The site was used as a base by early Arctic expeditions and a scientific research camp. The site was also visited by early twentieth-century expeditions and later by government and military personnel, researchers, Inughuit hunters and tourists. A human health and ecological risk assessment conducted for the area identified risks from contamination at the site and a Risk Management and Remediation Plan has been developed. While some remediation has been completed, additional work is not an option at this time due to the remoteness of the site and the risks to cultural artifacts. Therefore, a long-term monitoring plan was developed so that, if the site becomes more accessible and remediation is possible, the proposed risk management and remediation strategy could be reviewed and updated. For more information on these sites, please contact Jane Chisholm at [jane.chisholm@pc.gc.ca](mailto:jane.chisholm@pc.gc.ca).

Additional information has been gathered on other sites on Ellesmere Island from the Government of the Northwest Territories (GNWT) Spills Database and the Federal Contaminated Sites Inventory (FCSI). The available data are summarized together in Figure 4, Table 2. The GNWT Spills Database is a collection of reported petroleum and other hazardous material spills in Nunavut and the Northwest Territories. The FCSI includes information on all known and suspected contaminated sites under the management of federal departments, agencies and consolidated Crown corporations.

The majority of contaminated sites on Ellesmere Island have been closed following historical reviews, testing, clean-ups or long-term monitoring activities. Available information from these two databases indicates that there are ten active sites (five in or near CFS Alert, four in or near Eureka, and one in Fort Conger) and three suspected sites (one at the Alexandra Fiord RCMP Detachment Site, one at D'Iberville Fjord, and one at Alert). Site status and actions data are unavailable from the GNWT Spills Database.

Site numbers that start with “spill-“ are from the GNWT Spills Database, and all other sites are from the FCSI. The site status refers to what is currently happening with the site. An “active” site is a confirmed contaminated site where remediation action is or may be required; a “closed” site is a site that requires no further action; and a “suspected” site requires further assessment work to confirm whether the site is considered a contaminated site. Actions tell us what has been done to the site, for example remediation efforts or testing.

The GNWT Spills database can be found at <https://www.gov.nt.ca/ecc/en/spills>, and the FCSI data can be found at <https://www.tbs-sct.gc.ca/fcsi-rscf/home-accueil-eng.aspx> and <https://www.tbs-sct.gc.ca/fcsi-rscf/numbers-numeros-eng.aspx?qid=1680451>. Information on the Federal Contaminated Sites Action Plan (FCSAP) can be found at <https://www.canada.ca/en/environment-climate-change/services/federal-contaminated-sites/action-plan.html>.



**Figure 4. Map showing closed, active and suspected contaminated sites on Ellesmere Island, NU. Source data: Government of Northwest Territories (GNWT) Spills Database and the Federal Contaminated Sites Inventory (FCSI), accessed May 2023**

**Table 2. List of active and suspected contaminated sites located on Ellesmere Island, including information on reporting organization (Crown Indigenous Relations and Northern Affairs Canada [CIRNAC]; Fisheries and Oceans Canada [DFO]; National Defence [DND]; Environment and Climate Change Canada [ECCC]; Parks Canada Agency [PCA]; Royal Canadian Mounted Police [RCMP]), contaminants (petroleum hydrocarbons [PHCs]; benzene, toluene, ethylbenzene, and xylene [BTEXs]; polycyclic aromatic hydrocarbons [PAHs), quantity, and actions.**

Site Number	Site Name / Location	Site Status	Occurrence Date	Latitude	Longitude	Reporting Organization	Contaminants	Quantity (cubic metres)	Actions
286	Lincoln Bay	Active	Data unavailable	82.0833	-62.0000	CIRNAC	PHCs	12	Initial testing completed. Detailed testing underway.
2747	Eureka High Arctic Weather Station	Active	Data unavailable	79.9908	-85.8586	ECCC	PHCs, BTEXs, PAHs, Metal, metalloid, and organometallic	15750	Remediation / risk management completed. Confirmatory sampling underway.
8328	Fort Conger Historic Site	Active	Data unavailable	81.7522	-64.8261	PCA	PAHs, Metal, metalloid, and organometallic	1265	Remediation / risk management completed. Confirmatory sampling underway.
24258	Romulus - Panarctic C-42 Well Site	Active	Data unavailable	79.8526	-84.3764	CIRNAC	BTEXs, PAHs, Metal, metalloid, and organometallic	3500	Remediation / risk management completed. Confirmatory sampling underway.
24259	Gemini - Panarctic E-10 Well Site	Active	Data unavailable	79.9902	-84.0690	CIRNAC	PHCs, Metal, metalloid, and organometallic	1500	Initial testing completed. Detailed testing underway.
27530	Neil Trivet Gaw Lab (Bapmon - Alert)	Active	Data unavailable	82.4535	-62.5135	ECCC	PHCs	0	Initial testing completed. Detailed testing underway.
20247006	Alert Main Station	Active	Data unavailable	82.4981	-62.3367	DND	PHCs, PAHs, Metal, metalloid, and organometallic	14500	Confirmatory sampling completed. Long term monitoring underway.

Site Number	Site Name / Location	Site Status	Occurrence Date	Latitude	Longitude	Reporting Organization	Contaminants	Quantity (cubic metres)	Actions
20247025	Alert Tx Site	Active	Data unavailable	82.4528	-62.5020	DND	PHCs	600	Detailed testing completed. Remedial action plan under development.
20247029	Alert Airfield	Active	Data unavailable	82.4998	-62.3611	DND	PHCs, BTEXs, Metal, metalloid, and organometallic	3	Confirmatory sampling completed. Long term monitoring underway.
70069014	Eureka - North Airstrip Apron	Active	Data unavailable	79.9977	-85.8406	DND	PHCs, BTEXs and PAHs	1755	Confirmatory sampling completed. Long term monitoring underway.
1091	Alexandra Fiord Rcmp Detachment Site	Suspected	Data unavailable	78.8798	-75.7546	RCMP	Data unavailable	0	Historical review planned.
16525	D'Iberville Fjord (Unassessed)	Suspected	Data unavailable	80.6069	-79.4792	DFO	Data unavailable	0	Historical review completed. Initial testing underway.
25114	Alert - Unauthorized Firing Range	Suspected	Data unavailable	82.4246	-62.1835	DND	Data unavailable	0	Historical review planned.

\*Closed sites were not included in this table as they have either been cleaned up and/or require no further action. Sites for which no data are available with respect to status were also not included.



## Appendix 2. Tuvaijuittuq Ministerial Order Regulations

\***NOTE:** The regulations can also be found at this website: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2019-282/page-1.html>

### SOR/2019-282

#### OCEANS ACT

#### Registration 2019-07-30

#### Order Designating the Tuvaijuittuq Marine Protected Area

Whereas this Order designates the Tuvaijuittuq Marine Protected Area in a manner that is not inconsistent with a land claims agreement that has been given effect and has been ratified or approved by an Act of Parliament;

Therefore, the Minister of Fisheries and Oceans, pursuant to 35.1(2)<sup>a</sup> of the Oceans Act<sup>b</sup>, makes the annexed Order Designating the Tuvaijuittuq Marine Protected Area.

- <sup>a</sup>S.C. 2019, c. 8, s. 5
- <sup>b</sup>S.C. 1996, c. 31

Ottawa, July 29, 2019

Jonathan Wilkinson  
Minister of Fisheries and Oceans

#### Definition of *Marine Protected Area*

1 In this Order, **Marine Protected Area** means the area of the sea that is designated by section 2.

#### Marine Protected Area

2 (1) The area of the sea in the Arctic Ocean consisting of the waters off northern Ellesmere Island, as described in plan number FB42596, certified on July 16, 2019 and depicted in plan number CLSR 108395, which plans are deposited in the Canada Lands Surveys Records, is designated as the Tuvaijuittuq Marine Protected Area.

#### Seabed, subsoil and water column

(2) The Marine Protected Area consists of 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.

#### Ongoing activities

3 For the purposes of subsection 35.1(2) of the Oceans Act, the following classes of activities are ongoing activities in the Marine Protected Area:

- (a) national defence activities carried out by the Department of National Defence;
- and



(b) marine scientific research activities.

### Prohibitions

**4 (1)** It is prohibited in the Marine Protected Area to carry out any activity — other than those set out in section 3 — that disturbs, damages, destroys or removes from the Marine Protected Area any unique geological or archeological features or any living marine organism or any part of its habitat, or is likely to do so.

### Exemption

**(2)** Despite subsection (1), the following activities may be carried out in the Marine Protected Area:

(a) marine navigation by a foreign national, a foreign ship or a foreign state, or an entity incorporated or formed by or under the laws of a country other than Canada; and

(b) the laying, maintenance and repair of cables and pipelines by a foreign state.

### Non-application – Nunavut Agreement

**5** This Order does not apply with respect to the wildlife harvesting rights of the Inuit in the Nunavut Settlement Area, as provided for in the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada, as approved, given effect and declared valid by the [Nunavut Land Claims Agreement Act](#).

### Coming into force

**6** This Order comes into force on the day on which it is registered.

# What We Heard: Community Consultations on a New Ministerial Order Marine Protected Area in Tuvaijuittuq

April 3-18, 2023



Grise Fiord – April 18, 2023



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## Acknowledgements

The Tuvaijuittuq Working Group would like to thank the communities of Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord for their time and hospitality during our community visits. We would especially like to thank the Hunters and Trappers Associations (HTAs), Hamlet Councils, and Mayoral offices for their participation and knowledge-sharing. Finally, we would like to acknowledge the Qikiqtani Inuit Association for leading the coordination of these meetings.

## Our Team

The Tuvaijuittuq Working Group has members from the Qikiqtani Inuit Association (QIA), Fisheries and Oceans Canada (DFO), Parks Canada Agency (PCA), and the Government of Nunavut (GN). Our participants included representatives from each organization involved in the Working Group.



*Tuvaijuittuq Working Group members attending consultations in Clyde River, Arctic Bay and Pond Inlet (left photo) and in Resolute Bay and Grise Fiord (right photo). Left Photo, left to right: Syzula Ikkidluak (QIA), Delaney Ewing (DFO), Madelaine Kellett (DFO), Bernie MacIsaac (GN), and Justin Hack (GN). Right Photo, left to right: Sarah Kennedy (DFO), Bethany Schroeder (DFO), Iselena Natsiapik (QIA), Daniel Haney (GN), and Bernie MacIsaac (GN).*



## Executive Summary

The Tuvaijuittuq Working Group, with members from QIA, DFO, PCA, and GN, conducted community consultations in Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord between April 3 - 18, 2023. Grise Fiord consultations were held on April 18, 2023 and a follow-up meeting with the Iviq HTA and Grise Fiord Hamlet Council was held virtually on July 5, 2023.

The purpose of these consultations was to discuss a request by QIA to establish a new Ministerial Order Marine Protected Area (MPA) to explore an Inuit-led Protected and Conserved Area (IPCA) for Tuvaijuittuq. The Working Group also shared information on our proposed approach to regulations for this new short-term MPA, and sought community feedback and support on the proposal. The purpose of this report is to summarize the feedback provided by community members who attended the meetings in Grise Fiord, to provide transparency in the process, to provide a record of the discussions and concerns shared by the community, and to provide additional information to questions raised during consultations. To ensure we have accurately captured what we heard, this report has been circulated to the Iviq HTA and Grise Fiord Hamlet Council for review. Individual reports were developed for each community and after HTAs and hamlet councils have had an opportunity to comment, these reports will be shared with all five communities.

While the Iviq HTA and Grise Fiord Hamlet Council were unable to form quorum during the meeting, the Working Group met virtually with the HTA and Hamlet Council on July 5, 2023 to present the proposal and again and seek feedback. Both the Iviq HTA and Grise Fiord Hamlet Council gave the Working Group permission to seek letters of support for protecting Tuvaijuittuq under a new Ministerial Order MPA. Several community members present at the public open house meeting expressed support for the proposal, and no concerns or objections were expressed. The area is historically important to Inuit as a traditional travel route to and from Greenland. Inuit hunting grounds extend into parts of Tuvaijuittuq. There is interest from the community in understanding which long-term protection tools will be considered as part of the discussions around Indigenous Conserved and Protected Areas and in opportunities for Inuit that may become available from this work. Grise Fiord has noticed an increase in activities in the Arctic, and there is concern that potentially harmful activities will not be properly regulated. Care is needed when considering economic development in Tuvaijuittuq to avoid activities that may harm the sea ice and surrounding habitats. It is important that Inuit Qaujimaqatugangit forms the basis of knowledge for Tuvaijuittuq and that Inuit are involved in decision-making for the area. Given the changing nature of Tuvaijuittuq and surrounding areas, we may need to consider changing the name of the MPA.

### What We Heard From Communities Overall

A common theme heard from communities was a desire to learn more about the MPA, including the animals and habitats that occur there, potential for future economic opportunities, and the types of research done in the area. There is interest from all five communities to protect Tuvaijuittuq in both the short-term and long-term, but also in balancing protection with economic opportunities for future generations. Interest in protecting the area is based on Tuvaijuittuq's ecological importance, its significance to Inuit, and interest in the area's resources by other countries.



## Introduction and Approach

The Tuvaijuittuq Working Group, conducted community consultations in Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord between April 3 and April 18, 2023. Grise Fiord consultations were held on April 18, 2023. The purpose of these consultations was to discuss a proposed new Ministerial Order MPA in Tuvaijuittuq, to share information on the proposed approach to regulations for this new short-term protection measure, and to seek community feedback and support on this proposal. In each community, two gatherings were held; an initial meeting with the HTA, hamlet council, Mayor, Nauttiguqtiit and other relevant community groups, and an evening community open house which was open to the public.

At both meetings, information was shared on the significance of Tuvaijuittuq, its boundaries, reasons why the area is being considered for protection, the steps involved in establishing a new Ministerial Order MPA and proposed regulations for this short-term protection measure. The presentation materials and relevant assessments, including a summary of Natural Resources Canada's resource and economic assessment for the area<sup>1</sup> and an ecological and biological overview, were made available to community members in both English and Inuktitut. Two-page summaries of what we heard during November consultations were also provided. Simultaneous interpretation was also provided at each meeting.

The Tuvaijuittuq Working Group committed to circulating a "What We Heard" report to each community for their review and approval summarizing their feedback during these consultations. If community members or organizations feel that their feedback was misinterpreted or misrepresented, the Working Group will revise the report as requested and re-circulate to the community. Please contact Chandra Chambers ([chandra.chambers@dfo-mpo.gc.ca](mailto:chandra.chambers@dfo-mpo.gc.ca)) if you have any questions or concerns. After communities have had a chance to review and approve their What We Heard reports, the Working Group will provide copies of all reports to each community.

DFO committed to following up with communities on outstanding questions that were asked during community meetings. Answers to these questions were circulated to each community HTA, hamlet council and Mayor in an email on June 28, 2023, and this information is included in Appendix 1 of this report. A copy of the MPA regulations that are being proposed for the new Ministerial Order MPA are also included in Appendix 2 of this report.

The HTAs and/or hamlet councils in some communities could not form quorum during the April meetings. The Working Group followed up with these HTAs and hamlet councils virtually and received permission from each to seek a formal letter of support for the new regulation.

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<sup>1</sup> The full Natural Resources Canada resource assessment was also made available and can be accessed at: [https://publications.gc.ca/collections/collection\\_2022/rncan-nrcan/m183-2/M183-2-8897-eng.pdf](https://publications.gc.ca/collections/collection_2022/rncan-nrcan/m183-2/M183-2-8897-eng.pdf)



## Hunters and Trappers Association (HTA) and Hamlet Council Meeting

The Working Group met with the Iviq HTA and the Grise Fiord Hamlet Council on April 18, 2023 at 2:00 pm at the Community Hall. Other community groups were invited to attend. Three people were present for this meeting.

The Iviq HTA and Grise Fiord Hamlet Council were not able to form quorum, but the members present indicated they are supportive of the proposal and will bring the information back to the boards. The representatives gave permission to the Working Group to seek formal approval and asked that an additional virtual meeting be scheduled to ensure comfort with the proposal by the remaining members. The Working Group met virtually with the Iviq HTA and Grise Fiord Hamlet Council on July 5, 2023. The Iviq HTA and Grise Fiord Hamlet Council were comfortable with the Working Group seeking letters of support for the proposed new Ministerial Order MPA.

### ***What we heard:***

#### *Importance to Inuit*

- Grise Fiord would like to know more about how Tuvaijuittuq will be managed in the long term and what opportunities would be available for community members to be involved in this work.

#### *Economic Opportunities and Activities*

- Grise Fiord expressed interest in learning more about the program and its involvement with Tuvaijuittuq, as well as any additional opportunities available to Grise Fiord.

#### *Response:*

- Information regarding the Polar Continental Shelf Program and the projects they have supported in this area is provided in Appendix 1 of this report. For additional information, feel free to contact Michael Meunier, Manager of the Program Coordination and Outreach unit ([michael.meunier@nrcan-rncan.gc.ca](mailto:michael.meunier@nrcan-rncan.gc.ca)).
- One community member expressed that it is good to hear about the different projects happening in the area. There is a lot of funding and interest for projects in the Arctic, and opportunities to collaborate with other partners and countries, such as Greenland is seen as positive.

#### *Concerns*

- There is an increase in activities occurring in the Arctic. There is concern that as activities continue to increase, they will not be regulated or controlled. For example, filmmakers were taking videos of people dirt biking on an iceberg. There are also increased vessel activities occurring in other protected areas, such as sailboats in Tallurutiup Imanga.

## Community Open House

The Working Group hosted an Open House meeting for the general public on April 5, 2023 at 7:00 pm. The meeting took place in the Community Hall, where approximately 14 adults were in attendance. Children and youth were also welcomed. Several community members present at the meeting expressed support for pursuing a new Ministerial Order MPA in Tuvaijuittuq. No concerns or objections were expressed.



*Community members meet with the Tuvaijuittuq Working Group members, April 18, 2023.*

### ***What we heard:***

#### *Importance to Inuit*

- Tuvaijuittuq is historically important to Inuit. There are not a lot of community members left who remember the traditional travel routes. People from Greenland also used to go to Tuvaijuittuq to hunt. It was expressed that these memories are very important.
- Part of Inuit hunting grounds are in Tuvaijuittuq, and it is an important area for Grise Fiord community members. Community members feel that these areas should be protected, which will allow them to stay in Grise Fiord and continue to be a voice for their community.
- Community members have few memories or stories of traveling to the Tuvaijuittuq area. There are memories of dog sledding trips occurring in the 1960s. One was a regular patrol trip from April to June with a geologist and RCMP officer, who hired community members to go by dog team. Two other trips were raised as examples of a changing climate and the need for protection. On one trip, community members went out with two dog teams and on the way home lost one dog team and sled. Because the ice had melted on their return home, they were forced to travel along the ice cap. On a trip to Pond Inlet, dog sled teams were returning home in the late spring almost ran out of snow.
- A recommendation was made that the stories shared at this meeting and the previous meeting in November are considered for Tuvaijuittuq.

#### *Response:*

- Please note that QIA is in the process of conducting an Inuit Qaujimagatuqangit study for Tuvaijuittuq and will be following up with communities in the coming year. The Inuit Qaujimagatuqangit shared during this study, as well as information shared during consultations for Tuvaijuittuq, will inform the Working Group's recommendations about long-term protection and approach to management.

## Concerns

- There is concern that with the establishment of a Marine Protected Area, more ships will travel to Tuvaijuittuq and there will be more economic activities which could cause negative impacts. Community members feel that impacts such as ice calving or ice shelf collapse are caused by human activities. Care is needed when considering economic development to avoid exposing the area to increased vessel traffic related to tourism.
- Community members are concerned about climate change and the impacts it may have on wildlife. We heard that communities depend on wildlife for survival. If wildlife is not protected, and if younger generations are not taught about country food, then food will be bought from the stores. There is concern that buying food from stores will lead to diabetes and increased blood pressure.
- Having a funding structure that allows funds to flow to Grise Fiord instead of stations such as Eureka and CFS Alert is viewed as important to the integrity of the Grise Fiord community. There is concern that benefits associated with current IIBAs are not flowing as desired into Grise Fiord.

## Virtual Hunters and Trappers Association (HTA) and Hamlet Council Meeting

The Working Group met virtually with the Iviq HTA and Grise Fiord Hamlet Council on July 5, 2023 at 2:00 pm. Seven members were in attendance, with one member representing both the HTA and hamlet council. The HTA members present indicated they were comfortable proceeding with the meeting and agreed to communicate the information presented with the remaining HTA members. The Iviq HTA and Grise Fiord Hamlet Council are comfortable with the Working Group seeking a letter of support for the proposed new Ministerial Order MPA.

### ***What we heard:***

#### *Importance to Inuit*

- Grise Fiord would like to continue being consulted, along with the other impacted communities, on Tuvaijuittuq and issues related to long-term protection.

#### *Economic Opportunities and Activities*

- There is interest in learning more about the activities conducted in Tuvaijuittuq.

#### Response:

- Tuvaijuittuq is an area that is largely ice-covered all year round and as a result, activities in this area are minimal. Ongoing activities in Tuvaijuittuq were determined in 2019 to be national defence activities carried out by the Department of National Defence and marine scientific research activities. We heard from communities during consultations in 2019 that Inuit had not traveled there recently. Between 2012 and 2019, vessels accessed Tuvaijuittuq only five times; all within nearshore areas in August/September. All but one vessel (a transiting passenger ice-breaker) were Canadian Coast Guard ships. The



passenger vessel briefly accessed Greely Fiord in 2016. Available data indicates that between 2019 and 2023, three vessels accessed nearshore areas in Tuvaijuittuq. All were Canadian Coast Guard ships and all accessed the area in August (one in 2019, two in 2022). No tourist or recreational activities are currently occurring within Tuvaijuittuq. Ward Hunt Island, located outside of Tuvaijuittuq and administered by PCA as part of Quittinirpaaq National Park, has been used in the past as a launch point for expeditions to the North Pole. It is likely that these expeditions involved travelling over sea ice in Tuvaijuittuq; however, the activity is not currently ongoing.

- Additional information regarding ongoing activities, including research within Tuvaijuittuq is provided in Appendix 1.

## Next Steps

The next steps to pursue establishment of a new Ministerial Order MPA will be to seek stakeholder input on the proposal, seek formal community support, complete assessments and other approvals needed under the Nunavut Agreement such as conformity determination by the Nunavut Planning Commission and Nunavut Wildlife Management Board approval, and complete DFO's regulatory process. Formal letters of support will be sought from community hamlets and HTAs. Community members are encouraged to communicate their feedback on the proposal to these organizations to inform their decision. DFO will notify communities and stakeholders prior to the proposal being published online for a 30-day public comment period – additional input can be provided at that time as well.

It is important to us that we have summarized your input on this proposal correctly. If you feel that we have missed any input provided during our meetings or captured information incorrectly, please reach out to the email address provided above for correction.

The Tuvaijuittuq Working Group would like to thank all of the community members who attended these meetings - your feedback is vital and appreciated.

Thank you.

## Appendix 1. Follow-up questions and answers from the April 2023 consultations on a new Ministerial Order MPA in Tuvaijuittuq.

\*Please note, an additional question and answer have been added (Question #8) and Question #15 has been expanded upon since it was sent to the HTA and hamlet.

### 1) What is the purpose of protecting Tuvaijuittuq?

Researchers agree that summer sea ice will remain the longest in Tuvaijuittuq (Figure 1) as it continues to decline in other areas of the Arctic due to climate change. Because of this, the area is expected to become an important refuge for ice-dependent species. The area has a very diverse ecosystem, and contains a number of unique communities of organisms, including communities on the ice, in the ice, and below the ice. Habitat in Tuvaijuittuq is important to marine mammals and sea birds. For all of these reasons, DFO and its partners believe that the area, its habitat, and the wildlife within it, would benefit from protection. The proposed Ministerial Order MPA is a short-term protection tool which will protect the area for up to five years. The purpose of this short-term protection tool is to prohibit new activities in the area that may cause negative impacts while additional information is collected to support a better understanding of the conservation and protection needs of the area before longer-term protection measures are considered.

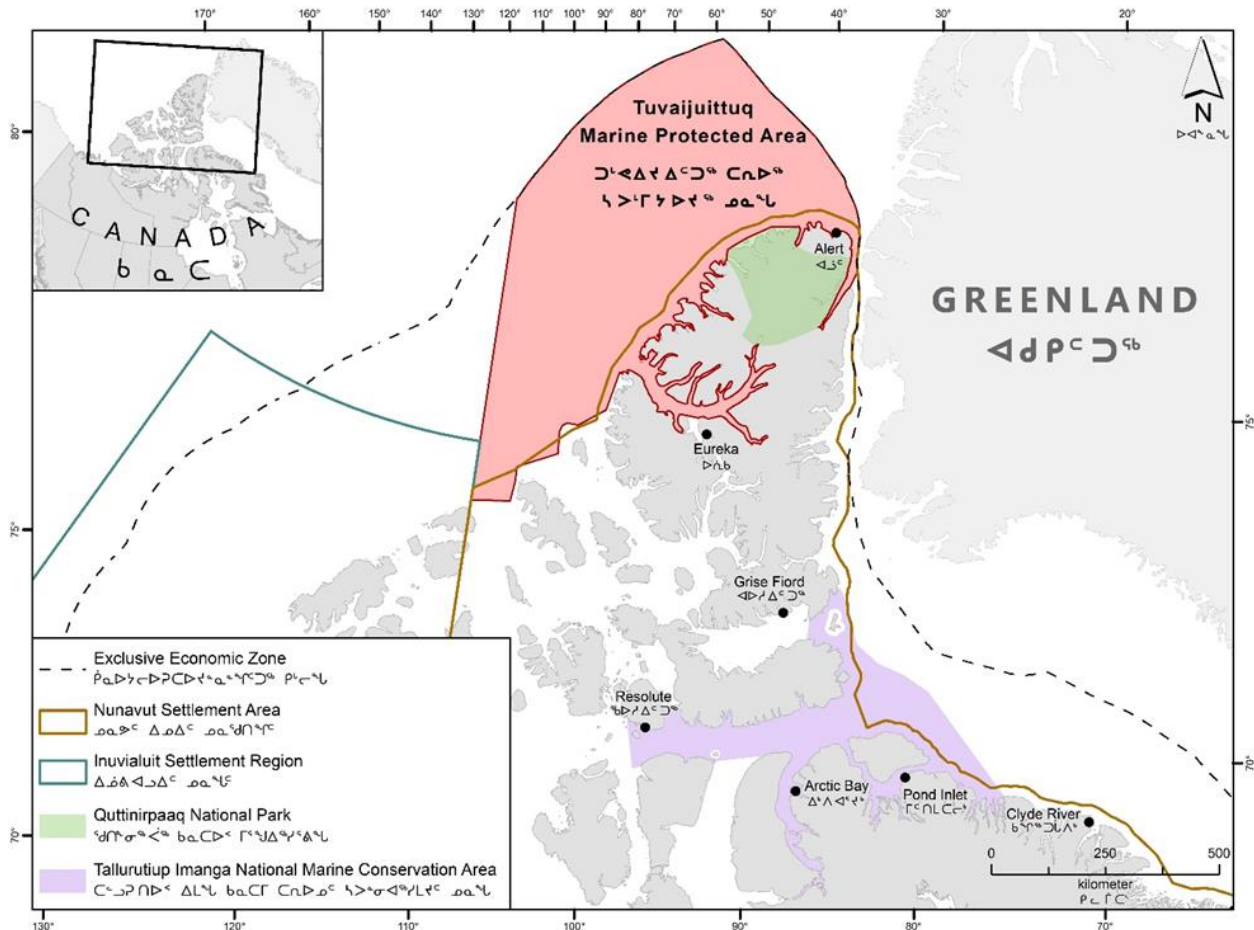


Figure 1. Map of Tuvaijuittuq MPA by Ministerial Order

**2) How was the Tuvaijuittuq boundary determined? Why are the rest of the Queen Elizabeth Islands not included in the boundary?**

The Tuvaijuittuq MPA includes the marine waters off northern Ellesmere Island, starting from the low water mark and extending to the outer 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. The initial boundaries of Tuvaijuittuq were based on the 2011 Canadian Science Advisory Report ([2011/55](#)), which identified key multi-year ice habitat. The boundary was later extended to the nearshore areas off Ellesmere Island within the Nunavut Settlement Area as more of the area was understood. The marine area around the Queen Elizabeth Islands south of Ellesmere Island supports different communities of organisms than those within Tuvaijuittuq. This area was not considered for inclusion in Tuvaijuittuq as it has different conservation needs. Partners agreed to settle on the boundary as it is now and consider the remaining islands at a later time as possible new protected areas. Some of the Queen Elizabeth Islands overlap with the Inuvialuit Settlement Region, which is not included in the Tuvaijuittuq boundary.

**3) What does “freezing the footprint of ongoing activities” mean?**

Freezing the footprint of ongoing activities means allowing activities that are already lawfully occurring in the area to continue and preventing any new activities that may damage, disturb, destroy or remove important habitats, features and organisms. Ongoing activities in Tuvaijuittuq were identified using a number of different methods, including community consultation (in Arctic Bay, Resolute Bay and Grise Fiord in 2019 and in Arctic Bay, Resolute Bay, Grise Fiord, Pond Inlet and Clyde River in 2022), consultation with QIA, and consultation with DFO Science and other federal departments and agencies including the Department of National Defence, Parks Canada Agency, and Canadian Coast Guard. DFO gathered further information about ongoing activities by seeking input on the proposed regulations from industry and other stakeholders (e.g., non-governmental organizations), and from studies such as an assessment of vessel traffic using Automatic Identification System (AIS) signals in the area between 2012-2019. This study is currently being updated so DFO has the most up-to-date information.

Based on available information, DFO determined that ongoing activities in Tuvaijuittuq include:

- (a) national defence activities carried out by the Department of National Defence; and
- (b) marine scientific research activities.

The regulations also include exemptions and exclusions helping to respect commitments Canada has made both domestically and internationally.

The full regulations are provided as a separate attachment in both English and Inuktitut.

**4) Does freezing the footprint of activities affect wildlife harvesting rights of Inuit in this area?**

The Ministerial Order MPA does not apply with respect to the wildlife harvesting rights of Nunavut Inuit in the Nunavut Settlement Area, as provided for in the Nunavut Agreement. This means that the Ministerial Order regulations do not affect the wildlife harvesting rights of Inuit within the Nunavut Settlement Area (NSA).

There appear to be no provisions within the Nunavut Agreement that extend Inuit harvesting rights beyond the NSA portion of Tuvaijuittuq. As a result, the regulations would apply to everyone in the area of Tuvaijuittuq that falls outside of the NSA. However, we would be interested in further discussing the matter if there are provisions in the Nunavut Agreement you believe have been overlooked.

**5) Why are there exemptions for foreign states in the Ministerial Order MPA regulations?**

Under the United Nations Convention on the Law of the Sea (UNCLOS), which is an international agreement, Canada must allow certain activities such as navigation (vessels transiting through) and laying of cables and pipelines, from foreign states in certain maritime zones. Because of this, those foreign activities are exempted from the application of the Ministerial Order MPA in Tuvaijuittuq. The exclusive economic zone, an area of the sea beyond the territorial sea extending out to 200 nautical miles from the coastline (Figure 2), is not Canadian territory, and in that area Canada only has jurisdiction over economic resources such as fishing, oil and gas, and mineral exploitation.

Under Canadian law, Canada has the authority to prohibit domestic vessel navigation and other activities in this area. Since the purpose of the short-term Ministerial Order MPA is to conserve and protect the vulnerable habitats and organisms in Tuvaijuittuq while we collect additional information to inform decisions about long-term protection, we aim to limit any activity, including domestic activities, that may negatively impact the area. Although foreign navigation is allowed in the MPA, foreign countries will typically comply with voluntary measures, if guidance is provided to avoid certain areas within the MPA.

**6) Can the old sea ice (multi-year ice) be broken by ice-breakers?**

While some ice-breakers can break through thick multi-year ice, there are different classes of ice-breakers built for different purposes and ice thicknesses. Not all ice-breakers can break through thick multi-year ice. To our knowledge, the few vessels that have travelled to Tuvaijuittuq for activities such as national defence, safety, marine research, and foreign vessel travel, have stayed within the nearshore areas during the open water season and did not actively conduct ice-breaking activities.

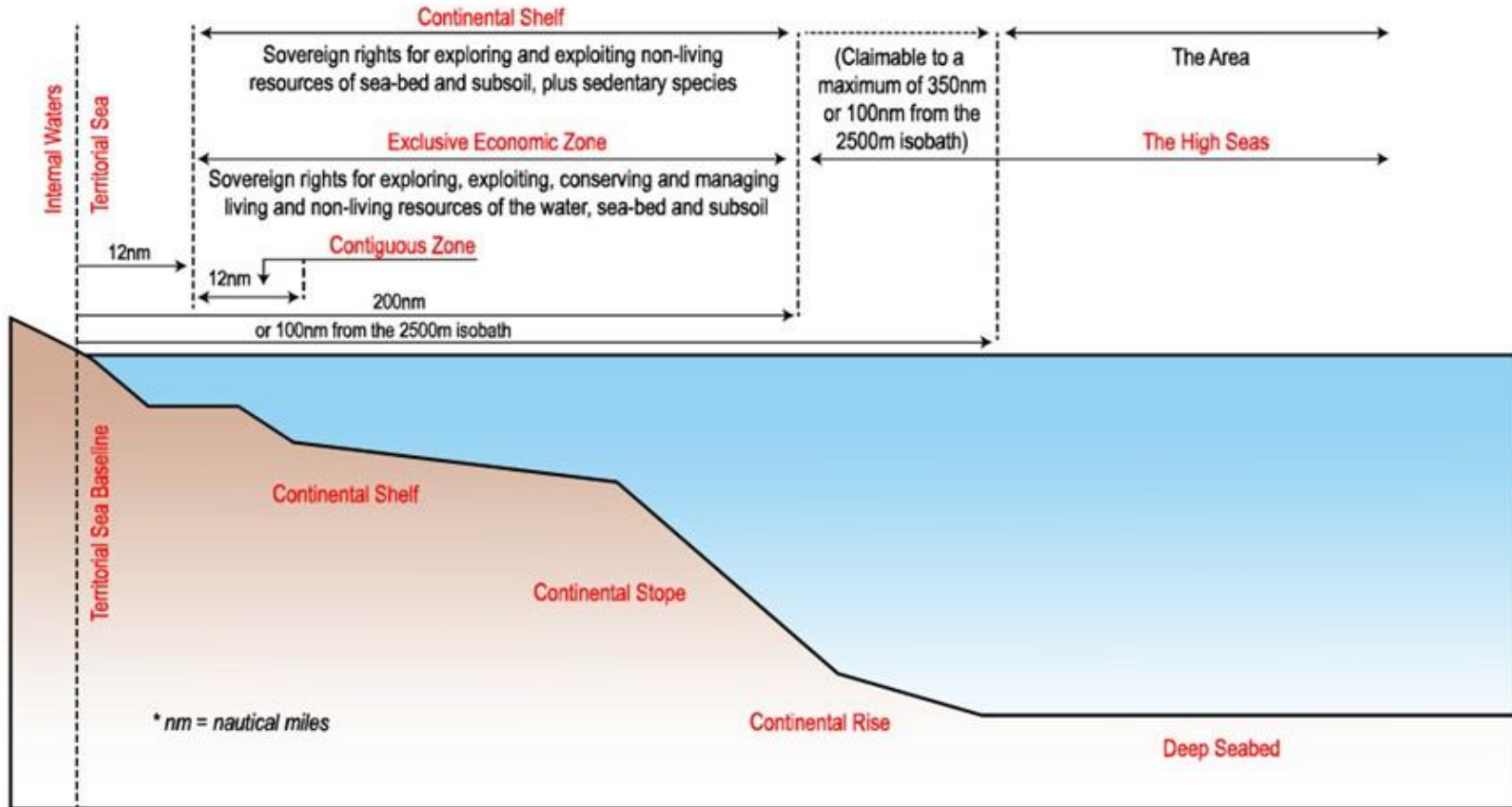


Figure 2. Canada's Maritime Zones

## 7) How can Inuit visit Tuvaijuittuq?

Tuvaijuittuq is an area of the sea that is a mainly ice-covered all year round and is very remote. There is one military research station in Alert called Canadian Forces Station (CFS) Alert located outside of Tuvaijuittuq on northern Ellesmere Island and a small research base in Eureka on Fosheim Peninsula. There are no communities nearby – the closest community is Grise Fiord, which is approximately 327 km as the crow flies from the MPA's southern-most boundary. Activity in Tuvaijuittuq is limited to national defence activities and marine scientific research, mainly due to the extensive ice cover in this marine area. In 2019, the communities of Arctic Bay, Resolute Bay and Grise Fiord indicated that the area is difficult to reach by skidoo; however, some community members in Grise Fiord had travelled, or knew of people that had travelled, as far as Eureka (which is south of the proposed area) by dogsled in the past.

There are however, opportunities for involvement in research activities in Tuvaijuittuq, which are based out of CFS Alert. For more information on participating in research activities in Tuvaijuittuq, please contact Chandra Chambers ([Chandra.Chambers@df0-mpo.gc.ca](mailto:Chandra.Chambers@df0-mpo.gc.ca)).

## 8) Fisheries quotas to Inuit

It is important to note that Tuvaijuittuq is largely ice-covered all year round and is not accessible to fishing vessels. As a result, no large-scale commercial fishing activities are possible in the area under current conditions. It is unknown if ice conditions would support small-scale on ice fisheries, and no data are available to understand whether a fishery (small or large-scale) would be possible.

When we visited communities in April 2023, we received a question relating to fisheries quotas in general and how these are allocated to Inuit.

Fisheries and Oceans Canada continues to respect and implement the obligations under Nunavut Agreement including provisions related to offshore commercial fisheries access that give special consideration to Nunavut. Through implementation of the Nunavut Agreement over the years, the share of adjacent resources to Qikiqtani Inuit has significantly increased, such that Qikiqtani Inuit fishers now have 80% of Turbot and 42% of shrimp resources including 100% of all fisheries resources within the Nunavut Settlement Area.

## 9) What kind of Inuit Qaujimaqatugangit (IQ) is used? What is studied?

- Oral History passed down over centuries of Inuit Knowledge.
- Inuit knowledge living and adapting, part of present day life. It is in how Inuit live and see the world today.
- QIA would like to gather IQ for Tuvaijuittuq.

## 10) Can more information be provided about the infrastructure that QIA refers to? Would QIA make buildings or houses for Tuvaijuittuq purposes?

- Multi-use facilities to address Inuit Stewardship and community needs (office space, equipment storage, garage, country food processing, community outreach, elder gatherings, etc.).

- Additional infrastructure that supports Inuit stewardship activities and the Nauttigsuqtiit program, such as housing and supplementing the facilities in the Tallurutiup Imanga communities as appropriate.
- Infrastructure requirements for Inuit stewardship that arise due to changing socio-economic or environmental conditions.

**11) When will the regional governance model will be in effect?**

At this time, this is still at the negotiation table. However, QIA is seeking this Regional Governance model for future IIBAs as well as existing IIBAs that will be renegotiated over time.

**12) Status update on the harbour planned for Resolute Bay.**

Transport Canada (TC), the Government of Nunavut (GN), and the Qikiqtani Inuit Association (QIA) have been working together towards the development of community harbours in Grise Fiord and Resolute Bay and have developed an Infrastructure Investment Plan (IIP) that was adopted in October 2022.

The IIP was completed based on community engagements and other work to date and informed the Agreement for Resolute Bay and Grise Fiord Community Harbour Development.

The Agreement for Resolute Bay and Grise Fiord Community Harbour Development was signed by TC and the GN on January 16, 2023 and will provide up to \$76,281,900 to the GN for the design and construction of the two community harbours in Grise Fiord and Resolute Bay. The current funding for community harbours will cover the cost of constructing at least one breakwater, a parking area, dredging, a boat launch, and floating docks.

TC has provided a copy of the agreement to the QIA representative, to be kept in confidence.

We understand from the GN that:

- A Project Manager with GN's Department of Community and Government Services has been assigned to the projects.
- The exact procurement approach for construction has not been finalized, but it is likely to follow the GN's standard procurement practices.
- The first step is expected to be a Request for Proposal for engineering and design services.

For more information, please contact Matthew Bowler ([MBowler@GOV.NU.CA](mailto:MBowler@GOV.NU.CA)) or Miguel Parent ([miguel.parent@tc.gc.ca](mailto:miguel.parent@tc.gc.ca)).

**13) What type of research is occurring in Tuvaijuittuq?**

Research in Tuvaijuittuq is led by DFO through the Multidisciplinary Arctic Program (MAP) - Last Ice and this team includes researchers from universities and organizations all over the world. The program brings together a number of different specialists to study different features in Tuvaijuittuq. For example, experts in sea ice, water, fish, marine mammals, and those who study organisms such as algae and krill that form the basis of the High Arctic



food web. Some of this work is done during a late winter/early spring seasonal field camp, where researchers work together as a team to collect samples and do their research. Others, like marine mammal surveys, are conducted around the same time but not as part of the field camp, and in the fall. The program began in 2018 and experienced some delays due to COVID-19 but is continuing. A new ship-based program called ArcticCore will begin this year and will include Archer Fiord and adjacent areas around Tuvaijuittuq (as sea-ice permits). This new program will study physical (currents/movement), chemical (nutrients, ocean acidification), and biological (primary production, zooplankton, benthos) oceanography and will also include marine mammal surveys and sea ice studies. If long-term protection is put into place in the future, then more formal management and monitoring plans would be developed for Tuvaijuittuq, in collaboration with partners and communities.

Research partners in MAP-Last Ice:

DFO  
Department of National Defence  
Defence Research and Development Canada  
Université Laval  
University of Essex  
Université du Québec à Rimouski  
Environment and Climate Change Canada  
Mediterranean Institute of Oceanography  
Polar Continental Shelf Program  
Alfred Wegener Institute  
University of Bristol  
Resolute HTA Board of Directors

Type of research conducted as part of MAP-Last Ice:

- Sea ice distribution, physical properties (thickness, composition), productivity (algal communities, biomass)
- Evolution of the ice and under-ice habitat over time
- Continuous atmospheric, oceanographic and sea ice observations
- Zooplankton, fish and benthic organisms
- Marine mammal and habitat surveys
- Physical (currents/movement), chemical (nutrients, ocean acidification), and biological (primary production) oceanography

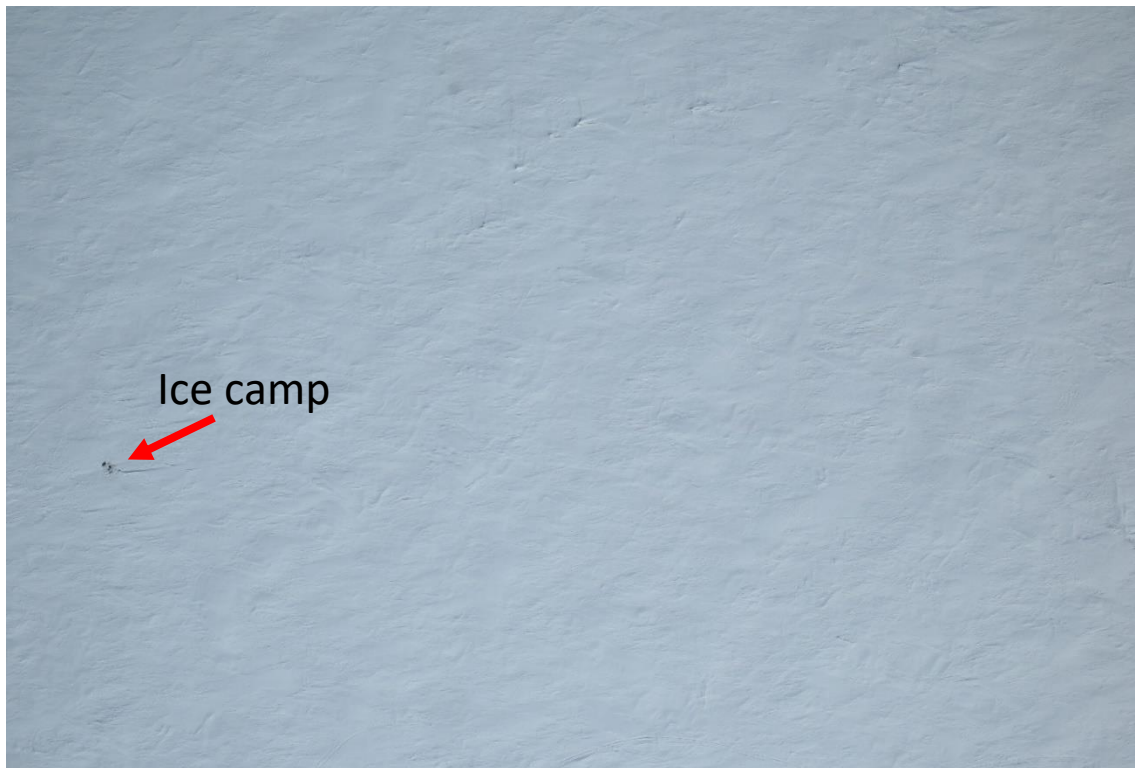
Collection of ice cores during the MAP-Last Ice and ArcticCORE programs:

We are very conscious of potential disturbances to the environment and during our sampling we take action to minimize these disturbances. When we collect ice cores, we sample only a part of the core and we replace the rest of the core to its original hole. Once replaced in its original hole, the core refreezes quickly, typically within a few hours.

The ice cores that we collect are small, at 9 cm diameter. This means that the surface area of one core is 5 times smaller than that of a hole cut out with an 8-inch auger, and about 10-12 times smaller than that of a seal breathing hole. While the seals keep their holes open,

we “close” our holes after sampling (with the original ice core from which we cut off one or a few sections). If we add the area of all the cores that we collect during one sampling season, it would typically add up to much less than 1 square meter, at most 2 m<sup>2</sup>.

In the photo below, we can see our ice camp on the sea ice north of Ellesmere Island. In another photo taken a few days after we took out camp, it was not possible to identify the site where the ice camp had been set up.



**Figure 3. Aerial view showing the ice camp on the sea ice north of Ellesmere Island. A few days after taking out the camp, the site of the ice camp was not visible anymore.**

#### **14) Interest in learning more about Canada’s Polar Continental Shelf Program**

##### **Polar Continental Shelf Program:**

Natural Resources Canada’s Polar Continental Shelf Program (PCSP) supports Arctic science by providing logistics planning, coordination and advice to Canadian government, non-government, university and international researchers. The PCSP supports projects in the Arctic from Churchill, Manitoba, to the northern tip of Ellesmere Island, Nunavut, and from the Yukon/Alaska border to as far as Greenland, on occasion.

Support can include air transportation, as well as fuel, field equipment for loan, field communications and safety, logistics advice for field studies, the use of the PCSP facility in Resolute, Nunavut, and shipping and receiving coordination and advice. The PCSP facility in Resolute is typically open from late January to September each year and is comprised of



an accommodations area that can house up to 237 guests, lounge areas, a fitness room, office spaces, kitchen and dining facilities, an operations centre and a laboratory.

The PCSP provides employment, student training and business opportunities for northern residents. The PCSP also helps with science outreach through publishing an annual science report and connecting researchers with northern community organizations.

The table below includes PCSP projects that occurred close to Grise Fiord and/or Tuvaijuittuq in recent years. Please feel free to reach out to the project leads if you have an interest in specific projects.

As a contact at the Polar Continental Shelf Program, please feel free to reach out to **Michael Meunier**, Manager of the Program Coordination and Outreach unit ([michael.meunier@nrcan-rncan.gc.ca](mailto:michael.meunier@nrcan-rncan.gc.ca)) or the PCSP Ottawa mailbox ([pcspottawa-ppcpottawa@nrcan-rncan.gc.ca](mailto:pcspottawa-ppcpottawa@nrcan-rncan.gc.ca)). Michael and his group would be pleased to connect with you and discuss your priorities.

Here are some additional resources that may be of interest:

- A list of all 2019 and 2020 projects supported by PCSP can be found at the following link: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/polar-continental-shelf-program/current-projects/10009>.
- More information on the PCSP can be found at: [https://natural-resources.canada.ca/sites/nrcan/files/earthsciences/files/pdf/polar/PCSP-Brochure\\_eng.pdf](https://natural-resources.canada.ca/sites/nrcan/files/earthsciences/files/pdf/polar/PCSP-Brochure_eng.pdf)
- Information on project support applications can be found here: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/research-support-arctic-logistics-and-field-equipment-for-across-canada/10003>.
- Annual Science Reports can be found at the following link: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/polar-continental-shelf-program/pcsp-publications/10011>.

**Table 1. List of PCSP-supported projects in the Arctic Archipelago, many near Grise Fiord and/or Tuvaijuittuq MPA in recent years**

Primary Investigator	Institution	Study Location(s)	Project Title
Hsin Chiang	McGill University	McGill Arctic Research Station, Expedition Fjord	A new window on the universe: radio astronomy from northern Canada
Cory Matthews	Fisheries and Oceans Canada	Grise Fiord	Aerial survey of High Arctic walrus and narwhal stocks
Michael Maurice	Environment and Climate Change Canada	Svartevaeg, Eureka, Isachsen, Grise Fiord, Mould Bay, Rea Point, Cape Providence, Resolute Bay, Steffanson Island, Cape Liverpool, Fort Ross, Gateshead	Annual Maintenance of Environment and Climate Change Canada's Automatic Weather Station array - Arctic Archipeligo

Primary Investigator	Institution	Study Location(s)	Project Title
Christine Michel	Natural Resources Canada	Eureka	Arctic CORE (Conservation, Observation, Research, and Engagement)
Lyle Whyte	McGill University	Assistance Bay	Assessment of Bioremediation Potential of Marine Fuels on NWP Arctic Beaches
Joseph Monteith	Crown-Indigenous Relations and Northern Affairs Canada	Alert, Eureka	Baffin/High Arctic Inspections 2022
Alexander Culley	Université Laval	Ward Hunt Island	Characterizing viral impact in the Last Ice Area
Christopher Omelon	Queen's University	Expedition Fiord, Resolute Bay	Climate Change Research at the McGill Arctic Research Station
David Didier	Université du Québec à Rimouski	Sydkap Glacier and surrounding area, Starnes Fiord and surrounding area, Jakeman Glacier and surrounding area, Grise Fiord	Coastal dynamics and hazards in Grise Fiord and Jones Sound
Mark Skidmore	Montana State University	Truelove Lowlands, Croker Bay, Resolute, Gascoyne inlet	Exploration of Saline Cryospheric Habitats with Europa Relevance (ESCHER): An approach using airborne and submarine semiautonomous systems
Erin MacNeil	Natural Resources Canada	Gascoyne Inlet	Defence of North America
Lyle Whyte	McGill University	Devon Island lakes site	Developing new technologies to access and investigate the hypersaline, subzero Devon Island Subglacial Lake System, a unique Mars and icy moon analogue
Denis Lacelle	University of Ottawa	Eureka	Effect of degrading ice wedge polygon landscapes on local topography, hydrology, and water quality.
Susan Kutz	University of Calgary	East wind lake, Eureka, Resolute Bay	Emerging Infectious Disease in High Arctic Ungulates - Terrestrial Investigations
Amelie Roberto-Charron	Government of Nunavut	Eureka Weather Station, Resolute Bay	Emerging Infectious Diseases in High Arctic Ungulates – Aerial assessment

Primary Investigator	Institution	Study Location(s)	Project Title
Clément Chevallier	Environment and Climate Change Canada	Cape Verra, Cape Verra, Nirjutiqarvik, Cape Liddon, Houbhouse Inlet, Prince Leopold Island, Baillarge Bay	Fulmar colony surveys in Lancaster Sound
Myriam Lemelin	Université de Sherbrooke	T-MARS camp, McGill Arctic Research Station, Axel Heiberg Island	Geological study and mapping of hydrothermal deposits and gossans, Expedition Fiord, Axel Heiberg Island, Nunavut, as analogues for Mars
Christine Dow	University of Waterloo	Devon Ice Cap camp	Geophysical imaging of the Devon sub-glacial lakes
Luke Copland	University of Ottawa	Manson Icefield, Sydkap base camp, Sydkap ice marginal lake complex, Grise Fiord	Glacier monitoring on southern Ellesmere Island
Maya Bhatia	University of Alberta	Sydkap Glacier and surrounding area, Starnes Fiord and surrounding area, Jakeman Glacier and surrounding area, Grise Fiord	Glacier-ocean interactions in the Canadian high Arctic
Daniel Fortier	University of Montreal	Ward Hunt Island	Ground ice of eastern Canadian High Arctic polar desert
Cortney Wheeler	Fisheries and Oceans Canada	Elwin Bay, Creswell Bay	High Arctic Beluga Whale Stock Structure
Greg Henry	University of British Columbia	Sverdrup Pass, Knud Peninsula, PCSP Eureka, Bache Peninsula, Princess Marie Bay, Alexandra Fiord, Cape Bounty	High Arctic tundra ecosystem responses to 30 years of experimental and observed climate change
Masaki Uchida	National Institute of Polar Research, Japan	Oobloyah Bay	Identifying and understanding the effect of temporal and spatial changes towards the biodiversity and carbon sequestration processes in the high Arctic
John Moores	York University	Expedition Fjord	Identifying putative microbial drivers of methane flux on Earth and on Mars
Raoul-Marie Couture	Université Laval	Ward Hunt Island	Impact of oxygen pulses on redox-sensitive chemicals and microbiome in Canada's northernmost lake
Cory Matthews	Fisheries and Oceans Canada	Goose Fiord, Brooman Point, Kearney Cove	Improving High Arctic walrus stock assessment using satellite telemetry, genetics, and time-lapse photography
Lyle Whyte	McGill University	Lost Hammer, Thompson Glacier, White Glacier,	

Primary Investigator	Institution	Study Location(s)	Project Title
		Expedition Fjord, Gypsum Hill, Color Peak	Investigations of microbial activity in cryoenvironments in the Canadian High Arctic
Laura Brown	University of Toronto Mississauga	Nanuit Itillinga (Polar Bear Pass), Nanuit Itillinga (Polar Bear Pass), Cornwallis Island Lakes	Lake Ice in the Canadian High Arctic
Scott Lamoureux	Queen's University	Cape Bounty, Melville Island, Resolute vicinity	Land and water impacts and response to climate and permafrost changes in the High Arctic
Laura Thomson	Natural Resources Canada	Muller Ice Cap, Expedition Fiord	Mass Balance and Energy fluxes of White Glacier, Axel Heiberg Island, NU
Catherine Girard	Université du Québec à Chicoutimi (UQAC)	Ward Hunt Island, Resolute Bay vicinity	Microbes on the go: Release of cryospheric microbes to downstream habitats
Derek Mueller	Carleton University	Milne Ice Shelf, Milne Fiord, Purple Valley, Eureka, Resolute	Milne Fiord ice-ocean interactions: Implications for the stability of ice shelves and glaciers in the Polar Regions
Dave Burgess	Natural Resources Canada	Agassiz Ice Cap, Meighen Ice Cap, Grise Fiord, Devon Ice Cap, Melville Ice Cap	National Glaciology Project - Queen Elizabeth Islands, NU & NT
Warwick Vincent	Université Laval	Resolute (Cornwallis Island), Thores Lake (Ellesmere Island) and Ward Hunt Island	Northern Ellesmere Island in the Global Environment - Sentinel North
Valerie Amarualik	Parks Canada	Young Inlet, Dundee Bight, Dome Camp	Qausuittuq National Park Operations 2022/2023
Adam Ferguson	Parks Canada	Fort Conger, Lake Hazen, Ruggles River, Tanquary Fiord, Resolute Bay	Quttinirpaaq National Park Operations 2022
Gordon Osinski	University of Western Ontario	Haughton River Valley	Reconstructing the post-impact history of the Haughton impact structure, Nunavut
Lynda Gullason	Inuit Heritage Trust Incorporated	Resolute, Morin Point, Devon Island, Pond Inlet	Saving Morin Point: Climate Change Risk Assessment and Archaeological Heritage Recovery
Dermot Antoniades	Université Laval	Stuckberry Valley, Lake Hazen	The functioning and evolution of the ecosystems of Stuckberry Valley, northern Ellesmere Island

<b>Primary Investigator</b>	<b>Institution</b>	<b>Study Location(s)</b>	<b>Project Title</b>
Joshua King	Environment and Climate Change Canada	Eureka, Nunavut	Development of a new Canadian Arctic Archipelago sea ice product from ICESat-2 (Ice Cloud and Land Elevation Satellite-2)
Michael Brohart	Environment and Climate Change Canada	Eureka, Nunavut	Instrument calibration at Eureka weather station as part of the Canadian Brewer Spectrophotometer Network operation
Alison Criscitiello	University of Alberta	Grise Fiord and Resolute, Nunavut	Airborne gravity survey over Devon Ice Cap
Rich DeVall	Environment and Climate Change Canada	Isachsen (Ellef Ringnes Island), Rea Point (Melville Island), Stefansson Island, Fort Ross (Somerset Island), Gateshead Island, Cape Liverpool (Bylot Island), Svarteveg (Axel Heiberg Island) and Grise Fiord (Ellesmere Island), Nunavut	Annual maintenance of ECCC's automatic weather station array – Arctic Archipelago
Grant Gilchrist	Environment and Climate Change Canada	Grise Fiord, Nunavut	Population surveys of endangered ivory gulls on Ellesmere Island and Devon Islands
Alexander Culley	Université Laval	Expedition Fiord (Axel Heiberg Island), Resolute (Cornwallis Island), Ward Hunt Island and Thores Lake (Ellesmere Island), Nunavut	Viral ecology of the high Canadian Arctic in water, ice and aerosols
Mark Lamothe	Natural Resources Canada	Eureka and Resolute, Nunavut	Eureka geomagnetic electronic replacement
Nicolas Lecomte	Université de Montreal	Bylot Island, Igloodik Island and Eureka, Nunavut	Arctic IMPACTS: tracking impacts of ecosystem changes in the Arctic
Christine Michel	Fisheries and Oceans Canada	Alert, Nunavut	Multidisciplinary Arctic Program (MAP) – Last Ice
Wayne Pollard	McGill University	Eureka and Expedition Fiord (Axel Heiberg Island), Nunavut	The vulnerability and resiliency of ice-rich permafrost in cold polar desert environments in response to changing climate
Vincent St. Louis	University of Alberta	Lake Hazen, Quttinirpaaq National Park, Nunavut	The impacts of rapidly receding glaciers on downstream freshwater resources and ecological services



**15) What is being done to clean up past military, research and Government of Canada sites left on Ellesmere Island?**

There were a number of sites in Quttinirpaaq National Park that required remediation. These sites have been remediated, with the exception of Fort Conger, which now has a long-term monitoring strategy in place.

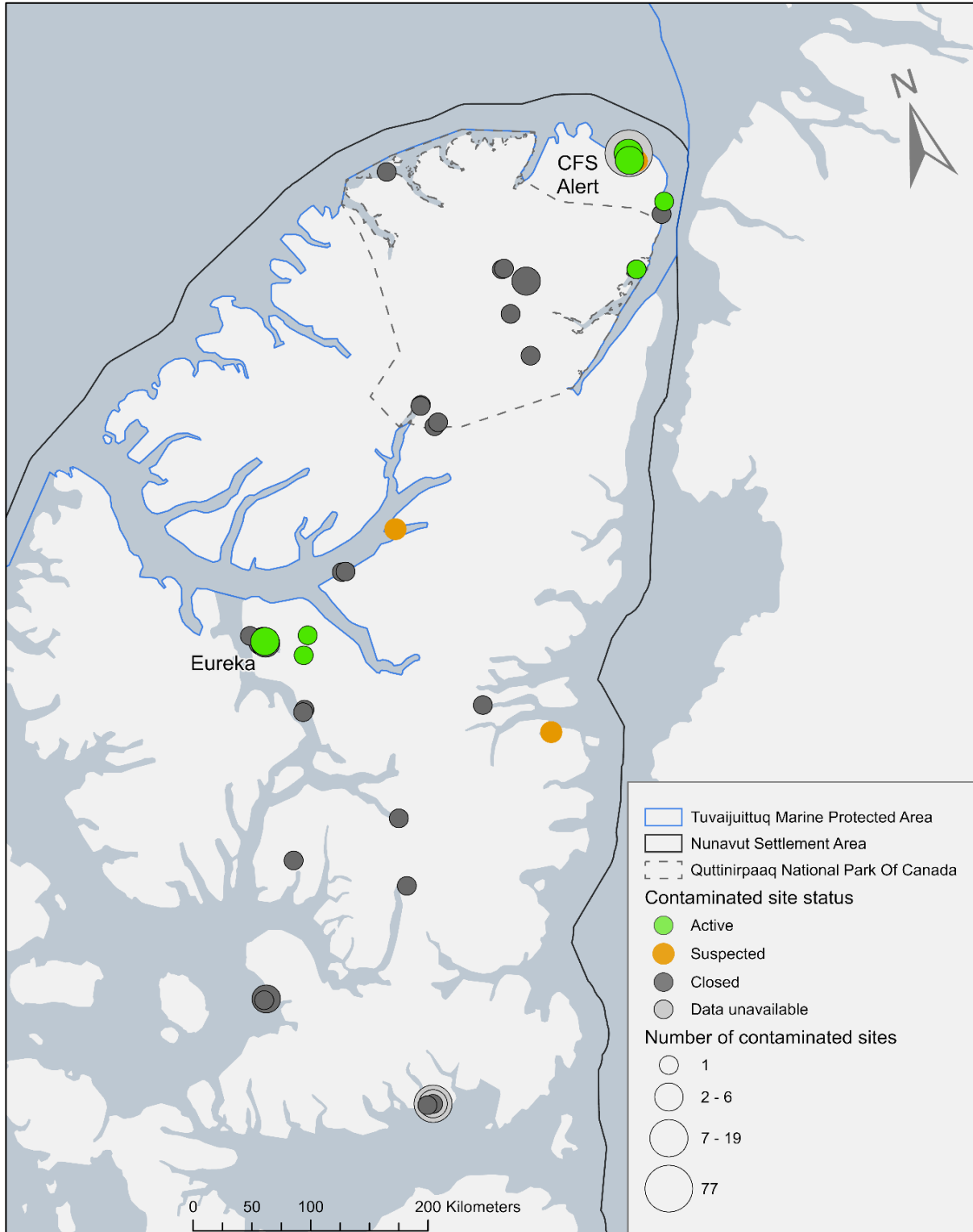
Fort Conger is a historical site situated on the shore of Discovery Harbour on Lady Franklin Bay, (N 81° 45.13', W 64° 49.56'). The site was used as a base by early Arctic expeditions and a scientific research camp. The site was also visited by early twentieth-century expeditions and later by government and military personnel, researchers, Inughuit hunters and tourists. A human health and ecological risk assessment conducted for the area identified risks from contamination at the site and a Risk Management and Remediation Plan has been developed. While some remediation has been completed, additional work is not an option at this time due to the remoteness of the site and the risks to cultural artifacts. Therefore, a long-term monitoring plan was developed so that, if the site becomes more accessible and remediation is possible, the proposed risk management and remediation strategy could be reviewed and updated. For more information on these sites, please contact Jane Chisholm at [jane.chisholm@pc.gc.ca](mailto:jane.chisholm@pc.gc.ca).

Additional information has been gathered on other sites on Ellesmere Island from the Government of the Northwest Territories (GNWT) Spills Database and the Federal Contaminated Sites Inventory (FCSI). The available data are summarized together in Figure 4, Table 2. The GNWT Spills Database is a collection of reported petroleum and other hazardous material spills in Nunavut and the Northwest Territories. The FCSI includes information on all known and suspected contaminated sites under the management of federal departments, agencies and consolidated Crown corporations.

The majority of contaminated sites on Ellesmere Island have been closed following historical reviews, testing, clean-ups or long-term monitoring activities. Available information from these two databases indicates that there are ten active sites (five in or near CFS Alert, four in or near Eureka, and one in Fort Conger) and three suspected sites (one at the Alexandra Fiord RCMP Detachment Site, one at D'Iberville Fjord, and one at Alert). Site status and actions data are unavailable from the GNWT Spills Database.

Site numbers that start with “spill-“ are from the GNWT Spills Database, and all other sites are from the FCSI. The site status refers to what is currently happening with the site. An “active” site is a confirmed contaminated site where remediation action is or may be required; a “closed” site is a site that requires no further action; and a “suspected” site requires further assessment work to confirm whether the site is considered a contaminated site. Actions tell us what has been done to the site, for example remediation efforts or testing.

The GNWT Spills database can be found at <https://www.gov.nt.ca/ecc/en/spills>, and the FCSI data can be found at <https://www.tbs-sct.gc.ca/fcsi-rscf/home-accueil-eng.aspx> and <https://www.tbs-sct.gc.ca/fcsi-rscf/numbers-numeros-eng.aspx?qid=1680451>. Information on the Federal Contaminated Sites Action Plan (FCSAP) can be found at <https://www.canada.ca/en/environment-climate-change/services/federal-contaminated-sites/action-plan.html>.



**Figure 4. Map showing closed, active and suspected contaminated sites on Ellesmere Island, NU. Source data: Government of Northwest Territories (GNWT) Spills Database and the Federal Contaminated Sites Inventory (FCSI), accessed May 2023**

**Table 2. List of active and suspected contaminated sites located on Ellesmere Island, including information on reporting organization (Crown Indigenous Relations and Northern Affairs Canada [CIRNAC]; Fisheries and Oceans Canada [DFO]; National Defence [DND]; Environment and Climate Change Canada [ECCC]; Parks Canada Agency [PCA]; Royal Canadian Mounted Police [RCMP]), contaminants (petroleum hydrocarbons [PHCs]; benzene, toluene, ethylbenzene, and xylene [BTEXs]; polycyclic aromatic hydrocarbons [PAHs), quantity, and actions.**

Site Number	Site Name / Location	Site Status	Occurrence Date	Latitude	Longitude	Reporting Organization	Contaminants	Quantity (cubic metres)	Actions
286	Lincoln Bay	Active	Data unavailable	82.0833	-62.0000	CIRNAC	PHCs	12	Initial testing completed. Detailed testing underway.
2747	Eureka High Arctic Weather Station	Active	Data unavailable	79.9908	-85.8586	ECCC	PHCs, BTEXs, PAHs, Metal, metalloid, and organometallic	15750	Remediation / risk management completed. Confirmatory sampling underway.
8328	Fort Conger Historic Site	Active	Data unavailable	81.7522	-64.8261	PCA	PAHs, Metal, metalloid, and organometallic	1265	Remediation / risk management completed. Confirmatory sampling underway.
24258	Romulus - Panarctic C-42 Well Site	Active	Data unavailable	79.8526	-84.3764	CIRNAC	BTEXs, PAHs, Metal, metalloid, and organometallic	3500	Remediation / risk management completed. Confirmatory sampling underway.
24259	Gemini - Panarctic E-10 Well Site	Active	Data unavailable	79.9902	-84.0690	CIRNAC	PHCs, Metal, metalloid, and organometallic	1500	Initial testing completed. Detailed testing underway.
27530	Neil Trivet Gaw Lab (Bapmon - Alert)	Active	Data unavailable	82.4535	-62.5135	ECCC	PHCs	0	Initial testing completed. Detailed testing underway.
20247006	Alert Main Station	Active	Data unavailable	82.4981	-62.3367	DND	PHCs, PAHs, Metal, metalloid, and organometallic	14500	Confirmatory sampling completed. Long term monitoring underway.



Site Number	Site Name / Location	Site Status	Occurrence Date	Latitude	Longitude	Reporting Organization	Contaminants	Quantity (cubic metres)	Actions
20247025	Alert Tx Site	Active	Data unavailable	82.4528	-62.5020	DND	PHCs	600	Detailed testing completed. Remedial action plan under development.
20247029	Alert Airfield	Active	Data unavailable	82.4998	-62.3611	DND	PHCs, BTEXs, Metal, metalloid, and organometallic	3	Confirmatory sampling completed. Long term monitoring underway.
70069014	Eureka - North Airstrip Apron	Active	Data unavailable	79.9977	-85.8406	DND	PHCs, BTEXs and PAHs	1755	Confirmatory sampling completed. Long term monitoring underway.
1091	Alexandra Fiord Rcmp Detachment Site	Suspected	Data unavailable	78.8798	-75.7546	RCMP	Data unavailable	0	Historical review planned.
16525	D'Iberville Fjord (Unassessed)	Suspected	Data unavailable	80.6069	-79.4792	DFO	Data unavailable	0	Historical review completed. Initial testing underway.
25114	Alert - Unauthorized Firing Range	Suspected	Data unavailable	82.4246	-62.1835	DND	Data unavailable	0	Historical review planned.

\*Closed sites were not included in this table as they have either been cleaned up and/or require no further action. Sites for which no data are available with respect to status were also not included.



## Appendix 2. Tuvaijuittuq Ministerial Order Regulations

\***NOTE:** The regulations can also be found at this website: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2019-282/page-1.html>

### SOR/2019-282

#### OCEANS ACT

#### Registration 2019-07-30

#### Order Designating the Tuvaijuittuq Marine Protected Area

Whereas this Order designates the Tuvaijuittuq Marine Protected Area in a manner that is not inconsistent with a land claims agreement that has been given effect and has been ratified or approved by an Act of Parliament;

Therefore, the Minister of Fisheries and Oceans, pursuant to 35.1(2)<sup>a</sup> of the *Oceans Act*<sup>b</sup>, makes the annexed *Order Designating the Tuvaijuittuq Marine Protected Area*.

- <sup>a</sup>S.C. 2019, c. 8, s. 5
- <sup>b</sup>S.C. 1996, c. 31

Ottawa, July 29, 2019

Jonathan Wilkinson  
Minister of Fisheries and Oceans

#### Definition of *Marine Protected Area*

1 In this Order, ***Marine Protected Area*** means the area of the sea that is designated by section 2.

#### Marine Protected Area

2 (1) The area of the sea in the Arctic Ocean consisting of the waters off northern Ellesmere Island, as described in plan number FB42596, certified on July 16, 2019 and depicted in plan number CLSR 108395, which plans are deposited in the Canada Lands Surveys Records, is designated as the Tuvaijuittuq Marine Protected Area.

#### Seabed, subsoil and water column

(2) The Marine Protected Area consists of 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.

#### Ongoing activities

3 For the purposes of subsection 35.1(2) of the *Oceans Act*, the following classes of activities are ongoing activities in the Marine Protected Area:

- (a) national defence activities carried out by the Department of National Defence;
- and



(b) marine scientific research activities.

### Prohibitions

**4 (1)** It is prohibited in the Marine Protected Area to carry out any activity — other than those set out in section 3 — that disturbs, damages, destroys or removes from the Marine Protected Area any unique geological or archeological features or any living marine organism or any part of its habitat, or is likely to do so.

### Exemption

**(2)** Despite subsection (1), the following activities may be carried out in the Marine Protected Area:

(a) marine navigation by a foreign national, a foreign ship or a foreign state, or an entity incorporated or formed by or under the laws of a country other than Canada; and

(b) the laying, maintenance and repair of cables and pipelines by a foreign state.

### Non-application – Nunavut Agreement

**5** This Order does not apply with respect to the wildlife harvesting rights of the Inuit in the Nunavut Settlement Area, as provided for in the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada, as approved, given effect and declared valid by the [Nunavut Land Claims Agreement Act](#).

### Coming into force

**6** This Order comes into force on the day on which it is registered.

# What We Heard: Community Consultations on a New Ministerial Order Marine Protected Area in Tuvaijuittuq

April 3-18, 2023



Pond Inlet – April 4, 2023



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## Acknowledgements

The Tuvaijuittuq Working Group would like to thank the communities of Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord for their time and hospitality during our community visits. We would especially like to thank the Hunters and Trappers Associations (HTAs), hamlet councils, and Mayoral offices for their participation and knowledge-sharing. Finally, we would like to acknowledge the Qikiqtani Inuit Association for leading the coordination of these meetings.

## Our Team

The Tuvaijuittuq Working Group has members from the Qikiqtani Inuit Association (QIA), Fisheries and Oceans Canada (DFO), Parks Canada Agency (PCA), and the Government of Nunavut (GN). Four participants included representatives from each organization involved in the Working Group.



*Tuvaijuittuq Working Group members attending consultations in Clyde River, Arctic Bay and Pond Inlet (left photo) and in Resolute Bay and Grise Fiord (right photo). Left Photo, left to right: Syzula Ikkidluak (QIA), Delaney Ewing (DFO), Madelaine Kellett (DFO), Bernie MacIsaac (GN), and Justin Hack (GN). Right Photo, left to right: Sarah Kennedy (DFO), Bethany Schroeder (DFO), Iselena Natsiapik (QIA), Daniel Haney (GN), and Bernie MacIsaac (GN).*



## Executive Summary

The Tuvaijuittuq Working Group, with members from QIA, DFO, PCA, and GN, conducted community consultations in Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord between April 3 - 18, 2023. Pond Inlet consultations were held on April 4, 2023.

The purpose of these consultations was to discuss a request by QIA to establish a new Ministerial Order Marine Protected Area (MPA) to explore an Inuit-led Protected and Conserved Area (IPCA) for Tuvaijuittuq. The Working Group also shared information on our proposed approach to regulations for this new short-term MPA, and sought community feedback and support on the proposal. The purpose of this report is to summarize the feedback provided by community members who attended the meetings in Pond Inlet, to provide transparency in the process, to provide a record of the discussions and concerns shared by the community, and to provide additional information to questions raised during consultations. To ensure we have accurately captured what we heard, this report has been circulated to the Mittimatalik HTA and Pond Inlet Hamlet Council for review. Individual reports were developed for each community and after HTAs and hamlet councils have had an opportunity to comment, these reports will be shared with all five communities.

While the Pond Inlet Hamlet Council was able to form quorum for the meeting, the Mittimatalik HTA was not. The HTA members present preferred to communicate the information presented at the meeting to the remaining members instead of scheduling a follow-up meeting. The Mittimatalik HTA members present and Pond Inlet Hamlet Council supported the proposal to pursue a new Ministerial Order MPA in Tuvaijuittuq and gave the Working Group permission to seek letters of support for the proposal. The community of Pond Inlet would like to continue its involvement in consultations and decision-making related to Tuvaijuittuq. Community interests related to Tuvaijuittuq include learning more about the animals (particularly marine mammals), the research being done, and in vessel traffic occurring in the area. There is also interest by the community for regular and stable Inuit employment for monitoring activities within the protected area, and in limiting the number of cruise ships that enter the MPA if possible. There is some concern about the ability to enforce regulations in the Tuvaijuittuq MPA, and whether assessments conducted for the area will be updated as climate change continues to impact the area. Pond Inlet has seen significant changes to sea ice in their area.

### What We Heard From Communities Overall

A common theme heard from communities was a desire to learn more about the MPA, including the animals and habitats that occur there, potential for future economic opportunities, and the types of research done in the area. There is interest from all five communities in protection for the area in both the short-term and long-term, but also in balancing protection with economic opportunities for future generations. Interest in protecting the area is based on Tuvaijuittuq's ecological importance, its significance to Inuit, and interest in the area's resources by other countries.



## Introduction and Approach

The Tuvaijuittuq Working Group, conducted community consultations in Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord between April 3 and April 18, 2023. Pond Inlet consultations were held on April 4, 2023. The purpose of these consultations was to discuss a proposed new Ministerial Order MPA in Tuvaijuittuq, to share information on the proposed approach to regulations for this new short-term protection measure, and to seek community feedback and support on this proposal. In each community, two gatherings were held; an initial meeting with the HTA, hamlet council, Mayor, Nauttiqsuqtiit and other relevant community groups, and an evening community open house.

At both meetings, information was shared on the significance of Tuvaijuittuq, its boundaries, reasons why the area is being considered for protection, the steps involved in establishing a new Ministerial Order MPA and proposed regulations for this short-term protection measure. The presentation materials and relevant assessments, including a summary of Natural Resources Canada's resource and economic assessment for the area<sup>1</sup> and an ecological and biological overview, were made available to community members in both English and Inuktitut. Two-page summaries of what we heard during November consultations were also provided. Simultaneous interpretation was also provided at each meeting.

The Tuvaijuittuq Working Group committed to circulating a "What We Heard" report to each community for their review and approval summarizing their feedback during these consultations. If community members or organizations feel that their feedback was misinterpreted or misrepresented, the Working Group will revise the report as requested and re-circulate to the community. Please contact Chandra Chambers ([chandra.chambers@dfo-mpo.gc.ca](mailto:chandra.chambers@dfo-mpo.gc.ca)) if you have any questions or concerns. After communities have had a chance to review and approve their What We Heard reports, the Working Group will provide copies of all reports to each community.

DFO committed to following up with communities on outstanding questions that were asked during community meetings. Answers to these questions were circulated to each community HTO, Hamlet office and Mayor in an email on June 28, 2023, and this information is included in Appendix 1 of this report. A copy of the MPA regulations that are being proposed for the new Ministerial Order MPA are also included in Appendix 2 of this report.

The HTAs and/or hamlet councils in some communities could not form quorum during the April meetings. The Working Group followed up with these boards virtually and received permission from each to seek a formal letter of support for the new regulation.

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<sup>1</sup> The full Natural Resources Canada resource assessment was also made available and can be accessed at: [https://publications.gc.ca/collections/collection\\_2022/rncan-nrcan/m183-2/M183-2-8897-eng.pdf](https://publications.gc.ca/collections/collection_2022/rncan-nrcan/m183-2/M183-2-8897-eng.pdf)



## Hunters and Trappers Association (HTA) and Hamlet Council Meeting

The Working Group met with the Mittimatalik HTA and Pond Inlet Hamlet Council on April 4, 2023 at 2:00 pm in the Sauniq Hotel conference room. Other community groups were invited to attend. Approximately 12 people were present for this meeting.

The Pond Inlet Hamlet Council was able to form quorum for the meeting, and although the HTA was not, the HTA members present committed to communicating the information to the remaining members and expressed support for the proposal. Both the Mittimatalik HTA and Pond Inlet Hamlet Council members indicated that a virtual follow-up meeting was unnecessary and gave permission to the Working Group to seek formal approval. The attending members gave the Working Group permission to engage the community at an open house meeting that evening.

### **What we heard:**

#### *Ecological Significance*

- The Pond Inlet community would like to learn more about Tuvaijuittuq, including marine mammal research that is happening in the area.

#### Response:

- Research in Tuvaijuittuq is led by DFO through an ongoing research program called the Multidisciplinary Arctic Program (MAP) – Last Ice. This program undertakes seasonal marine mammal, sea ice, lower trophic level, and other types of research.
  - Information related to animals, habitats and climate trends within Tuvaijuittuq is available at the following websites: [https://www.dfo-mpo.gc.ca/csas-sccs/Publications/ScR-RS/2020/2020\\_056-eng.html](https://www.dfo-mpo.gc.ca/csas-sccs/Publications/ScR-RS/2020/2020_056-eng.html) (DFO 2020; Inuktitut version available); [https://publications.gc.ca/collections/collection\\_2021/mpo-dfo/Fs97-6-3408-eng.pdf](https://publications.gc.ca/collections/collection_2021/mpo-dfo/Fs97-6-3408-eng.pdf) (Charette et al. 2020); and <http://wwwdev.ncr.dfo-mpo.ca/oceans/mpa-zpm/tuvaijuittuq/index-eng.html>. Climate models predict that summer sea ice may disappear in the Arctic Ocean by mid-century; however, it is unknown if or when the Tuvaijuittuq area might be ice-free (Charette et al. 2020). Additional information related to research in Tuvaijuittuq is provided in Appendix 1.
  - The information above is meant to build on presentations made to the community on November 15, 2022, in which information on the ecological significance and assessments of petroleum and economic potential of the area was shared. Please contact Chandra Chambers at [Chandra.Chambers@dfo-mpo.gc.ca](mailto:Chandra.Chambers@dfo-mpo.gc.ca) if you would like more information.
- There is interest in visiting Tuvaijuittuq, particularly the Archer Fiord/Lady Franklin Bay area which supports several marine mammal species.

### *Economic Opportunities and Activities*

- Pond Inlet asked for additional details regarding the proposed regulations.

Response:

- While the proposed regulations were reviewed during the meeting, DFO committed to providing additional details on how the regulation would be applied. This information is included in Appendices 1 and 2 of this report. If you have any questions, please contact Chandra Chambers at [Chandra.Chambers@dfo-mpo.gc.ca](mailto:Chandra.Chambers@dfo-mpo.gc.ca) or 204-914-6959.
- There was interest in learning more about how the Tuvaijuittuq boundary was determined originally and why the Queen Elizabeth Islands were not included. There was also a question about whether there have been any boundary disputes other than the one with Denmark in the Lincoln Sea area.

Response:

- Canada and Denmark signed a boundary agreement on June 14, 2022 to resolve a disagreement on the maritime boundary along the eastern edge of Tuvaijuittuq in the Lincoln Sea. Once an agreement is approved by Canada, this portion of the MPA boundary will be adjusted to follow the new international boundary line.
- There are no additional international boundary disputes related to Tuvaijuittuq.
- Additional information on how the Tuvaijuittuq boundary was decided on is provided in Appendix 1.
- Pond Inlet would like to have a continued role in decision-making about long-term options for Tuvaijuittuq and in the approach to enforcing the regulations.

Response:

- The Aulattiqatigiit Board that manages Tallurutiup Imanga National Marine Conservation Area also manages Tuvaijuittuq.
- DFO is responsible for compliance and enforcement in Tuvaijuittuq. Compliance monitoring is conducted through aerial surveillance, vessel traffic monitoring and detection using automatic information systems.
- Pond Inlet would like to see long-term employment opportunities for Inuit in Tuvaijuittuq.

Response:

- The Government of Canada and QIA are working together to identify future employment opportunities for Inuit related to potential long-term protection of Tuvaijuittuq. Currently, there are opportunities to participate in research activities in Tuvaijuittuq through the MAP - Last Ice Program. If there is interest in participating in research activities, please contact Chandra Chambers at [Chandra.Chambers@dfo-mpo.gc.ca](mailto:Chandra.Chambers@dfo-mpo.gc.ca).
- Board members expressed interest in travelling to Tuvaijuittuq and seeing the area for themselves, particularly the Archer Fiord area due to the marine mammals.

- Pond Inlet would like to be kept up to date on vessel traffic in Tuvaijuittuq, including where the vessels have travelled. If possible, cruise ship access to Tuvaijuittuq should be limited.

Response:

- Tuvaijuittuq is an area that is largely ice-covered all year round and as a result, activities in this area are minimal. Between 2012 and 2019, vessels accessed Tuvaijuittuq only five times, all within nearshore areas in August/September. All but one vessel (a transiting passenger ice-breaker) were Canadian Coast Guard ships. Available data indicates that between 2019 and 2023, three vessels accessed nearshore areas in Tuvaijuittuq. All three were Canadian Coast Guard ships and all trips occurred in August when sea ice extent is at its lowest (one in 2019, two in 2022). Only one of these vessels entered the Archer Fiord/Lady Franklin Bay area, between August 27-31, 2022.
- The community would like to see the number of cruise ships visiting Pond Inlet decrease. It was suggested that the Working Group come to Pond Inlet to observe the cruise ships and their activities rather than asking about them.

Response:

- Waters in and around Pond Inlet are managed under the Tallurutiup Imanga National Marine Conservation Area (NMCA), through Parks Canada Agency legislation. This request has been shared with the appropriate partners co-managing the NMCA.

### Concerns

- Board members were pleased to hear that the wildlife harvesting rights within the Nunavut Settlement Area are not affected by the Ministerial Order but were concerned that harvesting may be restricted by DFO in the future for animals such as narwhal, as additional to limits placed on narwhal in Arctic Bay. To date, marine mammals observed in Tuvaijuittuq include narwhal, walrus and seals (ringed and bearded). Integrated fisheries management plans have been developed for Atlantic walrus and narwhal populations (see links below).

Response:

- Additional information on how narwhal populations are managed in Canada can be accessed here (Inuktitut version available): <https://www.dfo-mpo.gc.ca/fisheries-peches/ifmp-gmp/narwhal-narval/index-eng.html>.
- Additional information on how Atlantic Walrus are managed in Canada can be accessed here (Inuktitut version available): <https://www.dfo-mpo.gc.ca/fisheries-peches/ifmp-gmp/walrus-atl-morse/walrus-nunavut-morse-eng.html>
- Additional information on harvesting rights in Tuvaijuittuq is provided in Appendix 1.
- There are concerns that any employment opportunities for Inuit related to Tuvaijuittuq in the future will not be available long-term. For example, employment opportunities for Pond Inlet community members related to Quittinirpaaq National Park did not grow into long-term opportunities. There is concern that this may happen with Tuvaijuittuq.

- The community of Pond Inlet has concerns about whether the assessments completed for Tuvaijuittuq, such as ecological, resource and economic assessments, will adapt as climate change impacts continue.

Response:

- The assessments used to inform short-term protection for Tuvaijuittuq have been updated since 2019 and will not be updated further for the purposes of pursuing another five years of protection. However, many of these assessments will be updated if we pursue long-term protection in order to make management decisions based on the most up to date information.
- When protecting an area over the long term, an important principle guiding the Government of Canada's approach is the ability to work collaboratively with partners and stakeholders to adjust our management approach to address changes to the area's ecosystem. This guiding principle will be an important consideration when working with partners to decide on a long-term option for Tuvaijuittuq.

*QIA Vision for an Indigenous Protected and Conserved Area (IPCA)*

- There is interest in learning more about QIA's vision for Tuvaijuittuq, including their regional governance model and planned infrastructure in the region.

Response:

- QIA will be undertaking consultations on their regional governance model in the coming months.

## Community Open House

The community open house took place in the Pond Inlet Community Hall April 4, 2023 at 7:00 pm, where approximately 15 adults were in attendance. Children and youth were also welcomed.

**What we heard:**

- The ice is noticeably changing around Pond Inlet. For example, 10-20 years ago the ice was eight feet thick and now it is half as thick, and will likely get thinner as time goes on.
- Additional interest was expressed at this meeting in future employment opportunities and in visiting Tuvaijuittuq.

## Next Steps

The next steps to pursue establishment of a new Ministerial Order MPA will be to seek stakeholder input on the proposal, seek formal community support, complete assessments and other approvals needed under the Nunavut Agreement such as conformity determination by the Nunavut Planning Commission and Nunavut Wildlife Management Board approval, and complete DFO's regulatory process. Formal letters of support will be sought from community hamlets and HTAs. Community members are encouraged to communicate their feedback on the



proposal to these organizations to inform their decision DFO will notify communities and stakeholders prior to the proposal being published online for a 30-day public comment period – additional input can be provided at that time as well.

It is important to us that we have summarized your input on this proposal correctly. If you feel that we have missed any input provided during our meetings or captured information incorrectly, please reach out to the email address provided above for correction.

The Tuvaijuittuq Working Group would like to thank all of the community members who attended these meetings - your feedback is vital and appreciated.

Thank you.

## Appendix 1. Follow-up questions and answers from the April 2023 consultations on a new Ministerial Order MPA in Tuvaijuittuq.

\*Please note, an additional question and answer have been added (Question #8) and Question #15 has been expanded upon since it was sent to the HTA and hamlet.

### 1) What is the purpose of protecting Tuvaijuittuq?

Researchers agree that summer sea ice will remain the longest in Tuvaijuittuq (Figure 1) as it continues to decline in other areas of the Arctic due to climate change. Because of this, the area is expected to become an important refuge for ice-dependent species. The area has a very diverse ecosystem, and contains a number of unique communities of organisms, including communities on the ice, in the ice, and below the ice. Habitat in Tuvaijuittuq is important to marine mammals and sea birds. For all of these reasons, DFO and its partners believe that the area, its habitat, and the wildlife within it, would benefit from protection. The proposed Ministerial Order MPA is a short-term protection tool which will protect the area for up to five years. The purpose of this short-term protection tool is to prohibit new activities in the area that may cause negative impacts while additional information is collected to support a better understanding of the conservation and protection needs of the area before longer-term protection measures are considered.

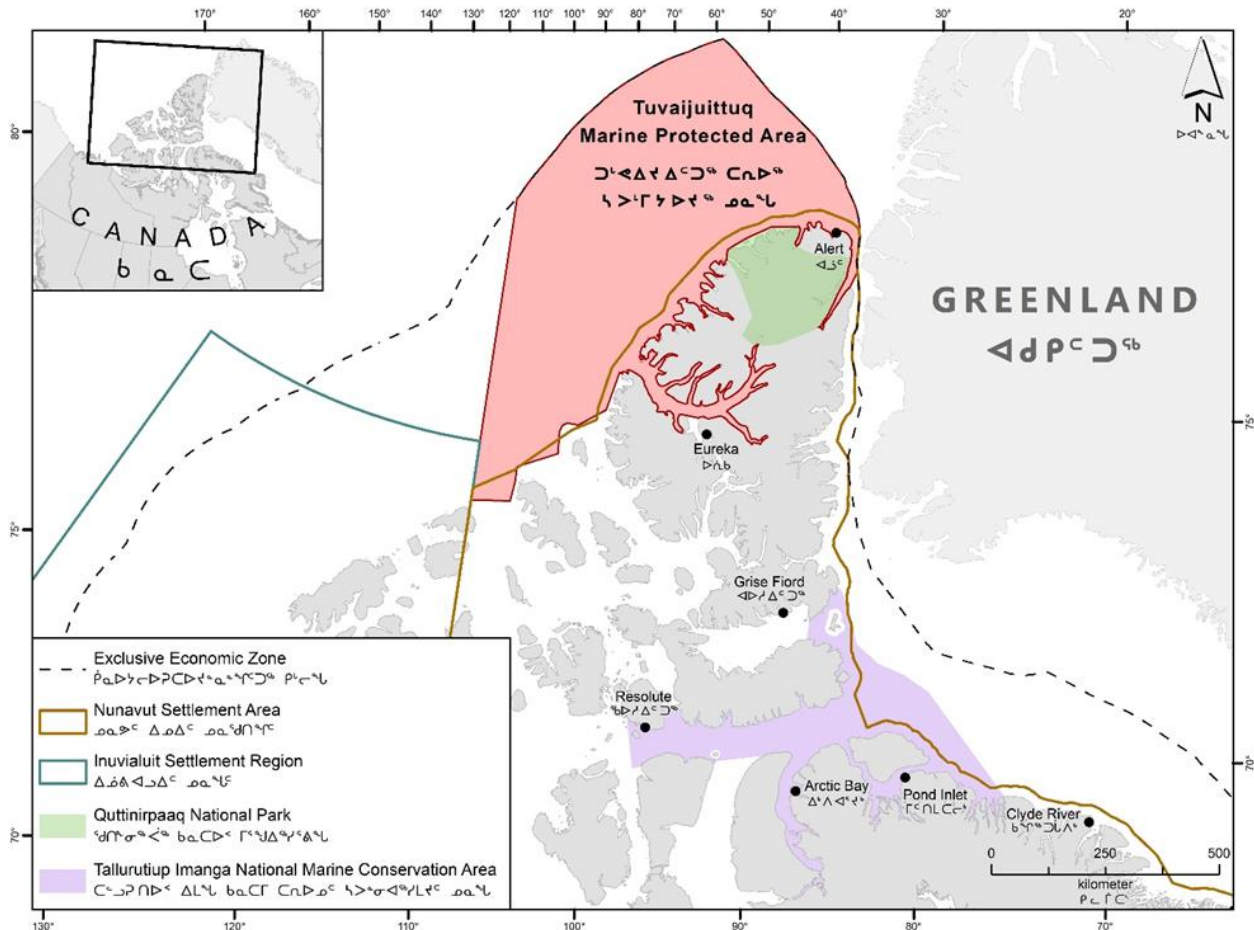


Figure 1. Map of Tuvaijuittuq MPA by Ministerial Order

**2) How was the Tuvaijuittuq boundary determined? Why are the rest of the Queen Elizabeth Islands not included in the boundary?**

The Tuvaijuittuq MPA includes the marine waters off northern Ellesmere Island, starting from the low water mark and extending to the outer 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. The initial boundaries of Tuvaijuittuq were based on the 2011 Canadian Science Advisory Report ([2011/55](#)), which identified key multi-year ice habitat. The boundary was later extended to the nearshore areas off Ellesmere Island within the Nunavut Settlement Area as more of the area was understood. The marine area around the Queen Elizabeth Islands south of Ellesmere Island supports different communities of organisms than those within Tuvaijuittuq. This area was not considered for inclusion in Tuvaijuittuq as it has different conservation needs. Partners agreed to settle on the boundary as it is now and consider the remaining islands at a later time as possible new protected areas. Some of the Queen Elizabeth Islands overlap with the Inuvialuit Settlement Region, which is not included in the Tuvaijuittuq boundary.

**3) What does “freezing the footprint of ongoing activities” mean?**

Freezing the footprint of ongoing activities means allowing activities that are already lawfully occurring in the area to continue and preventing any new activities that may damage, disturb, destroy or remove important habitats, features and organisms. Ongoing activities in Tuvaijuittuq were identified using a number of different methods, including community consultation (in Arctic Bay, Resolute Bay and Grise Fiord in 2019 and in Arctic Bay, Resolute Bay, Grise Fiord, Pond Inlet and Clyde River in 2022), consultation with QIA, and consultation with DFO Science and other federal departments and agencies including the Department of National Defence, Parks Canada Agency, and Canadian Coast Guard. DFO gathered further information about ongoing activities by seeking input on the proposed regulations from industry and other stakeholders (e.g., non-governmental organizations), and from studies such as an assessment of vessel traffic using Automatic Identification System (AIS) signals in the area between 2012-2019. This study is currently being updated so DFO has the most up-to-date information.

Based on available information, DFO determined that ongoing activities in Tuvaijuittuq include:

- (a) national defence activities carried out by the Department of National Defence; and
- (b) marine scientific research activities.

The regulations also include exemptions and exclusions helping to respect commitments Canada has made both domestically and internationally.

The full regulations are provided as a separate attachment in both English and Inuktitut.

**4) Does freezing the footprint of activities affect wildlife harvesting rights of Inuit in this area?**

The Ministerial Order MPA does not apply with respect to the wildlife harvesting rights of Nunavut Inuit in the Nunavut Settlement Area, as provided for in the Nunavut Agreement. This means that the Ministerial Order regulations do not affect the wildlife harvesting rights of Inuit within the Nunavut Settlement Area (NSA).

There appear to be no provisions within the Nunavut Agreement that extend Inuit harvesting rights beyond the NSA portion of Tuvaijuittuq. As a result, the regulations would apply to everyone in the area of Tuvaijuittuq that falls outside of the NSA. However, we would be interested in further discussing the matter if there are provisions in the Nunavut Agreement you believe have been overlooked.

**5) Why are there exemptions for foreign states in the Ministerial Order MPA regulations?**

Under the United Nations Convention on the Law of the Sea (UNCLOS), which is an international agreement, Canada must allow certain activities such as navigation (vessels transiting through) and laying of cables and pipelines, from foreign states in certain maritime zones. Because of this, those foreign activities are exempted from the application of the Ministerial Order MPA in Tuvaijuittuq. The exclusive economic zone, an area of the sea beyond the territorial sea extending out to 200 nautical miles from the coastline (Figure 2), is not Canadian territory, and in that area Canada only has jurisdiction over economic resources such as fishing, oil and gas, and mineral exploitation.

Under Canadian law, Canada has the authority to prohibit domestic vessel navigation and other activities in this area. Since the purpose of the short-term Ministerial Order MPA is to conserve and protect the vulnerable habitats and organisms in Tuvaijuittuq while we collect additional information to inform decisions about long-term protection, we aim to limit any activity, including domestic activities, that may negatively impact the area. Although foreign navigation is allowed in the MPA, foreign countries will typically comply with voluntary measures, if guidance is provided to avoid certain areas within the MPA.

**6) Can the old sea ice (multi-year ice) be broken by ice-breakers?**

While some ice-breakers can break through thick multi-year ice, there are different classes of ice-breakers built for different purposes and ice thicknesses. Not all ice-breakers can break through thick multi-year ice. To our knowledge, the few vessels that have travelled to Tuvaijuittuq for activities such as national defence, safety, marine research, and foreign vessel travel, have stayed within the nearshore areas during the open water season and did not actively conduct ice-breaking activities.

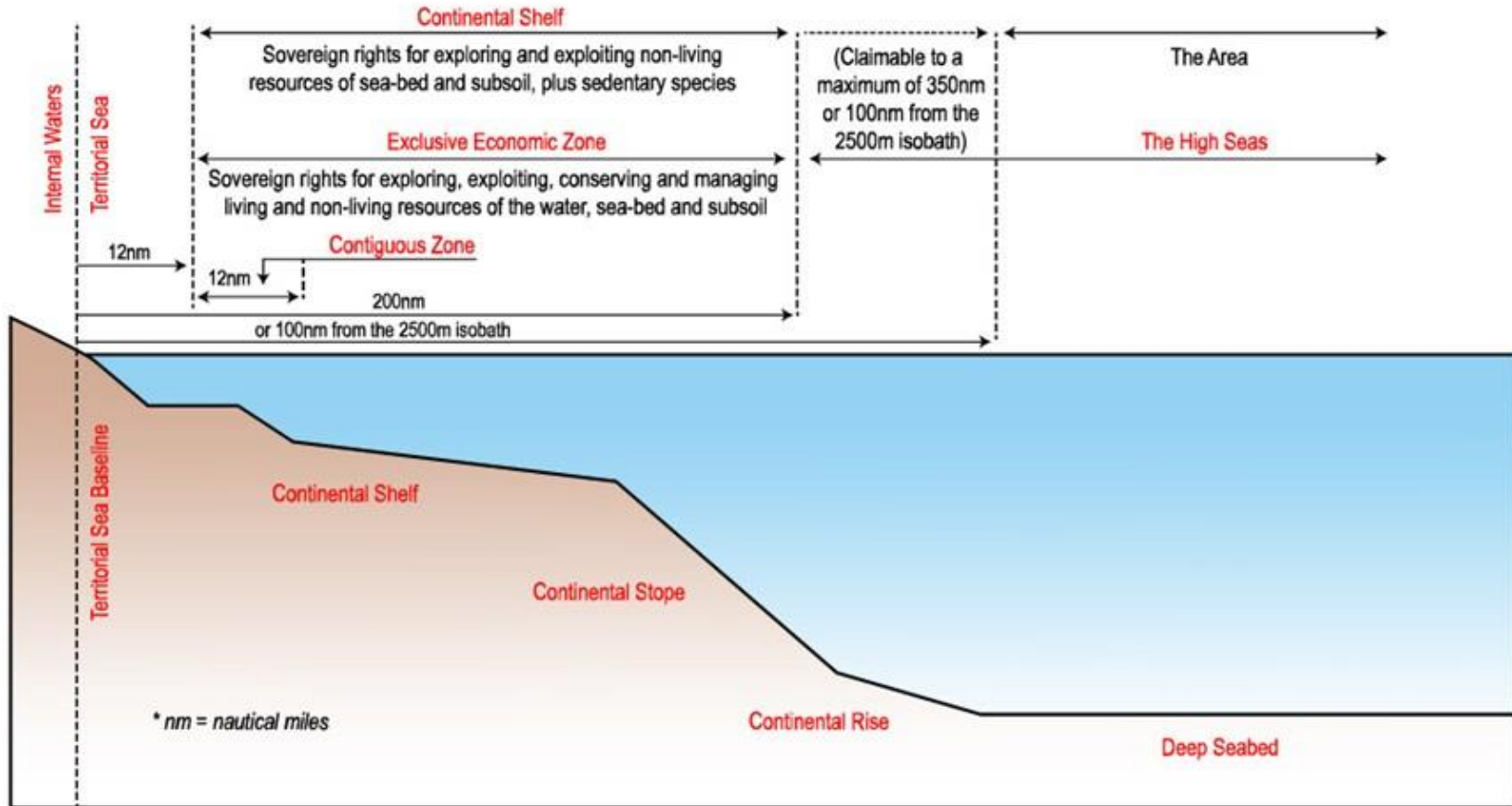


Figure 2. Canada's Maritime Zones

## 7) How can Inuit visit Tuvaijuittuq?

Tuvaijuittuq is an area of the sea that is a mainly ice-covered all year round and is very remote. There is one military research station in Alert called Canadian Forces Station (CFS) Alert located outside of Tuvaijuittuq on northern Ellesmere Island and a small research base in Eureka on Fosheim Peninsula. There are no communities nearby – the closest community is Grise Fiord, which is approximately 327 km as the crow flies from the MPA's southern-most boundary. Activity in Tuvaijuittuq is limited to national defence activities and marine scientific research, mainly due to the extensive ice cover in this marine area. In 2019, the communities of Arctic Bay, Resolute Bay and Grise Fiord indicated that the area is difficult to reach by skidoo; however, some community members in Grise Fiord had travelled, or knew of people that had travelled, as far as Eureka (which is south of the proposed area) by dogsled in the past.

There are however, opportunities for involvement in research activities in Tuvaijuittuq, which are based out of CFS Alert. For more information on participating in research activities in Tuvaijuittuq, please contact Chandra Chambers ([Chandra.Chambers@df0-mpo.gc.ca](mailto:Chandra.Chambers@df0-mpo.gc.ca)).

## 8) Fisheries quotas to Inuit

It is important to note that Tuvaijuittuq is largely ice-covered all year round and is not accessible to fishing vessels. As a result, no large-scale commercial fishing activities are possible in the area under current conditions. It is unknown if ice conditions would support small-scale on ice fisheries, and no data are available to understand whether a fishery (small or large-scale) would be possible.

When we visited communities in April 2023, we received a question relating to fisheries quotas in general and how these are allocated to Inuit.

Fisheries and Oceans Canada continues to respect and implement the obligations under Nunavut Agreement including provisions related to offshore commercial fisheries access that give special consideration to Nunavut. Through implementation of the Nunavut Agreement over the years, the share of adjacent resources to Qikiqtani Inuit has significantly increased, such that Qikiqtani Inuit fishers now have 80% of Turbot and 42% of shrimp resources including 100% of all fisheries resources within the Nunavut Settlement Area.

## 9) What kind of Inuit Qaujimaqatugangit (IQ) is used? What is studied?

- Oral History passed down over centuries of Inuit Knowledge.
- Inuit knowledge living and adapting, part of present day life. It is in how Inuit live and see the world today.
- QIA would like to gather IQ for Tuvaijuittuq.

## 10) Can more information be provided about the infrastructure that QIA refers to? Would QIA make buildings or houses for Tuvaijuittuq purposes?

- Multi-use facilities to address Inuit Stewardship and community needs (office space, equipment storage, garage, country food processing, community outreach, elder gatherings, etc.).

- Additional infrastructure that supports Inuit stewardship activities and the Nauttigsuqtiit program, such as housing and supplementing the facilities in the Tallurutiup Imanga communities as appropriate.
- Infrastructure requirements for Inuit stewardship that arise due to changing socio-economic or environmental conditions.

### **11) When will the regional governance model will be in effect?**

At this time, this is still at the negotiation table. However, QIA is seeking this Regional Governance model for future IIBAs as well as existing IIBAs that will be renegotiated over time.

### **12) Status update on the harbour planned for Resolute Bay.**

Transport Canada (TC), the Government of Nunavut (GN), and the Qikiqtani Inuit Association (QIA) have been working together towards the development of community harbours in Grise Fiord and Resolute Bay and have developed an Infrastructure Investment Plan (IIP) that was adopted in October 2022.

The IIP was completed based on community engagements and other work to date and informed the Agreement for Resolute Bay and Grise Fiord Community Harbour Development.

The Agreement for Resolute Bay and Grise Fiord Community Harbour Development was signed by TC and the GN on January 16, 2023 and will provide up to \$76,281,900 to the GN for the design and construction of the two community harbours in Grise Fiord and Resolute Bay. The current funding for community harbours will cover the cost of constructing at least one breakwater, a parking area, dredging, a boat launch, and floating docks.

TC has provided a copy of the agreement to the QIA representative, to be kept in confidence.

We understand from the GN that:

- A Project Manager with GN's Department of Community and Government Services has been assigned to the projects.
- The exact procurement approach for construction has not been finalized, but it is likely to follow the GN's standard procurement practices.
- The first step is expected to be a Request for Proposal for engineering and design services.

For more information, please contact Matthew Bowler ([MBowler@GOV.NU.CA](mailto:MBowler@GOV.NU.CA)) or Miguel Parent ([miguel.parent@tc.gc.ca](mailto:miguel.parent@tc.gc.ca)).

### **13) What type of research is occurring in Tuvaijuittuq?**

Research in Tuvaijuittuq is led by DFO through the Multidisciplinary Arctic Program (MAP) - Last Ice and this team includes researchers from universities and organizations all over the world. The program brings together a number of different specialists to study different features in Tuvaijuittuq. For example, experts in sea ice, water, fish, marine mammals, and those who study organisms such as algae and krill that form the basis of the High Arctic



food web. Some of this work is done during a late winter/early spring seasonal field camp, where researchers work together as a team to collect samples and do their research. Others, like marine mammal surveys, are conducted around the same time but not as part of the field camp, and in the fall. The program began in 2018 and experienced some delays due to COVID-19 but is continuing. A new ship-based program called ArcticCore will begin this year and will include Archer Fiord and adjacent areas around Tuvaijuittuq (as sea-ice permits). This new program will study physical (currents/movement), chemical (nutrients, ocean acidification), and biological (primary production, zooplankton, benthos) oceanography and will also include marine mammal surveys and sea ice studies. If long-term protection is put into place in the future, then more formal management and monitoring plans would be developed for Tuvaijuittuq, in collaboration with partners and communities.

Research partners in MAP-Last Ice:

DFO  
Department of National Defence  
Defence Research and Development Canada  
Université Laval  
University of Essex  
Université du Québec à Rimouski  
Environment and Climate Change Canada  
Mediterranean Institute of Oceanography  
Polar Continental Shelf Program  
Alfred Wegener Institute  
University of Bristol  
Resolute HTA Board of Directors

Type of research conducted as part of MAP-Last Ice:

- Sea ice distribution, physical properties (thickness, composition), productivity (algal communities, biomass)
- Evolution of the ice and under-ice habitat over time
- Continuous atmospheric, oceanographic and sea ice observations
- Zooplankton, fish and benthic organisms
- Marine mammal and habitat surveys
- Physical (currents/movement), chemical (nutrients, ocean acidification), and biological (primary production) oceanography

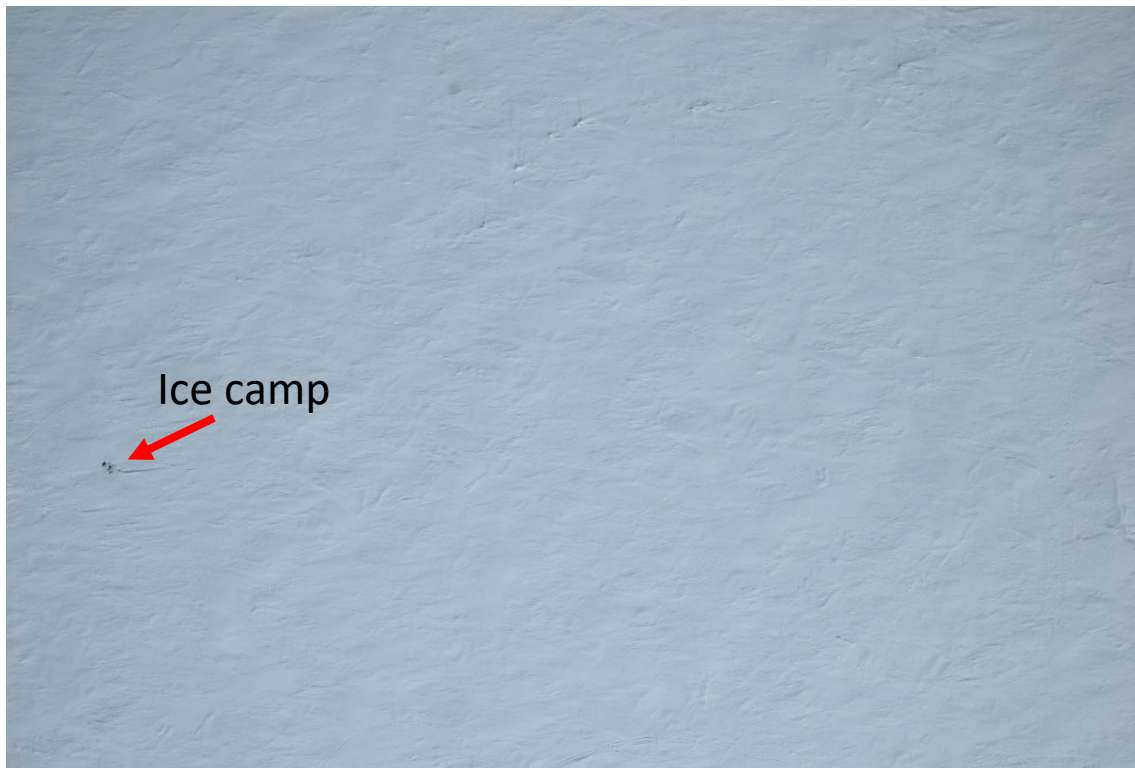
Collection of ice cores during the MAP-Last Ice and ArcticCORE programs:

We are very conscious of potential disturbances to the environment and during our sampling we take action to minimize these disturbances. When we collect ice cores, we sample only a part of the core and we replace the rest of the core to its original hole. Once replaced in its original hole, the core refreezes quickly, typically within a few hours.

The ice cores that we collect are small, at 9 cm diameter. This means that the surface area of one core is 5 times smaller than that of a hole cut out with an 8-inch auger, and about 10-12 times smaller than that of a seal breathing hole. While the seals keep their holes open,

we “close” our holes after sampling (with the original ice core from which we cut off one or a few sections). If we add the area of all the cores that we collect during one sampling season, it would typically add up to much less than 1 square meter, at most 2 m<sup>2</sup>.

In the photo below, we can see our ice camp on the sea ice north of Ellesmere Island. In another photo taken a few days after we took out camp, it was not possible to identify the site where the ice camp had been set up.



**Figure 3. Aerial view showing the ice camp on the sea ice north of Ellesmere Island. A few days after taking out the camp, the site of the ice camp was not visible anymore.**

#### **14) Interest in learning more about Canada’s Polar Continental Shelf Program**

##### **Polar Continental Shelf Program:**

Natural Resources Canada’s Polar Continental Shelf Program (PCSP) supports Arctic science by providing logistics planning, coordination and advice to Canadian government, non-government, university and international researchers. The PCSP supports projects in the Arctic from Churchill, Manitoba, to the northern tip of Ellesmere Island, Nunavut, and from the Yukon/Alaska border to as far as Greenland, on occasion.

Support can include air transportation, as well as fuel, field equipment for loan, field communications and safety, logistics advice for field studies, the use of the PCSP facility in Resolute, Nunavut, and shipping and receiving coordination and advice. The PCSP facility in Resolute is typically open from late January to September each year and is comprised of

an accommodations area that can house up to 237 guests, lounge areas, a fitness room, office spaces, kitchen and dining facilities, an operations centre and a laboratory.

The PCSP provides employment, student training and business opportunities for northern residents. The PCSP also helps with science outreach through publishing an annual science report and connecting researchers with northern community organizations.

The table below includes PCSP projects that occurred close to Grise Fiord and/or Tuvaijuittuq in recent years. Please feel free to reach out to the project leads if you have an interest in specific projects.

As a contact at the Polar Continental Shelf Program, please feel free to reach out to **Michael Meunier**, Manager of the Program Coordination and Outreach unit ([michael.meunier@nrcan-rncan.gc.ca](mailto:michael.meunier@nrcan-rncan.gc.ca)) or the PCSP Ottawa mailbox ([pcspottawa-ppcpottawa@nrcan-rncan.gc.ca](mailto:pcspottawa-ppcpottawa@nrcan-rncan.gc.ca)). Michael and his group would be pleased to connect with you and discuss your priorities.

Here are some additional resources that may be of interest:

- A list of all 2019 and 2020 projects supported by PCSP can be found at the following link: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/polar-continental-shelf-program/current-projects/10009>.
- More information on the PCSP can be found at: [https://natural-resources.canada.ca/sites/nrcan/files/earthsciences/files/pdf/polar/PCSP-Brochure\\_eng.pdf](https://natural-resources.canada.ca/sites/nrcan/files/earthsciences/files/pdf/polar/PCSP-Brochure_eng.pdf)
- Information on project support applications can be found here: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/research-support-arctic-logistics-and-field-equipment-for-across-canada/10003>.
- Annual Science Reports can be found at the following link: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/polar-continental-shelf-program/pcsp-publications/10011>.

**Table 1. List of PCSP-supported projects in the Arctic Archipelago, many near Grise Fiord and/or Tuvaijuittuq MPA in recent years**

Primary Investigator	Institution	Study Location(s)	Project Title
Hsin Chiang	McGill University	McGill Arctic Research Station, Expedition Fjord	A new window on the universe: radio astronomy from northern Canada
Cory Matthews	Fisheries and Oceans Canada	Grise Fiord	Aerial survey of High Arctic walrus and narwhal stocks
Michael Maurice	Environment and Climate Change Canada	Svarvevaeg, Eureka, Isachsen, Grise Fiord, Mould Bay, Rea Point, Cape Providence, Resolute Bay, Steffanson Island, Cape Liverpool, Fort Ross, Gateshead	Annual Maintenance of Environment and Climate Change Canada's Automatic Weather Station array - Arctic Archipeligo

Primary Investigator	Institution	Study Location(s)	Project Title
Christine Michel	Natural Resources Canada	Eureka	Arctic CORE (Conservation, Observation, Research, and Engagement)
Lyle Whyte	McGill University	Assistance Bay	Assessment of Bioremediation Potential of Marine Fuels on NWP Arctic Beaches
Joseph Monteith	Crown-Indigenous Relations and Northern Affairs Canada	Alert, Eureka	Baffin/High Arctic Inspections 2022
Alexander Culley	Université Laval	Ward Hunt Island	Characterizing viral impact in the Last Ice Area
Christopher Omelon	Queen's University	Expedition Fiord, Resolute Bay	Climate Change Research at the McGill Arctic Research Station
David Didier	Université du Québec à Rimouski	Sydkap Glacier and surrounding area, Starnes Fiord and surrounding area, Jakeman Glacier and surrounding area, Grise Fiord	Coastal dynamics and hazards in Grise Fiord and Jones Sound
Mark Skidmore	Montana State University	Truelove Lowlands, Croker Bay, Resolute, Gascoyne inlet	Exploration of Saline Cryospheric Habitats with Europa Relevance (ESCHER): An approach using airborne and submarine semiautonomous systems
Erin MacNeil	Natural Resources Canada	Gascoyne Inlet	Defence of North America
Lyle Whyte	McGill University	Devon Island lakes site	Developing new technologies to access and investigate the hypersaline, subzero Devon Island Subglacial Lake System, a unique Mars and icy moon analogue
Denis Lacelle	University of Ottawa	Eureka	Effect of degrading ice wedge polygon landscapes on local topography, hydrology, and water quality.
Susan Kutz	University of Calgary	East wind lake, Eureka, Resolute Bay	Emerging Infectious Disease in High Arctic Ungulates - Terrestrial Investigations
Amelie Roberto-Charron	Government of Nunavut	Eureka Weather Station, Resolute Bay	Emerging Infectious Diseases in High Arctic Ungulates – Aerial assessment

Primary Investigator	Institution	Study Location(s)	Project Title
Clément Chevallier	Environment and Climate Change Canada	Cape Verra, Cape Verra, Nirjutiqarvik, Cape Liddon, Houbhouse Inlet, Prince Leopold Island, Baillarge Bay	Fulmar colony surveys in Lancaster Sound
Myriam Lemelin	Université de Sherbrooke	T-MARS camp, McGill Arctic Research Station, Axel Heiberg Island	Geological study and mapping of hydrothermal deposits and gossans, Expedition Fiord, Axel Heiberg Island, Nunavut, as analogues for Mars
Christine Dow	University of Waterloo	Devon Ice Cap camp	Geophysical imaging of the Devon sub-glacial lakes
Luke Copland	University of Ottawa	Manson Icefield, Sydkap base camp, Sydkap ice marginal lake complex, Grise Fiord	Glacier monitoring on southern Ellesmere Island
Maya Bhatia	University of Alberta	Sydkap Glacier and surrounding area, Starnes Fiord and surrounding area, Jakeman Glacier and surrounding area, Grise Fiord	Glacier-ocean interactions in the Canadian high Arctic
Daniel Fortier	University of Montreal	Ward Hunt Island	Ground ice of eastern Canadian High Arctic polar desert
Cortney Wheeler	Fisheries and Oceans Canada	Elwin Bay, Creswell Bay	High Arctic Beluga Whale Stock Structure
Greg Henry	University of British Columbia	Sverdrup Pass, Knud Peninsula, PCSP Eureka, Bache Peninsula, Princess Marie Bay, Alexandra Fiord, Cape Bounty	High Arctic tundra ecosystem responses to 30 years of experimental and observed climate change
Masaki Uchida	National Institute of Polar Research, Japan	Oobloyah Bay	Identifying and understanding the effect of temporal and spatial changes towards the biodiversity and carbon sequestration processes in the high Arctic
John Moores	York University	Expedition Fjord	Identifying putative microbial drivers of methane flux on Earth and on Mars
Raoul-Marie Couture	Université Laval	Ward Hunt Island	Impact of oxygen pulses on redox-sensitive chemicals and microbiome in Canada's northernmost lake
Cory Matthews	Fisheries and Oceans Canada	Goose Fiord, Brooman Point, Kearney Cove	Improving High Arctic walrus stock assessment using satellite telemetry, genetics, and time-lapse photography
Lyle Whyte	McGill University	Lost Hammer, Thompson Glacier, White Glacier,	

Primary Investigator	Institution	Study Location(s)	Project Title
		Expedition Fjord, Gypsum Hill, Color Peak	Investigations of microbial activity in cryoenvironments in the Canadian High Arctic
Laura Brown	University of Toronto Mississauga	Nanuit Itillinga (Polar Bear Pass), Nanuit Itillinga (Polar Bear Pass), Cornwallis Island Lakes	Lake Ice in the Canadian High Arctic
Scott Lamoureux	Queen's University	Cape Bounty, Melville Island, Resolute vicinity	Land and water impacts and response to climate and permafrost changes in the High Arctic
Laura Thomson	Natural Resources Canada	Muller Ice Cap, Expedition Fiord	Mass Balance and Energy fluxes of White Glacier, Axel Heiberg Island, NU
Catherine Girard	Université du Québec à Chicoutimi (UQAC)	Ward Hunt Island, Resolute Bay vicinity	Microbes on the go: Release of cryospheric microbes to downstream habitats
Derek Mueller	Carleton University	Milne Ice Shelf, Milne Fiord, Purple Valley, Eureka, Resolute	Milne Fiord ice-ocean interactions: Implications for the stability of ice shelves and glaciers in the Polar Regions
Dave Burgess	Natural Resources Canada	Agassiz Ice Cap, Meighen Ice Cap, Grise Fiord, Devon Ice Cap, Melville Ice Cap	National Glaciology Project - Queen Elizabeth Islands, NU & NT
Warwick Vincent	Université Laval	Resolute (Cornwallis Island), Thores Lake (Ellesmere Island) and Ward Hunt Island	Northern Ellesmere Island in the Global Environment - Sentinel North
Valerie Amarualik	Parks Canada	Young Inlet, Dundee Bight, Dome Camp	Qausuittuq National Park Operations 2022/2023
Adam Ferguson	Parks Canada	Fort Conger, Lake Hazen, Ruggles River, Tanquary Fiord, Resolute Bay	Quttinirpaaq National Park Operations 2022
Gordon Osinski	University of Western Ontario	Haughton River Valley	Reconstructing the post-impact history of the Haughton impact structure, Nunavut
Lynda Gullason	Inuit Heritage Trust Incorporated	Resolute, Morin Point, Devon Island, Pond Inlet	Saving Morin Point: Climate Change Risk Assessment and Archaeological Heritage Recovery
Dermot Antoniades	Université Laval	Stuckberry Valley, Lake Hazen	The functioning and evolution of the ecosystems of Stuckberry Valley, northern Ellesmere Island

<b>Primary Investigator</b>	<b>Institution</b>	<b>Study Location(s)</b>	<b>Project Title</b>
Joshua King	Environment and Climate Change Canada	Eureka, Nunavut	Development of a new Canadian Arctic Archipelago sea ice product from ICESat-2 (Ice Cloud and Land Elevation Satellite-2)
Michael Brohart	Environment and Climate Change Canada	Eureka, Nunavut	Instrument calibration at Eureka weather station as part of the Canadian Brewer Spectrophotometer Network operation
Alison Criscitiello	University of Alberta	Grise Fiord and Resolute, Nunavut	Airborne gravity survey over Devon Ice Cap
Rich DeVall	Environment and Climate Change Canada	Isachsen (Ellef Ringnes Island), Rea Point (Melville Island), Stefansson Island, Fort Ross (Somerset Island), Gateshead Island, Cape Liverpool (Bylot Island), Svarteveg (Axel Heiberg Island) and Grise Fiord (Ellesmere Island), Nunavut	Annual maintenance of ECCC's automatic weather station array – Arctic Archipelago
Grant Gilchrist	Environment and Climate Change Canada	Grise Fiord, Nunavut	Population surveys of endangered ivory gulls on Ellesmere Island and Devon Islands
Alexander Culley	Université Laval	Expedition Fiord (Axel Heiberg Island), Resolute (Cornwallis Island), Ward Hunt Island and Thores Lake (Ellesmere Island), Nunavut	Viral ecology of the high Canadian Arctic in water, ice and aerosols
Mark Lamothe	Natural Resources Canada	Eureka and Resolute, Nunavut	Eureka geomagnetic electronic replacement
Nicolas Lecomte	Université de Montreal	Bylot Island, Igloolik Island and Eureka, Nunavut	Arctic IMPACTS: tracking impacts of ecosystem changes in the Arctic
Christine Michel	Fisheries and Oceans Canada	Alert, Nunavut	Multidisciplinary Arctic Program (MAP) – Last Ice
Wayne Pollard	McGill University	Eureka and Expedition Fiord (Axel Heiberg Island), Nunavut	The vulnerability and resiliency of ice-rich permafrost in cold polar desert environments in response to changing climate
Vincent St. Louis	University of Alberta	Lake Hazen, Quttinirpaaq National Park, Nunavut	The impacts of rapidly receding glaciers on downstream freshwater resources and ecological services

### 15) What is being done to clean up past military, research and Government of Canada sites left on Ellesmere Island?

There were a number of sites in Quttinirpaaq National Park that required remediation. These sites have been remediated, with the exception of Fort Conger, which now has a long-term monitoring strategy in place.

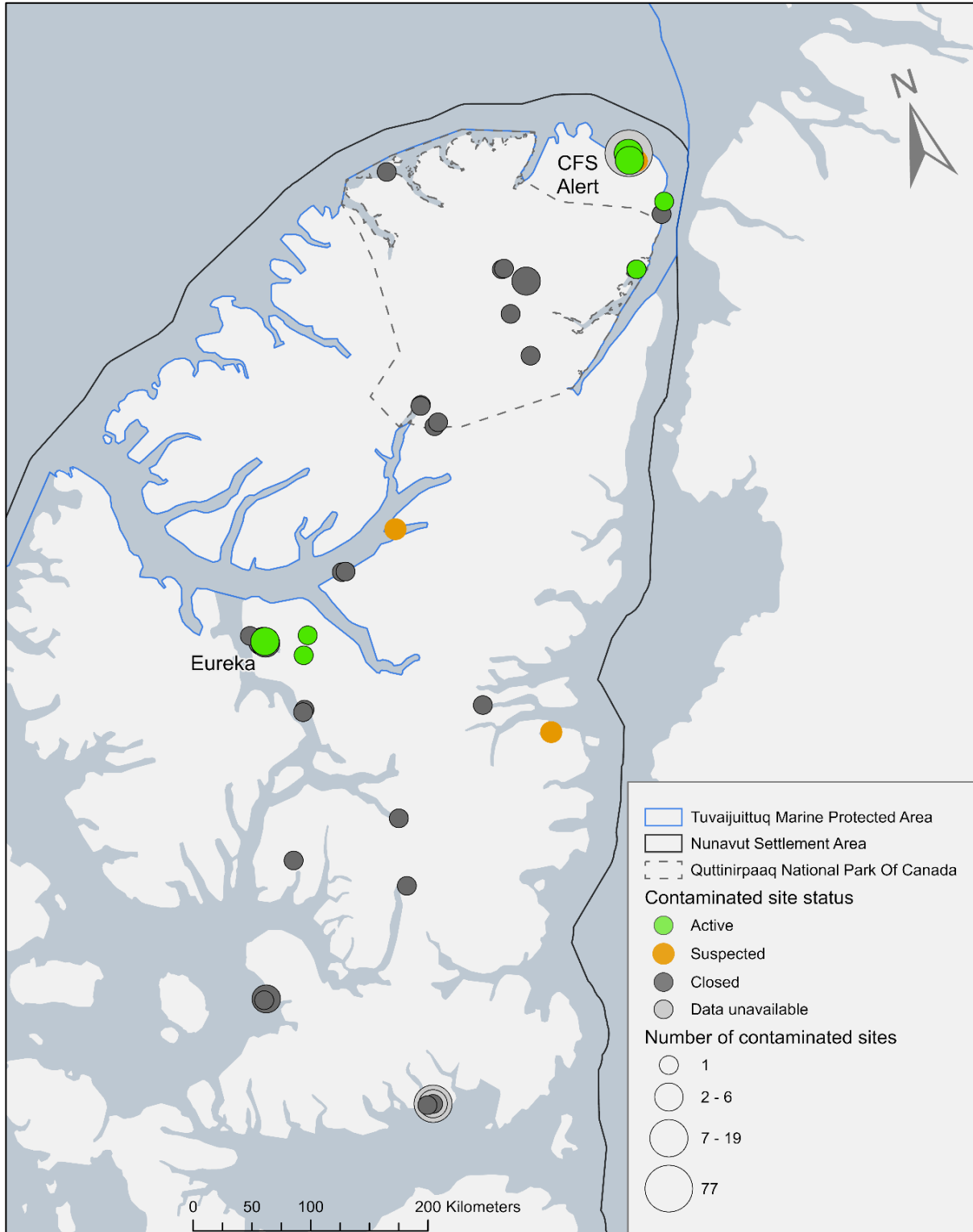
Fort Conger is a historical site situated on the shore of Discovery Harbour on Lady Franklin Bay, (N 81° 45.13', W 64° 49.56'). The site was used as a base by early Arctic expeditions and a scientific research camp. The site was also visited by early twentieth-century expeditions and later by government and military personnel, researchers, Inughuit hunters and tourists. A human health and ecological risk assessment conducted for the area identified risks from contamination at the site and a Risk Management and Remediation Plan has been developed. While some remediation has been completed, additional work is not an option at this time due to the remoteness of the site and the risks to cultural artifacts. Therefore, a long-term monitoring plan was developed so that, if the site becomes more accessible and remediation is possible, the proposed risk management and remediation strategy could be reviewed and updated. For more information on these sites, please contact Jane Chisholm at [jane.chisholm@pc.gc.ca](mailto:jane.chisholm@pc.gc.ca).

Additional information has been gathered on other sites on Ellesmere Island from the Government of the Northwest Territories (GNWT) Spills Database and the Federal Contaminated Sites Inventory (FCSI). The available data are summarized together in Figure 4, Table 2. The GNWT Spills Database is a collection of reported petroleum and other hazardous material spills in Nunavut and the Northwest Territories. The FCSI includes information on all known and suspected contaminated sites under the management of federal departments, agencies and consolidated Crown corporations.

The majority of contaminated sites on Ellesmere Island have been closed following historical reviews, testing, clean-ups or long-term monitoring activities. Available information from these two databases indicates that there are ten active sites (five in or near CFS Alert, four in or near Eureka, and one in Fort Conger) and three suspected sites (one at the Alexandra Fiord RCMP Detachment Site, one at D'Iberville Fjord, and one at Alert). Site status and actions data are unavailable from the GNWT Spills Database.

Site numbers that start with “spill-“ are from the GNWT Spills Database, and all other sites are from the FCSI. The site status refers to what is currently happening with the site. An “active” site is a confirmed contaminated site where remediation action is or may be required; a “closed” site is a site that requires no further action; and a “suspected” site requires further assessment work to confirm whether the site is considered a contaminated site. Actions tell us what has been done to the site, for example remediation efforts or testing.

The GNWT Spills database can be found at <https://www.gov.nt.ca/ecc/en/spills>, and the FCSI data can be found at <https://www.tbs-sct.gc.ca/fcsi-rscf/home-accueil-eng.aspx> and <https://www.tbs-sct.gc.ca/fcsi-rscf/numbers-numeros-eng.aspx?qid=1680451>. Information on the Federal Contaminated Sites Action Plan (FCSAP) can be found at <https://www.canada.ca/en/environment-climate-change/services/federal-contaminated-sites/action-plan.html>.



**Figure 4. Map showing closed, active and suspected contaminated sites on Ellesmere Island, NU. Source data: Government of Northwest Territories (GNWT) Spills Database and the Federal Contaminated Sites Inventory (FCSI), accessed May 2023**

**Table 2. List of active and suspected contaminated sites located on Ellesmere Island, including information on reporting organization (Crown Indigenous Relations and Northern Affairs Canada [CIRNAC]; Fisheries and Oceans Canada [DFO]; National Defence [DND]; Environment and Climate Change Canada [ECCC]; Parks Canada Agency [PCA]; Royal Canadian Mounted Police [RCMP]), contaminants (petroleum hydrocarbons [PHCs]; benzene, toluene, ethylbenzene, and xylene [BTEXs]; polycyclic aromatic hydrocarbons [PAHs), quantity, and actions.**

Site Number	Site Name / Location	Site Status	Occurrence Date	Latitude	Longitude	Reporting Organization	Contaminants	Quantity (cubic metres)	Actions
286	Lincoln Bay	Active	Data unavailable	82.0833	-62.0000	CIRNAC	PHCs	12	Initial testing completed. Detailed testing underway.
2747	Eureka High Arctic Weather Station	Active	Data unavailable	79.9908	-85.8586	ECCC	PHCs, BTEXs, PAHs, Metal, metalloid, and organometallic	15750	Remediation / risk management completed. Confirmatory sampling underway.
8328	Fort Conger Historic Site	Active	Data unavailable	81.7522	-64.8261	PCA	PAHs, Metal, metalloid, and organometallic	1265	Remediation / risk management completed. Confirmatory sampling underway.
24258	Romulus - Panarctic C-42 Well Site	Active	Data unavailable	79.8526	-84.3764	CIRNAC	BTEXs, PAHs, Metal, metalloid, and organometallic	3500	Remediation / risk management completed. Confirmatory sampling underway.
24259	Gemini - Panarctic E-10 Well Site	Active	Data unavailable	79.9902	-84.0690	CIRNAC	PHCs, Metal, metalloid, and organometallic	1500	Initial testing completed. Detailed testing underway.
27530	Neil Trivet Gaw Lab (Bapmon - Alert)	Active	Data unavailable	82.4535	-62.5135	ECCC	PHCs	0	Initial testing completed. Detailed testing underway.
20247006	Alert Main Station	Active	Data unavailable	82.4981	-62.3367	DND	PHCs, PAHs, Metal, metalloid, and organometallic	14500	Confirmatory sampling completed. Long term monitoring underway.

Site Number	Site Name / Location	Site Status	Occurrence Date	Latitude	Longitude	Reporting Organization	Contaminants	Quantity (cubic metres)	Actions
20247025	Alert Tx Site	Active	Data unavailable	82.4528	-62.5020	DND	PHCs	600	Detailed testing completed. Remedial action plan under development.
20247029	Alert Airfield	Active	Data unavailable	82.4998	-62.3611	DND	PHCs, BTEXs, Metal, metalloid, and organometallic	3	Confirmatory sampling completed. Long term monitoring underway.
70069014	Eureka - North Airstrip Apron	Active	Data unavailable	79.9977	-85.8406	DND	PHCs, BTEXs and PAHs	1755	Confirmatory sampling completed. Long term monitoring underway.
1091	Alexandra Fiord Rcmp Detachment Site	Suspected	Data unavailable	78.8798	-75.7546	RCMP	Data unavailable	0	Historical review planned.
16525	D'Iberville Fjord (Unassessed)	Suspected	Data unavailable	80.6069	-79.4792	DFO	Data unavailable	0	Historical review completed. Initial testing underway.
25114	Alert - Unauthorized Firing Range	Suspected	Data unavailable	82.4246	-62.1835	DND	Data unavailable	0	Historical review planned.

\*Closed sites were not included in this table as they have either been cleaned up and/or require no further action. Sites for which no data are available with respect to status were also not included.



## Appendix 2. Tuvaijuittuq Ministerial Order Regulations

\***NOTE:** The regulations can also be found at this website: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2019-282/page-1.html>

### SOR/2019-282

#### OCEANS ACT

#### Registration 2019-07-30

#### Order Designating the Tuvaijuittuq Marine Protected Area

Whereas this Order designates the Tuvaijuittuq Marine Protected Area in a manner that is not inconsistent with a land claims agreement that has been given effect and has been ratified or approved by an Act of Parliament;

Therefore, the Minister of Fisheries and Oceans, pursuant to 35.1(2)<sup>a</sup> of the Oceans Act<sup>b</sup>, makes the annexed Order Designating the Tuvaijuittuq Marine Protected Area.

- <sup>a</sup>S.C. 2019, c. 8, s. 5
- <sup>b</sup>S.C. 1996, c. 31

Ottawa, July 29, 2019

Jonathan Wilkinson  
Minister of Fisheries and Oceans

#### Definition of *Marine Protected Area*

1 In this Order, **Marine Protected Area** means the area of the sea that is designated by section 2.

#### Marine Protected Area

2 (1) The area of the sea in the Arctic Ocean consisting of the waters off northern Ellesmere Island, as described in plan number FB42596, certified on July 16, 2019 and depicted in plan number CLSR 108395, which plans are deposited in the Canada Lands Surveys Records, is designated as the Tuvaijuittuq Marine Protected Area.

#### Seabed, subsoil and water column

(2) The Marine Protected Area consists of 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.

#### Ongoing activities

3 For the purposes of subsection 35.1(2) of the Oceans Act, the following classes of activities are ongoing activities in the Marine Protected Area:

- (a) national defence activities carried out by the Department of National Defence;
- and



(b) marine scientific research activities.

### Prohibitions

**4 (1)** It is prohibited in the Marine Protected Area to carry out any activity — other than those set out in section 3 — that disturbs, damages, destroys or removes from the Marine Protected Area any unique geological or archeological features or any living marine organism or any part of its habitat, or is likely to do so.

### Exemption

**(2)** Despite subsection (1), the following activities may be carried out in the Marine Protected Area:

(a) marine navigation by a foreign national, a foreign ship or a foreign state, or an entity incorporated or formed by or under the laws of a country other than Canada; and

(b) the laying, maintenance and repair of cables and pipelines by a foreign state.

### Non-application – Nunavut Agreement

**5** This Order does not apply with respect to the wildlife harvesting rights of the Inuit in the Nunavut Settlement Area, as provided for in the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada, as approved, given effect and declared valid by the [Nunavut Land Claims Agreement Act](#).

### Coming into force

**6** This Order comes into force on the day on which it is registered.

# What We Heard: Community Consultations on a New Ministerial Order Marine Protected Area in Tuvaijuittuq

April 3-18, 2023



Resolute Bay – April 17, 2023



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## Acknowledgements

The Tuvaijuittuq Working Group would like to thank the communities of Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord for their time and hospitality during our community visits. We would especially like to thank the Hunters and Trappers Associations (HTAs), hamlet councils, and Mayoral offices for their participation and knowledge-sharing. Finally, we would like to acknowledge the Qikiqtani Inuit Association for leading the coordination of these meetings.

## Our Team

The Tuvaijuittuq Working Group has members from the Qikiqtani Inuit Association (QIA), Fisheries and Oceans Canada (DFO), Parks Canada Agency (PCA), and the Government of Nunavut (GN). Four participants included representatives from each organization involved in the Working Group.



*Tuvaijuittuq Working Group members attending consultations in Clyde River, Arctic Bay and Pond Inlet (left photo) and in Resolute Bay and Grise Fiord (right photo). Left Photo, left to right: Syzula Ikkidluak (QIA), Delaney Ewing (DFO), Madelaine Kellett (DFO), Bernie MacIsaac (GN), and Justin Hack (GN). Right Photo, left to right: Sarah Kennedy (DFO), Bethany Schroeder (DFO), Iselena Natsiapik (QIA), Daniel Haney (GN), and Bernie MacIsaac (GN).*



## Executive Summary

The Tuvaijuittuq Working Group, with members from QIA, DFO, PCA, and GN, conducted community consultations in Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord between April 3 - 18, 2023. Resolute Bay consultations were held on April 17, 2023.

The purpose of these consultations was to discuss a request by QIA to establish a new Ministerial Order Marine Protected Area (MPA) to explore an Inuit-led Protected and Conserved Area (IPCA) for Tuvaijuittuq. The Working Group also shared information on our proposed approach to regulations for this new short-term MPA, and sought community feedback and support on the proposal. The purpose of this report is to summarize the feedback provided by community members who attended the meetings in Resolute Bay, to provide transparency in the process, to provide a record of the discussions and concerns shared by the community, and to provide additional information to questions raised during consultations. To ensure we have accurately captured what we heard, this report has been circulated to the Resolute Bay HTA and Resolute Bay Hamlet Council for review. Individual reports were developed for each community and after HTAs and hamlet councils have had an opportunity to comment, these reports will be shared with all five communities.

The Resolute Bay HTA and Resolute Bay Hamlet Council did not express any concerns for a new Ministerial Order in Tuvaijuittuq, and gave the Tuvaijuittuq Working Group permission to seek a letter of support through their Chairperson and Board of Directors for the HTA for the proposal. The community of Resolute Bay would like to learn more about Tuvaijuittuq as information becomes more available and would like to continue being involved in decision-making for this area. The community feels that the connections between Tuvaijuittuq and other established and potential protected areas such as Tallurutiup Imanga National Marine Conservation Area, the Sarvarjuaq study area, and Quttinirpaaq National Park are important. Also important is finding ways to approach co-management and related community involvement in a way that works better for communities. There is support for QIA's regional governance model and an interest in learning more about it. While some community members in Resolute Bay are supportive of protecting Tuvaijuittuq in the long-term, others feel that there are too many protected areas in the Qikiqtani Region. Concerns were expressed about continued contamination in High Arctic areas from pollution and spills; these impacts are still being observed 10 to 20 years later. Other concerns shared were the possibility that protecting the area may attract more tourism, that other countries may become interested in the resources in Tuvaijuittuq, and that benefits associated with Tallurutiup Imanga are not flowing as desired into Resolute Bay. The community would like to see more seasonal jobs for youth.

### What We Heard From Communities Overall

A common theme heard from communities was a desire to learn more about the MPA, including the animals and habitats that occur there, potential for future economic opportunities, and the types of research done in the area. There is interest from all five communities to protect Tuvaijuittuq in both the short-term and long-term, but also in balancing protection with economic opportunities for future generations. Interest in protecting the area is based on Tuvaijuittuq's ecological importance, its significance to Inuit, and interest in the area's resources by other countries.



## Introduction and Approach

The Tuvaijuittuq Working Group conducted community consultations in Arctic Bay, Pond Inlet, Clyde River, Resolute Bay, and Grise Fiord between April 3 and April 18, 2023. Resolute Bay consultations were held on April 17, 2023. The purpose of these consultations was to discuss a proposed new Ministerial Order MPA in Tuvaijuittuq, to share information on the proposed approach to regulations for this new short-term protection measure, and to seek community feedback and support on this proposal. In each community, two gatherings were held; an initial meeting with the HTA, hamlet council, Mayor, Nauttiqsuqtiit and other relevant community groups, and an evening community open house which was open to the public.

At both meetings, information was shared on the significance of Tuvaijuittuq, its boundaries, reasons why the area is being considered for protection, the steps involved in establishing a new Ministerial Order MPA and proposed regulations for this short-term protection measure. The presentation materials and relevant assessments, including a summary of Natural Resources Canada's resource and economic assessment for the area<sup>1</sup> and an ecological and biological overview, were made available to community members in both English and Inuktitut. Two-page summaries of what we heard during November consultations were also provided. Simultaneous interpretation was provided at each meeting.

The Tuvaijuittuq Working Group committed to circulating a "What We Heard" report to each community for their review and approval summarizing their feedback during these consultations. If community members or organizations feel that their feedback was misinterpreted or misrepresented, the Working Group will revise the report as requested and re-circulate to the community. Please contact Chandra Chambers ([chandra.chambers@dfo-mpo.gc.ca](mailto:chandra.chambers@dfo-mpo.gc.ca)) if you have any questions or concerns. After communities have had a chance to review and approve their What We Heard reports, the Working Group will provide copies of all reports to each community.

DFO committed to following up with communities on outstanding questions that were asked during community meetings. Answers to these questions were circulated to each community HTO, Hamlet office and Mayor in an email on June 28, 2023, and this information is included in Appendix 1 of this report. A copy of the MPA regulations that are being proposed for the new Ministerial Order MPA are also included in Appendix 2 of this report.

The HTAs and/or hamlet councils in some communities could not form quorum during the April meetings. The Working Group followed up with these boards virtually and received permission from each to seek a formal letter of support for the new regulation.

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<sup>1</sup> The full Natural Resources Canada resource assessment was also made available and can be accessed at: [https://publications.gc.ca/collections/collection\\_2022/rncan-nrcan/m183-2/M183-2-8897-eng.pdf](https://publications.gc.ca/collections/collection_2022/rncan-nrcan/m183-2/M183-2-8897-eng.pdf)



## Hunters and Trappers Association (HTA) and Hamlet Council Meeting

The Working Group met with the Resolute Bay HTA and Resolute Bay Hamlet Council on April 3, 2023 at 2:00 pm at the ATCO hotel conference room. Other community groups were invited to attend. Seven people were present for this meeting. The representatives present did not express any concerns with the proposal to repeal the current Ministerial Order and replace with a new Ministerial Order in Tuvaijuittuq. As a result, the HTA members gave permission for the Working Group to seek a letter of support for the proposal from the Chairperson and Board of Directors for the HTA.

### ***What we heard:***

#### *Importance to Inuit*

- The community would like to learn more about harvesting rights in Tuvaijuittuq.

#### Response:

- The Ministerial Order MPA is consistent with the Nunavut Agreement and does not affect the wildlife harvesting rights of Inuit within the Nunavut Settlement Area. In the offshore area of Tuvaijuittuq that falls outside the Nunavut Settlement Area, the regulations of this short-term protection measure would apply to everyone.
- Harvesting rights in Tuvaijuittuq are also addressed in Appendix 1.

#### *Ecological Significance*

- Resolute Bay would like more information on the species found in Tuvaijuittuq (such as Arctic char, polar bears and narwhal), and why the area is important.

#### Response:

- There are a few reasons why Tuvaijuittuq is being considered for protection. One important reason is that Tuvaijuittuq is an area of multi-year ice that is expected to maintain summer sea ice the longest as ice declines in other areas of the Arctic due to climate change. As a result, this region is likely to become an important refuge for animals that depend on sea ice. The area also maintains a number of unique communities of organisms above, inside and below the ice.
- Research in Tuvaijuittuq is led by DFO through an ongoing research program called the Multidisciplinary Arctic Program (MAP) – Last Ice. This program undertakes seasonal marine mammal, sea ice, lower trophic level, and other types of research.
- Information related to animals, habitats and climate trends within Tuvaijuittuq is available at the following websites: [https://www.dfo-mpo.gc.ca/csas-sccs/Publications/ScR-RS/2020/2020\\_056-eng.html](https://www.dfo-mpo.gc.ca/csas-sccs/Publications/ScR-RS/2020/2020_056-eng.html) (DFO 2020; Inuktitut version available); [https://publications.gc.ca/collections/collection\\_2021/mpo-dfo/Fs97-6-3408-eng.pdf](https://publications.gc.ca/collections/collection_2021/mpo-dfo/Fs97-6-3408-eng.pdf) (Charette et al. 2020); and <http://wwwdev.ncr.dfo->



[mpo.ca/oceans/mpa-zpm/tuvaijuittuq/index-eng.html](https://mpo.ca/oceans/mpa-zpm/tuvaijuittuq/index-eng.html). Additional information related to research in Tuvaijuittuq is provided in Appendix 1.

- The information above is meant to build on presentations made to the community on November 15, 2022 in which information on the ecological significance and assessments of petroleum and economic potential of the area was shared.

*Economic Opportunities and Activities*

- The community is interested in learning more about how the Tuvaijuittuq boundary was determined.

Response:

- Canada and Denmark signed a boundary agreement on June 14, 2022 to resolve a disagreement on the maritime boundary along the eastern edge of Tuvaijuittuq in the Lincoln Sea. Once an agreement is approved by Canada, this portion of the MPA boundary will be adjusted to follow the new international boundary line.
- Additional information on how the Tuvaijuittuq boundary was decided on is provided in Appendix 1.
- There is support in the community for protecting Tuvaijuittuq, along with other areas in the region such as Tallurutiup Imanga National Marine Conservation Area. Connectivity between protected areas in the same region is important, and this connection should extend to how we approach co-management. For example, finding ways to make community involvement more efficient with their many partners and conservation projects.

*QIA Vision for an Indigenous Protected and Conserved Area (IPCA)*

- There is support for QIA’s vision for Tuvaijuittuq, including finding efficiencies with their regional governance model to change the way we co-manage conservation areas in the Qikiqtani Region.

Response:

- QIA will be undertaking consultations on their regional governance model in the coming months.

*Concerns*

- The area is being contaminated from pollution from both the water and air. The impacts from spills that occurred 10-20 years ago are still being seen, and it takes a long time for ecosystems to recover from these impacts.

## Community Open House

The Working Group hosted a community open house meeting on April 17, 2023 at 7:00 pm. The meeting took place in the Community Gym, where approximately seven adults were in attendance. Children and youth were also welcomed.

### **What we heard:**

#### *Importance to Inuit*

- Community members would like to continue their involvement in decision-making processes for Tuvaijuittuq, including Inuit governance and stewardship. There is interest in learning more about QIA's approach to regional governance.
- It was recommended that communities be involved from the beginning when committees are created because there have been issues with advisory groups not listening to community input.



*Community members meet with the Tuvaijuittuq Working Group members, April 17, 2023.*

#### *Ecological Significance*

- Community members expressed an interest in learning more about the significance of Tuvaijuittuq as more information becomes available.

#### Response:

- In addition to the answer provided above under “Hunters and Trappers Association (HTA) and Hamlet Council Meeting”, the Working Group will update the communities as more information becomes available for Tuvaijuittuq.

#### *Economic Opportunities and Activities*

- The community of Resolute Bay would like to see more seasonal jobs for youth. There is currently a recycling program for plastic and metal that creates seasonal jobs for youth, but there should be more, perhaps related to protection work.
- Community members would like to learn more about how the proposed regulations apply within different parts of the marine environment (e.g., between 12 and 200 miles).

#### Response:

- In addition to the information already provided during the meeting, and above under “Hunters and Trappers Association (HTA) and Hamlet Council Meeting”, more information on the proposed regulations and how they are applied are provided in appendices 1 and 2.

#### *Concerns*

- There is concern that once the area becomes protected it will attract more tourists. A community member expressed that when Tallurutiup Imanga National Marine Conservation Area was created, the HTA had identified some ecologically sensitive areas, but there has been an increase in sailboats in those areas.

Response:

- It should be noted that the Tuvaijuittuq MPA is an area made up largely of multi-year sea-ice and is difficult to access without an icebreaker. The MPA does not include the land (it starts at the low water mark). Given that the area cannot be accessed by regular vessels, tourist access to the area is extremely limited.
- There is concern in the community that other countries have an interest in accessing oil and gas in the future when the ice melts.
- Some community members feel that there are too many conservation areas in the Qikiqtani Region, and there is concern that protection may interfere with some economic opportunities.
- There is concern that the benefits associated with the current Inuit Impact and Benefit Agreements are not flowing as desired into Resolute Bay.
- The Resolute Bay community would like an update on the status of their harbour.

Response:

- An Agreement for Resolute Bay and Grise Fiord Community Harbour Development was signed by Transport Canada and the GN on January 16, 2023, and will provide up to \$76,281,900 to the GN for the design and construction of the two community harbours in Grise Fiord and Resolute Bay. The current funding for community harbours will cover the cost of constructing at least one breakwater, a parking area, dredging, a boat launch, and floating docks.
- A more detailed update is provided in Appendix 1.

## Next Steps

The next steps to pursue establishment of a new Ministerial Order MPA will be to seek stakeholder input on the proposal, seek formal community support, complete assessments and approvals needed under the Nunavut Agreement such as conformity determination by the Nunavut Planning Commission and Nunavut Wildlife Management Board approval, and complete DFO's regulatory process. Formal letters of support will be sought from community hamlets and HTAs. Community members are encouraged to communicate their feedback on the proposal to these organizations to inform their decision. DFO will notify communities and stakeholders prior to the proposal being published online for a 30-day public comment period – additional input can be provided at that time as well.

It is important to us that we have summarized your input on this proposal correctly. If you feel that we have missed any input provided during our meetings or captured information incorrectly, please reach out to the email address provided above for correction.

The Tuvaijuittuq Working Group would like to thank all of the community members who attended these meetings - your feedback is vital and appreciated.

# Thank you.

## Appendix 1. Follow-up questions and answers from the April 2023 consultations on a new Ministerial Order MPA in Tuvaijuittuq.

\*Please note, an additional question and answer have been added (Question #8) and Question #15 has been expanded upon since it was sent to the HTA and hamlet.

### 1) What is the purpose of protecting Tuvaijuittuq?

Researchers agree that summer sea ice will remain the longest in Tuvaijuittuq (Figure 1) as it continues to decline in other areas of the Arctic due to climate change. Because of this, the area is expected to become an important refuge for ice-dependent species. The area has a very diverse ecosystem, and contains a number of unique communities of organisms, including communities on the ice, in the ice, and below the ice. Habitat in Tuvaijuittuq is important to marine mammals and sea birds. For all of these reasons, DFO and its partners believe that the area, its habitat, and the wildlife within it, would benefit from protection. The proposed Ministerial Order MPA is a short-term protection tool which will protect the area for up to five years. The purpose of this short-term protection tool is to prohibit new activities in the area that may cause negative impacts while additional information is collected to support a better understanding of the conservation and protection needs of the area before longer-term protection measures are considered.

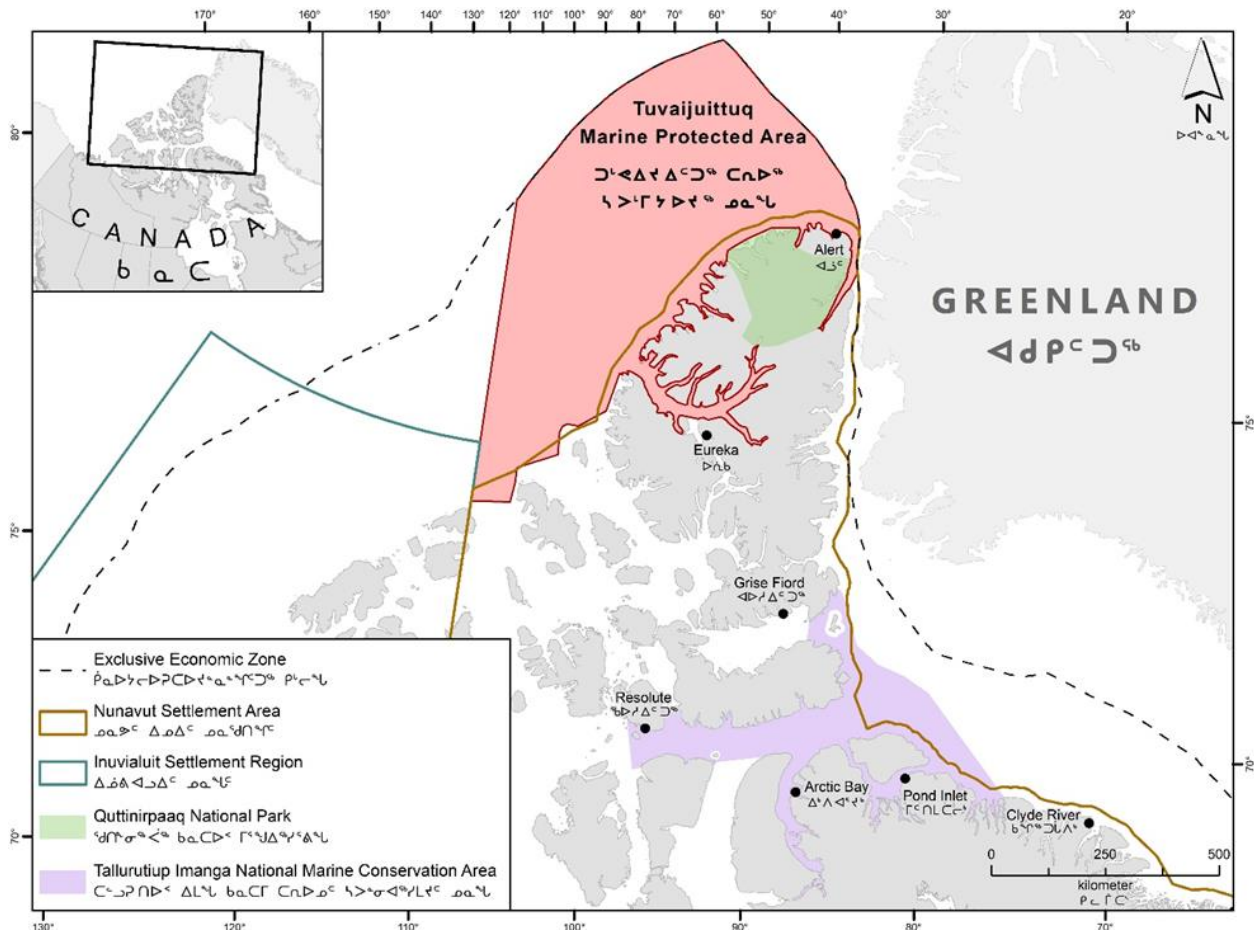


Figure 1. Map of Tuvaijuittuq MPA by Ministerial Order

**2) How was the Tuvaijuittuq boundary determined? Why are the rest of the Queen Elizabeth Islands not included in the boundary?**

The Tuvaijuittuq MPA includes the marine waters off northern Ellesmere Island, starting from the low water mark and extending to the outer 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. The initial boundaries of Tuvaijuittuq were based on the 2011 Canadian Science Advisory Report ([2011/55](#)), which identified key multi-year ice habitat. The boundary was later extended to the nearshore areas off Ellesmere Island within the Nunavut Settlement Area as more of the area was understood. The marine area around the Queen Elizabeth Islands south of Ellesmere Island supports different communities of organisms than those within Tuvaijuittuq. This area was not considered for inclusion in Tuvaijuittuq as it has different conservation needs. Partners agreed to settle on the boundary as it is now and consider the remaining islands at a later time as possible new protected areas. Some of the Queen Elizabeth Islands overlap with the Inuvialuit Settlement Region, which is not included in the Tuvaijuittuq boundary.

**3) What does “freezing the footprint of ongoing activities” mean?**

Freezing the footprint of ongoing activities means allowing activities that are already lawfully occurring in the area to continue and preventing any new activities that may damage, disturb, destroy or remove important habitats, features and organisms. Ongoing activities in Tuvaijuittuq were identified using a number of different methods, including community consultation (in Arctic Bay, Resolute Bay and Grise Fiord in 2019 and in Arctic Bay, Resolute Bay, Grise Fiord, Pond Inlet and Clyde River in 2022), consultation with QIA, and consultation with DFO Science and other federal departments and agencies including the Department of National Defence, Parks Canada Agency, and Canadian Coast Guard. DFO gathered further information about ongoing activities by seeking input on the proposed regulations from industry and other stakeholders (e.g., non-governmental organizations), and from studies such as an assessment of vessel traffic using Automatic Identification System (AIS) signals in the area between 2012-2019. This study is currently being updated so DFO has the most up-to-date information.

Based on available information, DFO determined that ongoing activities in Tuvaijuittuq include:

- (a) national defence activities carried out by the Department of National Defence; and
- (b) marine scientific research activities.

The regulations also include exemptions and exclusions helping to respect commitments Canada has made both domestically and internationally.

The full regulations are provided as a separate attachment in both English and Inuktitut.

**4) Does freezing the footprint of activities affect wildlife harvesting rights of Inuit in this area?**

The Ministerial Order MPA does not apply with respect to the wildlife harvesting rights of Nunavut Inuit in the Nunavut Settlement Area, as provided for in the Nunavut Agreement. This means that the Ministerial Order regulations do not affect the wildlife harvesting rights of Inuit within the Nunavut Settlement Area (NSA).

There appear to be no provisions within the Nunavut Agreement that extend Inuit harvesting rights beyond the NSA portion of Tuvaijuittuq. As a result, the regulations would apply to everyone in the area of Tuvaijuittuq that falls outside of the NSA. However, we would be interested in further discussing the matter if there are provisions in the Nunavut Agreement you believe have been overlooked.

**5) Why are there exemptions for foreign states in the Ministerial Order MPA regulations?**

Under the United Nations Convention on the Law of the Sea (UNCLOS), which is an international agreement, Canada must allow certain activities such as navigation (vessels transiting through) and laying of cables and pipelines, from foreign states in certain maritime zones. Because of this, those foreign activities are exempted from the application of the Ministerial Order MPA in Tuvaijuittuq. The exclusive economic zone, an area of the sea beyond the territorial sea extending out to 200 nautical miles from the coastline (Figure 2), is not Canadian territory, and in that area Canada only has jurisdiction over economic resources such as fishing, oil and gas, and mineral exploitation.

Under Canadian law, Canada has the authority to prohibit domestic vessel navigation and other activities in this area. Since the purpose of the short-term Ministerial Order MPA is to conserve and protect the vulnerable habitats and organisms in Tuvaijuittuq while we collect additional information to inform decisions about long-term protection, we aim to limit any activity, including domestic activities, that may negatively impact the area. Although foreign navigation is allowed in the MPA, foreign countries will typically comply with voluntary measures, if guidance is provided to avoid certain areas within the MPA.

**6) Can the old sea ice (multi-year ice) be broken by ice-breakers?**

While some ice-breakers can break through thick multi-year ice, there are different classes of ice-breakers built for different purposes and ice thicknesses. Not all ice-breakers can break through thick multi-year ice. To our knowledge, the few vessels that have travelled to Tuvaijuittuq for activities such as national defence, safety, marine research, and foreign vessel travel, have stayed within the nearshore areas during the open water season and did not actively conduct ice-breaking activities.

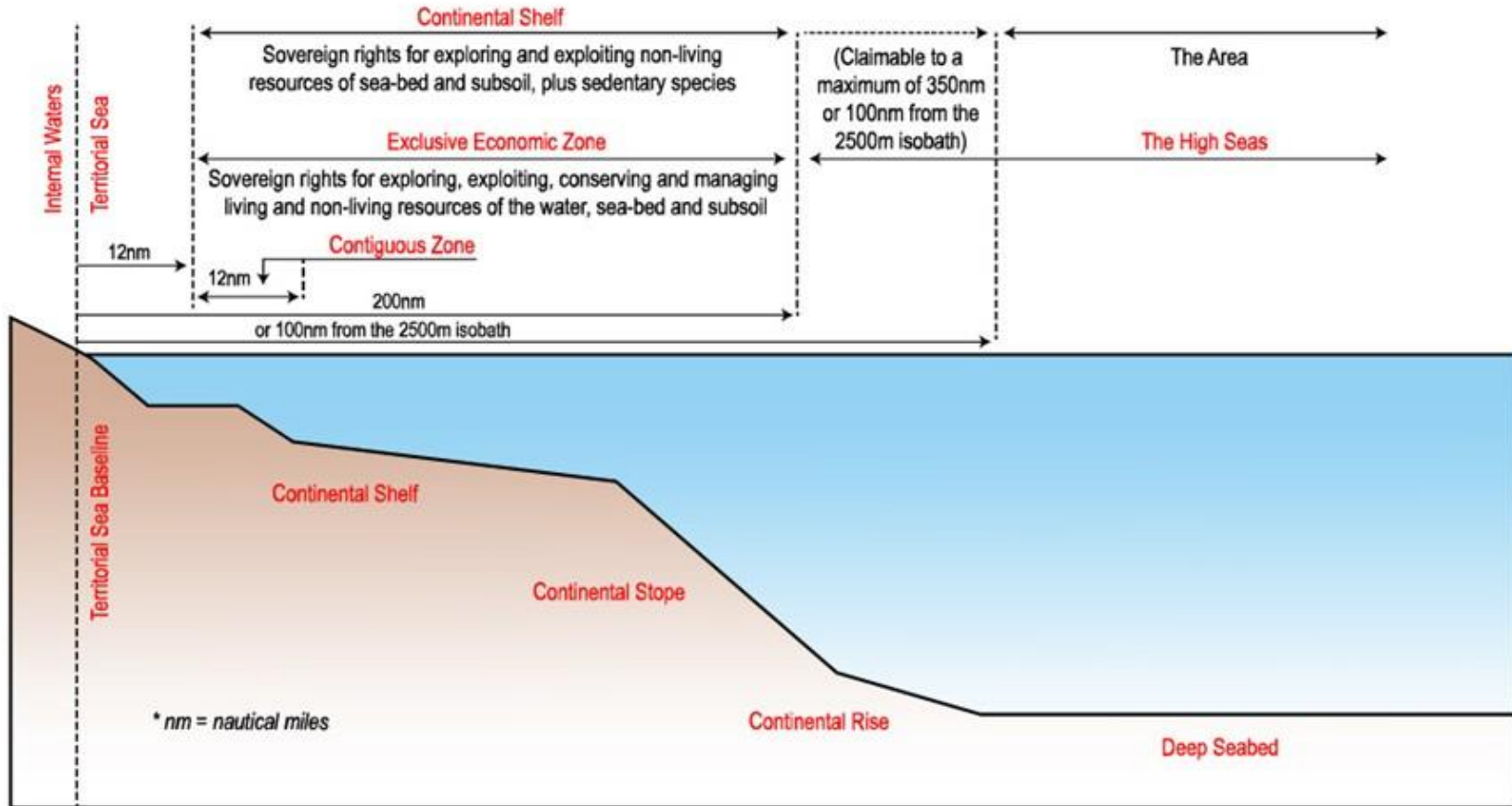


Figure 2. Canada's Maritime Zones

## 7) How can Inuit visit Tuvaijuittuq?

Tuvaijuittuq is an area of the sea that is a mainly ice-covered all year round and is very remote. There is one military research station in Alert called Canadian Forces Station (CFS) Alert located outside of Tuvaijuittuq on northern Ellesmere Island and a small research base in Eureka on Fosheim Peninsula. There are no communities nearby – the closest community is Grise Fiord, which is approximately 327 km as the crow flies from the MPA's southern-most boundary. Activity in Tuvaijuittuq is limited to national defence activities and marine scientific research, mainly due to the extensive ice cover in this marine area. In 2019, the communities of Arctic Bay, Resolute Bay and Grise Fiord indicated that the area is difficult to reach by skidoo; however, some community members in Grise Fiord had travelled, or knew of people that had travelled, as far as Eureka (which is south of the proposed area) by dogsled in the past.

There are however, opportunities for involvement in research activities in Tuvaijuittuq, which are based out of CFS Alert. For more information on participating in research activities in Tuvaijuittuq, please contact Chandra Chambers ([Chandra.Chambers@dfm-mpo.gc.ca](mailto:Chandra.Chambers@dfm-mpo.gc.ca)).

## 8) Fisheries quotas to Inuit

It is important to note that Tuvaijuittuq is largely ice-covered all year round and is not accessible to fishing vessels. As a result, no large-scale commercial fishing activities are possible in the area under current conditions. It is unknown if ice conditions would support small-scale on ice fisheries, and no data are available to understand whether a fishery (small or large-scale) would be possible.

When we visited communities in April 2023, we received a question relating to fisheries quotas in general and how these are allocated to Inuit.

Fisheries and Oceans Canada continues to respect and implement the obligations under Nunavut Agreement including provisions related to offshore commercial fisheries access that give special consideration to Nunavut. Through implementation of the Nunavut Agreement over the years, the share of adjacent resources to Qikiqtani Inuit has significantly increased, such that Qikiqtani Inuit fishers now have 80% of Turbot and 42% of shrimp resources including 100% of all fisheries resources within the Nunavut Settlement Area.

## 9) What kind of Inuit Qaujimaqatugangit (IQ) is used? What is studied?

- Oral History passed down over centuries of Inuit Knowledge.
- Inuit knowledge living and adapting, part of present day life. It is in how Inuit live and see the world today.
- QIA would like to gather IQ for Tuvaijuittuq.

## 10) Can more information be provided about the infrastructure that QIA refers to? Would QIA make buildings or houses for Tuvaijuittuq purposes?

- Multi-use facilities to address Inuit Stewardship and community needs (office space, equipment storage, garage, country food processing, community outreach, elder gatherings, etc.).

- Additional infrastructure that supports Inuit stewardship activities and the Nauttigsuqtiit program, such as housing and supplementing the facilities in the Tallurutiup Imanga communities as appropriate.
- Infrastructure requirements for Inuit stewardship that arise due to changing socio-economic or environmental conditions.

### **11) When will the regional governance model will be in effect?**

At this time, this is still at the negotiation table. However, QIA is seeking this Regional Governance model for future IIBAs as well as existing IIBAs that will be renegotiated over time.

### **12) Status update on the harbour planned for Resolute Bay.**

Transport Canada (TC), the Government of Nunavut (GN), and the Qikiqtani Inuit Association (QIA) have been working together towards the development of community harbours in Grise Fiord and Resolute Bay and have developed an Infrastructure Investment Plan (IIP) that was adopted in October 2022.

The IIP was completed based on community engagements and other work to date and informed the Agreement for Resolute Bay and Grise Fiord Community Harbour Development.

The Agreement for Resolute Bay and Grise Fiord Community Harbour Development was signed by TC and the GN on January 16, 2023 and will provide up to \$76,281,900 to the GN for the design and construction of the two community harbours in Grise Fiord and Resolute Bay. The current funding for community harbours will cover the cost of constructing at least one breakwater, a parking area, dredging, a boat launch, and floating docks.

TC has provided a copy of the agreement to the QIA representative, to be kept in confidence.

We understand from the GN that:

- A Project Manager with GN's Department of Community and Government Services has been assigned to the projects.
- The exact procurement approach for construction has not been finalized, but it is likely to follow the GN's standard procurement practices.
- The first step is expected to be a Request for Proposal for engineering and design services.

For more information, please contact Matthew Bowler ([MBowler@GOV.NU.CA](mailto:MBowler@GOV.NU.CA)) or Miguel Parent ([miguel.parent@tc.gc.ca](mailto:miguel.parent@tc.gc.ca)).

### **13) What type of research is occurring in Tuvaijuittuq?**

Research in Tuvaijuittuq is led by DFO through the Multidisciplinary Arctic Program (MAP) - Last Ice and this team includes researchers from universities and organizations all over the world. The program brings together a number of different specialists to study different features in Tuvaijuittuq. For example, experts in sea ice, water, fish, marine mammals, and those who study organisms such as algae and krill that form the basis of the High Arctic



food web. Some of this work is done during a late winter/early spring seasonal field camp, where researchers work together as a team to collect samples and do their research. Others, like marine mammal surveys, are conducted around the same time but not as part of the field camp, and in the fall. The program began in 2018 and experienced some delays due to COVID-19 but is continuing. A new ship-based program called ArcticCore will begin this year and will include Archer Fiord and adjacent areas around Tuvaijuittuq (as sea-ice permits). This new program will study physical (currents/movement), chemical (nutrients, ocean acidification), and biological (primary production, zooplankton, benthos) oceanography and will also include marine mammal surveys and sea ice studies. If long-term protection is put into place in the future, then more formal management and monitoring plans would be developed for Tuvaijuittuq, in collaboration with partners and communities.

Research partners in MAP-Last Ice:

DFO  
Department of National Defence  
Defence Research and Development Canada  
Université Laval  
University of Essex  
Université du Québec à Rimouski  
Environment and Climate Change Canada  
Mediterranean Institute of Oceanography  
Polar Continental Shelf Program  
Alfred Wegener Institute  
University of Bristol  
Resolute HTA Board of Directors

Type of research conducted as part of MAP-Last Ice:

- Sea ice distribution, physical properties (thickness, composition), productivity (algal communities, biomass)
- Evolution of the ice and under-ice habitat over time
- Continuous atmospheric, oceanographic and sea ice observations
- Zooplankton, fish and benthic organisms
- Marine mammal and habitat surveys
- Physical (currents/movement), chemical (nutrients, ocean acidification), and biological (primary production) oceanography

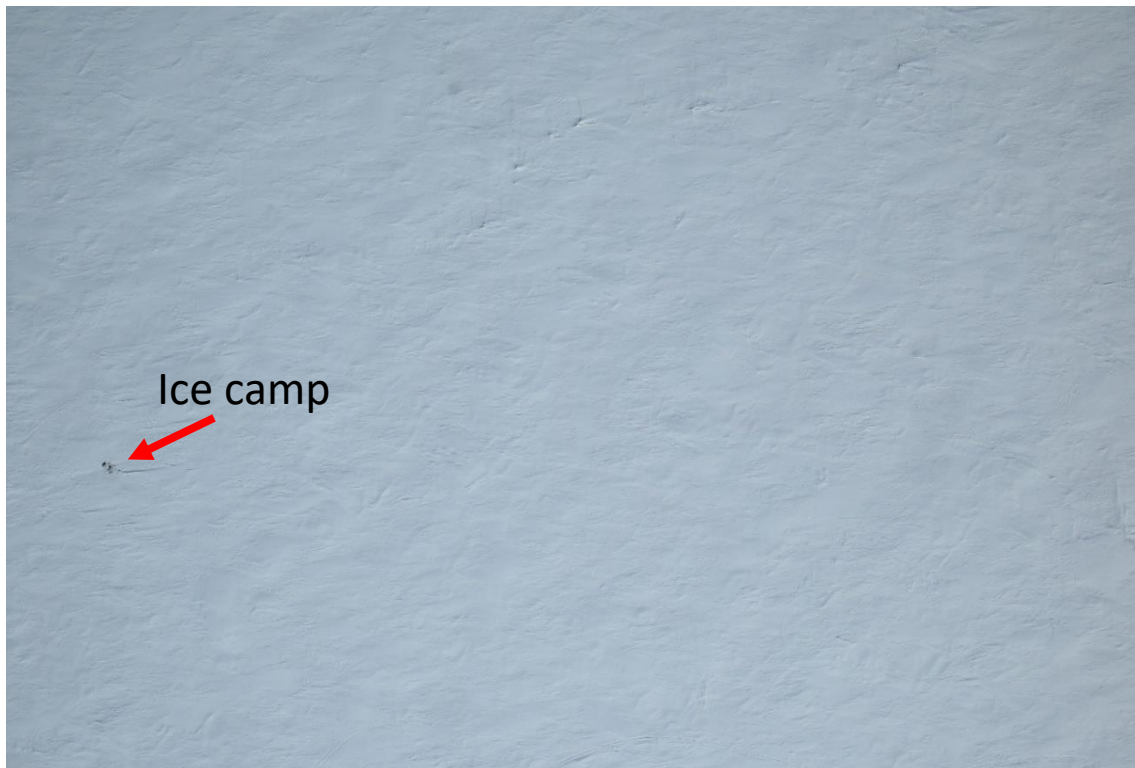
Collection of ice cores during the MAP-Last Ice and ArcticCORE programs:

We are very conscious of potential disturbances to the environment and during our sampling we take action to minimize these disturbances. When we collect ice cores, we sample only a part of the core and we replace the rest of the core to its original hole. Once replaced in its original hole, the core refreezes quickly, typically within a few hours.

The ice cores that we collect are small, at 9 cm diameter. This means that the surface area of one core is 5 times smaller than that of a hole cut out with an 8-inch auger, and about 10-12 times smaller than that of a seal breathing hole. While the seals keep their holes open,

we “close” our holes after sampling (with the original ice core from which we cut off one or a few sections). If we add the area of all the cores that we collect during one sampling season, it would typically add up to much less than 1 square meter, at most 2 m<sup>2</sup>.

In the photo below, we can see our ice camp on the sea ice north of Ellesmere Island. In another photo taken a few days after we took out camp, it was not possible to identify the site where the ice camp had been set up.



**Figure 3. Aerial view showing the ice camp on the sea ice north of Ellesmere Island. A few days after taking out the camp, the site of the ice camp was not visible anymore.**

#### **14) Interest in learning more about Canada’s Polar Continental Shelf Program**

##### **Polar Continental Shelf Program:**

Natural Resources Canada’s Polar Continental Shelf Program (PCSP) supports Arctic science by providing logistics planning, coordination and advice to Canadian government, non-government, university and international researchers. The PCSP supports projects in the Arctic from Churchill, Manitoba, to the northern tip of Ellesmere Island, Nunavut, and from the Yukon/Alaska border to as far as Greenland, on occasion.

Support can include air transportation, as well as fuel, field equipment for loan, field communications and safety, logistics advice for field studies, the use of the PCSP facility in Resolute, Nunavut, and shipping and receiving coordination and advice. The PCSP facility in Resolute is typically open from late January to September each year and is comprised of

an accommodations area that can house up to 237 guests, lounge areas, a fitness room, office spaces, kitchen and dining facilities, an operations centre and a laboratory.

The PCSP provides employment, student training and business opportunities for northern residents. The PCSP also helps with science outreach through publishing an annual science report and connecting researchers with northern community organizations.

The table below includes PCSP projects that occurred close to Grise Fiord and/or Tuvaijuittuq in recent years. Please feel free to reach out to the project leads if you have an interest in specific projects.

As a contact at the Polar Continental Shelf Program, please feel free to reach out to **Michael Meunier**, Manager of the Program Coordination and Outreach unit ([michael.meunier@nrcan-rncan.gc.ca](mailto:michael.meunier@nrcan-rncan.gc.ca)) or the PCSP Ottawa mailbox ([pcspottawa-ppcpottawa@nrcan-rncan.gc.ca](mailto:pcspottawa-ppcpottawa@nrcan-rncan.gc.ca)). Michael and his group would be pleased to connect with you and discuss your priorities.

Here are some additional resources that may be of interest:

- A list of all 2019 and 2020 projects supported by PCSP can be found at the following link: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/polar-continental-shelf-program/current-projects/10009>.
- More information on the PCSP can be found at: [https://natural-resources.canada.ca/sites/nrcan/files/earthsciences/files/pdf/polar/PCSP-Brochure\\_eng.pdf](https://natural-resources.canada.ca/sites/nrcan/files/earthsciences/files/pdf/polar/PCSP-Brochure_eng.pdf)
- Information on project support applications can be found here: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/research-support-arctic-logistics-and-field-equipment-for-across-canada/10003>.
- Annual Science Reports can be found at the following link: <https://natural-resources.canada.ca/science-and-data/science-and-research/arctic-science/polar-continental-shelf-program/pcsp-publications/10011>.

**Table 1. List of PCSP-supported projects in the Arctic Archipelago, many near Grise Fiord and/or Tuvaijuittuq MPA in recent years**

Primary Investigator	Institution	Study Location(s)	Project Title
Hsin Chiang	McGill University	McGill Arctic Research Station, Expedition Fjord	A new window on the universe: radio astronomy from northern Canada
Cory Matthews	Fisheries and Oceans Canada	Grise Fiord	Aerial survey of High Arctic walrus and narwhal stocks
Michael Maurice	Environment and Climate Change Canada	Svartevaeg, Eureka, Isachsen, Grise Fiord, Mould Bay, Rea Point, Cape Providence, Resolute Bay, Steffanson Island, Cape Liverpool, Fort Ross, Gateshead	Annual Maintenance of Environment and Climate Change Canada's Automatic Weather Station array - Arctic Archipeligo

Primary Investigator	Institution	Study Location(s)	Project Title
Christine Michel	Natural Resources Canada	Eureka	Arctic CORE (Conservation, Observation, Research, and Engagement)
Lyle Whyte	McGill University	Assistance Bay	Assessment of Bioremediation Potential of Marine Fuels on NWP Arctic Beaches
Joseph Monteith	Crown-Indigenous Relations and Northern Affairs Canada	Alert, Eureka	Baffin/High Arctic Inspections 2022
Alexander Culley	Université Laval	Ward Hunt Island	Characterizing viral impact in the Last Ice Area
Christopher Omelon	Queen's University	Expedition Fiord, Resolute Bay	Climate Change Research at the McGill Arctic Research Station
David Didier	Université du Québec à Rimouski	Sydkap Glacier and surrounding area, Starnes Fiord and surrounding area, Jakeman Glacier and surrounding area, Grise Fiord	Coastal dynamics and hazards in Grise Fiord and Jones Sound
Mark Skidmore	Montana State University	Truelove Lowlands, Croker Bay, Resolute, Gascoyne inlet	Exploration of Saline Cryospheric Habitats with Europa Relevance (ESCHER): An approach using airborne and submarine semiautonomous systems
Erin MacNeil	Natural Resources Canada	Gascoyne Inlet	Defence of North America
Lyle Whyte	McGill University	Devon Island lakes site	Developing new technologies to access and investigate the hypersaline, subzero Devon Island Subglacial Lake System, a unique Mars and icy moon analogue
Denis Lacelle	University of Ottawa	Eureka	Effect of degrading ice wedge polygon landscapes on local topography, hydrology, and water quality.
Susan Kutz	University of Calgary	East wind lake, Eureka, Resolute Bay	Emerging Infectious Disease in High Arctic Ungulates - Terrestrial Investigations
Amelie Roberto-Charron	Government of Nunavut	Eureka Weather Station, Resolute Bay	Emerging Infectious Diseases in High Arctic Ungulates – Aerial assessment

Primary Investigator	Institution	Study Location(s)	Project Title
Clément Chevallier	Environment and Climate Change Canada	Cape Verra, Cape Verra, Nirjutiqarvik, Cape Liddon, Houbhouse Inlet, Prince Leopold Island, Baillarge Bay	Fulmar colony surveys in Lancaster Sound
Myriam Lemelin	Université de Sherbrooke	T-MARS camp, McGill Arctic Research Station, Axel Heiberg Island	Geological study and mapping of hydrothermal deposits and gossans, Expedition Fiord, Axel Heiberg Island, Nunavut, as analogues for Mars
Christine Dow	University of Waterloo	Devon Ice Cap camp	Geophysical imaging of the Devon sub-glacial lakes
Luke Copland	University of Ottawa	Manson Icefield, Sydkap base camp, Sydkap ice marginal lake complex, Grise Fiord	Glacier monitoring on southern Ellesmere Island
Maya Bhatia	University of Alberta	Sydkap Glacier and surrounding area, Starnes Fiord and surrounding area, Jakeman Glacier and surrounding area, Grise Fiord	Glacier-ocean interactions in the Canadian high Arctic
Daniel Fortier	University of Montreal	Ward Hunt Island	Ground ice of eastern Canadian High Arctic polar desert
Cortney Wheeler	Fisheries and Oceans Canada	Elwin Bay, Creswell Bay	High Arctic Beluga Whale Stock Structure
Greg Henry	University of British Columbia	Sverdrup Pass, Knud Peninsula, PCSP Eureka, Bache Peninsula, Princess Marie Bay, Alexandra Fiord, Cape Bounty	High Arctic tundra ecosystem responses to 30 years of experimental and observed climate change
Masaki Uchida	National Institute of Polar Research, Japan	Oobloyah Bay	Identifying and understanding the effect of temporal and spatial changes towards the biodiversity and carbon sequestration processes in the high Arctic
John Moores	York University	Expedition Fjord	Identifying putative microbial drivers of methane flux on Earth and on Mars
Raoul-Marie Couture	Université Laval	Ward Hunt Island	Impact of oxygen pulses on redox-sensitive chemicals and microbiome in Canada's northernmost lake
Cory Matthews	Fisheries and Oceans Canada	Goose Fiord, Brooman Point, Kearney Cove	Improving High Arctic walrus stock assessment using satellite telemetry, genetics, and time-lapse photography
Lyle Whyte	McGill University	Lost Hammer, Thompson Glacier, White Glacier,	

Primary Investigator	Institution	Study Location(s)	Project Title
		Expedition Fjord, Gypsum Hill, Color Peak	Investigations of microbial activity in cryoenvironments in the Canadian High Arctic
Laura Brown	University of Toronto Mississauga	Nanuit Itillinga (Polar Bear Pass), Nanuit Itillinga (Polar Bear Pass), Cornwallis Island Lakes	Lake Ice in the Canadian High Arctic
Scott Lamoureux	Queen's University	Cape Bounty, Melville Island, Resolute vicinity	Land and water impacts and response to climate and permafrost changes in the High Arctic
Laura Thomson	Natural Resources Canada	Muller Ice Cap, Expedition Fiord	Mass Balance and Energy fluxes of White Glacier, Axel Heiberg Island, NU
Catherine Girard	Université du Québec à Chicoutimi (UQAC)	Ward Hunt Island, Resolute Bay vicinity	Microbes on the go: Release of cryospheric microbes to downstream habitats
Derek Mueller	Carleton University	Milne Ice Shelf, Milne Fiord, Purple Valley, Eureka, Resolute	Milne Fiord ice-ocean interactions: Implications for the stability of ice shelves and glaciers in the Polar Regions
Dave Burgess	Natural Resources Canada	Agassiz Ice Cap, Meighen Ice Cap, Grise Fiord, Devon Ice Cap, Melville Ice Cap	National Glaciology Project - Queen Elizabeth Islands, NU & NT
Warwick Vincent	Université Laval	Resolute (Cornwallis Island), Thores Lake (Ellesmere Island) and Ward Hunt Island	Northern Ellesmere Island in the Global Environment - Sentinel North
Valerie Amarualik	Parks Canada	Young Inlet, Dundee Bight, Dome Camp	Qausuittuq National Park Operations 2022/2023
Adam Ferguson	Parks Canada	Fort Conger, Lake Hazen, Ruggles River, Tanquary Fiord, Resolute Bay	Quttinirpaaq National Park Operations 2022
Gordon Osinski	University of Western Ontario	Haughton River Valley	Reconstructing the post-impact history of the Haughton impact structure, Nunavut
Lynda Gullason	Inuit Heritage Trust Incorporated	Resolute, Morin Point, Devon Island, Pond Inlet	Saving Morin Point: Climate Change Risk Assessment and Archaeological Heritage Recovery
Dermot Antoniades	Université Laval	Stuckberry Valley, Lake Hazen	The functioning and evolution of the ecosystems of Stuckberry Valley, northern Ellesmere Island

Primary Investigator	Institution	Study Location(s)	Project Title
Joshua King	Environment and Climate Change Canada	Eureka, Nunavut	Development of a new Canadian Arctic Archipelago sea ice product from ICESat-2 (Ice Cloud and Land Elevation Satellite-2)
Michael Brohart	Environment and Climate Change Canada	Eureka, Nunavut	Instrument calibration at Eureka weather station as part of the Canadian Brewer Spectrophotometer Network operation
Alison Criscitiello	University of Alberta	Grise Fiord and Resolute, Nunavut	Airborne gravity survey over Devon Ice Cap
Rich DeVall	Environment and Climate Change Canada	Isachsen (Ellef Ringnes Island), Rea Point (Melville Island), Stefansson Island, Fort Ross (Somerset Island), Gateshead Island, Cape Liverpool (Bylot Island), Svartevog (Axel Heiberg Island) and Grise Fiord (Ellesmere Island), Nunavut	Annual maintenance of ECCC's automatic weather station array – Arctic Archipelago
Grant Gilchrist	Environment and Climate Change Canada	Grise Fiord, Nunavut	Population surveys of endangered ivory gulls on Ellesmere Island and Devon Islands
Alexander Culley	Université Laval	Expedition Fiord (Axel Heiberg Island), Resolute (Cornwallis Island), Ward Hunt Island and Thores Lake (Ellesmere Island), Nunavut	Viral ecology of the high Canadian Arctic in water, ice and aerosols
Mark Lamothe	Natural Resources Canada	Eureka and Resolute, Nunavut	Eureka geomagnetic electronic replacement
Nicolas Lecomte	Université de Montreal	Bylot Island, Igloodik Island and Eureka, Nunavut	Arctic IMPACTS: tracking impacts of ecosystem changes in the Arctic
Christine Michel	Fisheries and Oceans Canada	Alert, Nunavut	Multidisciplinary Arctic Program (MAP) – Last Ice
Wayne Pollard	McGill University	Eureka and Expedition Fiord (Axel Heiberg Island), Nunavut	The vulnerability and resiliency of ice-rich permafrost in cold polar desert environments in response to changing climate
Vincent St. Louis	University of Alberta	Lake Hazen, Quttinirpaaq National Park, Nunavut	The impacts of rapidly receding glaciers on downstream freshwater resources and ecological services

### 15) What is being done to clean up past military, research and Government of Canada sites left on Ellesmere Island?

There were a number of sites in Quttinirpaaq National Park that required remediation. These sites have been remediated, with the exception of Fort Conger, which now has a long-term monitoring strategy in place.

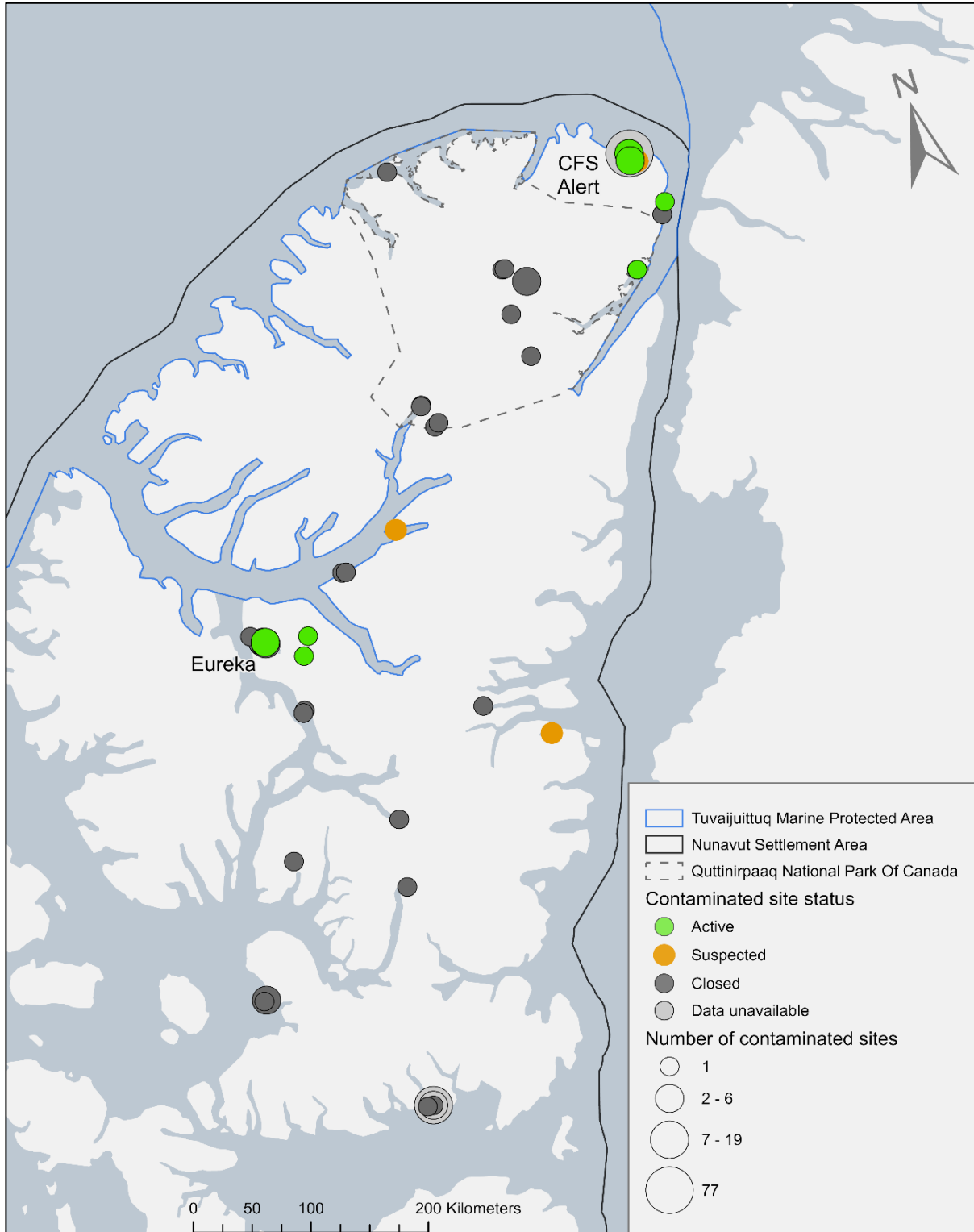
Fort Conger is a historical site situated on the shore of Discovery Harbour on Lady Franklin Bay, (N 81° 45.13', W 64° 49.56'). The site was used as a base by early Arctic expeditions and a scientific research camp. The site was also visited by early twentieth-century expeditions and later by government and military personnel, researchers, Inughuit hunters and tourists. A human health and ecological risk assessment conducted for the area identified risks from contamination at the site and a Risk Management and Remediation Plan has been developed. While some remediation has been completed, additional work is not an option at this time due to the remoteness of the site and the risks to cultural artifacts. Therefore, a long-term monitoring plan was developed so that, if the site becomes more accessible and remediation is possible, the proposed risk management and remediation strategy could be reviewed and updated. For more information on these sites, please contact Jane Chisholm at [jane.chisholm@pc.gc.ca](mailto:jane.chisholm@pc.gc.ca).

Additional information has been gathered on other sites on Ellesmere Island from the Government of the Northwest Territories (GNWT) Spills Database and the Federal Contaminated Sites Inventory (FCSI). The available data are summarized together in Figure 4, Table 2. The GNWT Spills Database is a collection of reported petroleum and other hazardous material spills in Nunavut and the Northwest Territories. The FCSI includes information on all known and suspected contaminated sites under the management of federal departments, agencies and consolidated Crown corporations.

The majority of contaminated sites on Ellesmere Island have been closed following historical reviews, testing, clean-ups or long-term monitoring activities. Available information from these two databases indicates that there are ten active sites (five in or near CFS Alert, four in or near Eureka, and one in Fort Conger) and three suspected sites (one at the Alexandra Fiord RCMP Detachment Site, one at D'Iberville Fjord, and one at Alert). Site status and actions data are unavailable from the GNWT Spills Database.

Site numbers that start with “spill-“ are from the GNWT Spills Database, and all other sites are from the FCSI. The site status refers to what is currently happening with the site. An “active” site is a confirmed contaminated site where remediation action is or may be required; a “closed” site is a site that requires no further action; and a “suspected” site requires further assessment work to confirm whether the site is considered a contaminated site. Actions tell us what has been done to the site, for example remediation efforts or testing.

The GNWT Spills database can be found at <https://www.gov.nt.ca/ecc/en/spills>, and the FCSI data can be found at <https://www.tbs-sct.gc.ca/fcsi-rscf/home-accueil-eng.aspx> and <https://www.tbs-sct.gc.ca/fcsi-rscf/numbers-numeros-eng.aspx?qid=1680451>. Information on the Federal Contaminated Sites Action Plan (FCSAP) can be found at <https://www.canada.ca/en/environment-climate-change/services/federal-contaminated-sites/action-plan.html>.



**Figure 4. Map showing closed, active and suspected contaminated sites on Ellesmere Island, NU. Source data: Government of Northwest Territories (GNWT) Spills Database and the Federal Contaminated Sites Inventory (FCSI), accessed May 2023**

**Table 2. List of active and suspected contaminated sites located on Ellesmere Island, including information on reporting organization (Crown Indigenous Relations and Northern Affairs Canada [CIRNAC]; Fisheries and Oceans Canada [DFO]; National Defence [DND]; Environment and Climate Change Canada [ECCC]; Parks Canada Agency [PCA]; Royal Canadian Mounted Police [RCMP]), contaminants (petroleum hydrocarbons [PHCs]; benzene, toluene, ethylbenzene, and xylene [BTEXs]; polycyclic aromatic hydrocarbons [PAHs), quantity, and actions.**

Site Number	Site Name / Location	Site Status	Occurrence Date	Latitude	Longitude	Reporting Organization	Contaminants	Quantity (cubic metres)	Actions
286	Lincoln Bay	Active	Data unavailable	82.0833	-62.0000	CIRNAC	PHCs	12	Initial testing completed. Detailed testing underway.
2747	Eureka High Arctic Weather Station	Active	Data unavailable	79.9908	-85.8586	ECCC	PHCs, BTEXs, PAHs, Metal, metalloid, and organometallic	15750	Remediation / risk management completed. Confirmatory sampling underway.
8328	Fort Conger Historic Site	Active	Data unavailable	81.7522	-64.8261	PCA	PAHs, Metal, metalloid, and organometallic	1265	Remediation / risk management completed. Confirmatory sampling underway.
24258	Romulus - Panarctic C-42 Well Site	Active	Data unavailable	79.8526	-84.3764	CIRNAC	BTEXs, PAHs, Metal, metalloid, and organometallic	3500	Remediation / risk management completed. Confirmatory sampling underway.
24259	Gemini - Panarctic E-10 Well Site	Active	Data unavailable	79.9902	-84.0690	CIRNAC	PHCs, Metal, metalloid, and organometallic	1500	Initial testing completed. Detailed testing underway.
27530	Neil Trivet Gaw Lab (Bapmon - Alert)	Active	Data unavailable	82.4535	-62.5135	ECCC	PHCs	0	Initial testing completed. Detailed testing underway.
20247006	Alert Main Station	Active	Data unavailable	82.4981	-62.3367	DND	PHCs, PAHs, Metal, metalloid, and organometallic	14500	Confirmatory sampling completed. Long term monitoring underway.

Site Number	Site Name / Location	Site Status	Occurrence Date	Latitude	Longitude	Reporting Organization	Contaminants	Quantity (cubic metres)	Actions
20247025	Alert Tx Site	Active	Data unavailable	82.4528	-62.5020	DND	PHCs	600	Detailed testing completed. Remedial action plan under development.
20247029	Alert Airfield	Active	Data unavailable	82.4998	-62.3611	DND	PHCs, BTEXs, Metal, metalloid, and organometallic	3	Confirmatory sampling completed. Long term monitoring underway.
70069014	Eureka - North Airstrip Apron	Active	Data unavailable	79.9977	-85.8406	DND	PHCs, BTEXs and PAHs	1755	Confirmatory sampling completed. Long term monitoring underway.
1091	Alexandra Fiord Rcmp Detachment Site	Suspected	Data unavailable	78.8798	-75.7546	RCMP	Data unavailable	0	Historical review planned.
16525	D'Iberville Fjord (Unassessed)	Suspected	Data unavailable	80.6069	-79.4792	DFO	Data unavailable	0	Historical review completed. Initial testing underway.
25114	Alert - Unauthorized Firing Range	Suspected	Data unavailable	82.4246	-62.1835	DND	Data unavailable	0	Historical review planned.

\*Closed sites were not included in this table as they have either been cleaned up and/or require no further action. Sites for which no data are available with respect to status were also not included.



## Appendix 2. Tuvaijuittuq Ministerial Order Regulations

\***NOTE:** The regulations can also be found at this website: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2019-282/page-1.html>

### SOR/2019-282

#### OCEANS ACT

#### Registration 2019-07-30

#### Order Designating the Tuvaijuittuq Marine Protected Area

Whereas this Order designates the Tuvaijuittuq Marine Protected Area in a manner that is not inconsistent with a land claims agreement that has been given effect and has been ratified or approved by an Act of Parliament;

Therefore, the Minister of Fisheries and Oceans, pursuant to 35.1(2)<sup>a</sup> of the *Oceans Act*<sup>b</sup>, makes the annexed *Order Designating the Tuvaijuittuq Marine Protected Area*.

- <sup>a</sup>S.C. 2019, c. 8, s. 5
- <sup>b</sup>S.C. 1996, c. 31

Ottawa, July 29, 2019

Jonathan Wilkinson  
Minister of Fisheries and Oceans

#### Definition of *Marine Protected Area*

1 In this Order, ***Marine Protected Area*** means the area of the sea that is designated by section 2.

#### Marine Protected Area

2 (1) The area of the sea in the Arctic Ocean consisting of the waters off northern Ellesmere Island, as described in plan number FB42596, certified on July 16, 2019 and depicted in plan number CLSR 108395, which plans are deposited in the Canada Lands Surveys Records, is designated as the Tuvaijuittuq Marine Protected Area.

#### Seabed, subsoil and water column

(2) The Marine Protected Area consists of 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.

#### Ongoing activities

3 For the purposes of subsection 35.1(2) of the *Oceans Act*, the following classes of activities are ongoing activities in the Marine Protected Area:

- (a) national defence activities carried out by the Department of National Defence;
- and



(b) marine scientific research activities.

### Prohibitions

**4 (1)** It is prohibited in the Marine Protected Area to carry out any activity — other than those set out in section 3 — that disturbs, damages, destroys or removes from the Marine Protected Area any unique geological or archeological features or any living marine organism or any part of its habitat, or is likely to do so.

### Exemption

**(2)** Despite subsection (1), the following activities may be carried out in the Marine Protected Area:

(a) marine navigation by a foreign national, a foreign ship or a foreign state, or an entity incorporated or formed by or under the laws of a country other than Canada; and

(b) the laying, maintenance and repair of cables and pipelines by a foreign state.

### Non-application – Nunavut Agreement

**5** This Order does not apply with respect to the wildlife harvesting rights of the Inuit in the Nunavut Settlement Area, as provided for in the Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada, as approved, given effect and declared valid by the [Nunavut Land Claims Agreement Act](#).

### Coming into force

**6** This Order comes into force on the day on which it is registered.





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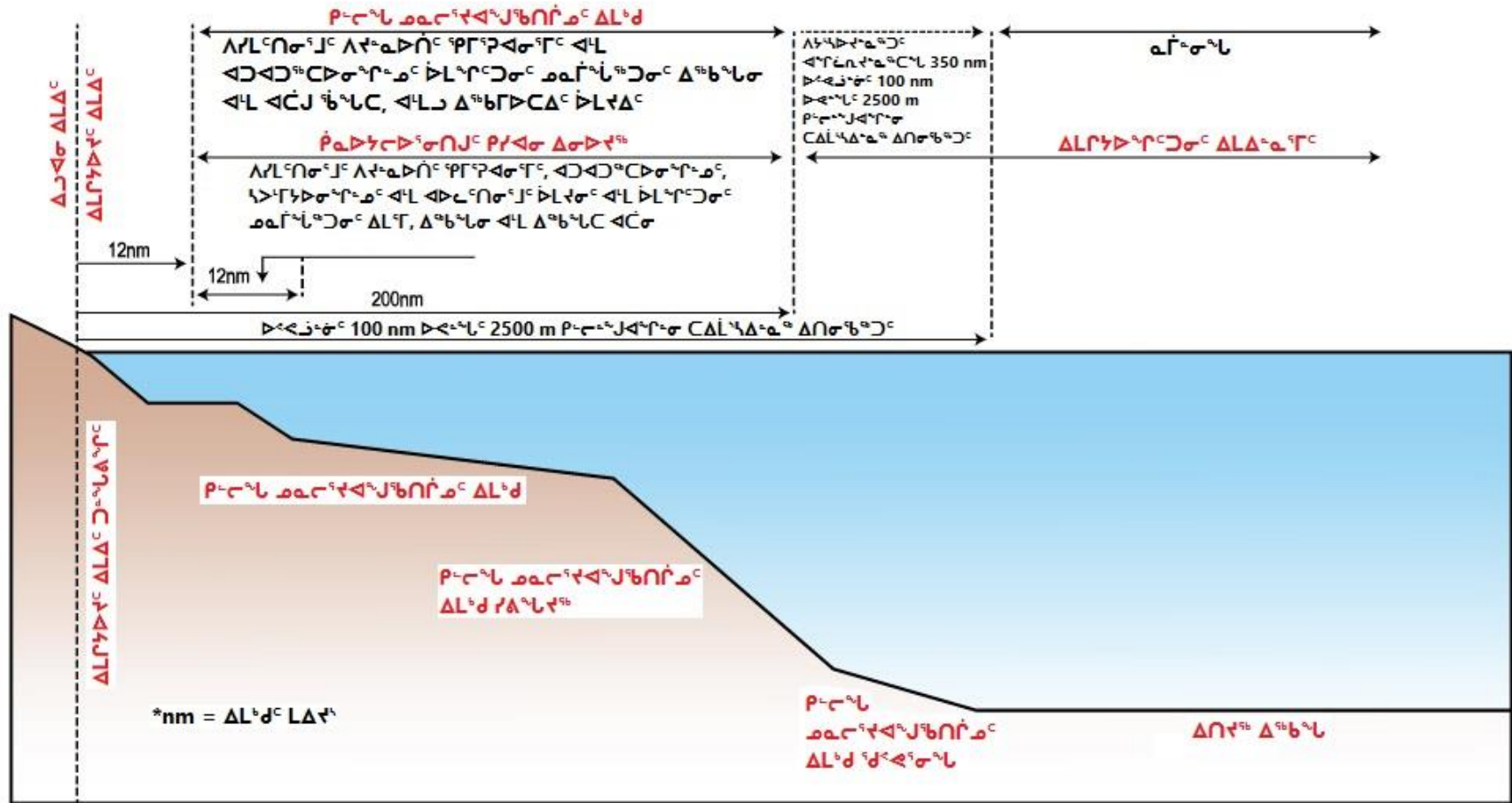












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Δομή / Στοιχείο	Δομή / Στοιχείο / Αριθμός	Δομή / Στοιχείο	Έπιπεδο / Ποσό	Υψόμετρο	Περιγραφή	Ποσότητα	Ποσότητα	Μονάδα	Σημειώσεις
24259	Υπερ- κορυφή E-10 Πόσιμο Δομή	Αεροπορική	Έπιπεδο / Ποσό	79.9902	-84.0690	Ποσότητα / Ποσό (CIRNAC)	Ποσότητα / Ποσό	1500	Αεροπορική / Έπιπεδο / Ποσό / Αεροπορική
27530	Πόσιμο / Δομή (10 - 11)	Αεροπορική	Έπιπεδο / Ποσό	82.4535	-62.5135	Αεροπορική / Ποσό (ECCC)	Ποσότητα / Ποσό (PHC)	0	Αεροπορική / Έπιπεδο / Ποσό / Αεροπορική
202470 06	Αεροπορική / Αεροπορική	Αεροπορική	Έπιπεδο / Ποσό	82.4981	-62.3367	Αεροπορική / Ποσό (DND)	Ποσότητα / Ποσό (PHC), Αεροπορική (PAH), Αεροπορική, LCJ, Αεροπορική	14500	Αεροπορική / Έπιπεδο / Ποσό / Αεροπορική / Αεροπορική
202470 25	Αεροπορική Tx	Αεροπορική	Έπιπεδο / Ποσό	82.4528	-62.5020	Αεροπορική / Ποσό (DND)	Ποσότητα / Ποσό (PHC)	600	Αεροπορική / Έπιπεδο / Ποσό / Αεροπορική / Αεροπορική
202470 29	Αεροπορική / Αεροπορική	Αεροπορική	Έπιπεδο / Ποσό	82.4998	-62.3611	Αεροπορική / Ποσό (DND)	Ποσότητα / Ποσό (PHC), Αεροπορική, LCJ, Αεροπορική (BTEX), Αεροπορική, LCJ, Αεροπορική	3	Αεροπορική / Έπιπεδο / Ποσό / Αεροπορική / Αεροπορική
700690 14	Αεροπορική - Αεροπορική / Αεροπορική	Αεροπορική	Έπιπεδο / Ποσό	79.9977	-85.8406	Αεροπορική / Ποσό (DND)	Ποσότητα / Ποσό (PHC), Αεροπορική, LCJ, Αεροπορική (BTEX) Αεροπορική	1755	Αεροπορική / Έπιπεδο / Ποσό / Αεροπορική / Αεροπορική



ᐃᑎᑦᑦᐃᑦ ᑭᐱᑦᐃᑦ	ᐃᑎᑦᑦᐃᑦ ᑭᐱᑦᐃᑦ / ᑭᐱᑦᐃᑦ	ᐃᑎᑦᑦᐃᑦ ᑭᐱᑦᐃᑦ	ᑭᐱᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦ ᑭᐱᑦᐃᑦ	ᑭᐱᑦᐃᑦ	ᑭᐱᑦᐃᑦ	ᑭᐱᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦ	ᑭᐱᑦᐃᑦᑦᐃᑦ	ᑭᐱᑦᐃᑦᑦᐃᑦ (ᑭᐱᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦ)	ᑭᐱᑦᐃᑦᑦᐃᑦ
							ᑭᐱᑦᐃᑦᑦᐃᑦ (PAH)		
1091	ᑭᐱᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦ	ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ	ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ	78.8798	-75.7546	ᑭᐱᑦᐃᑦ (RCMP)	ᑭᐱᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦ	0	ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ.
16525	ᑭᐱᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦ (ᑭᐱᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦ)	ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ	ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ	80.6069	-79.4792	ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦ (DFO)	ᑭᐱᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦ	0	ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦᑦᐃᑦ. ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦᑦᐃᑦ.
25114	ᑭᐱᑦᐃᑦ - ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ	ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ	ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ	82.4246	-62.1835	ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦ (DND)	ᑭᐱᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦ	0	ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ.

\*ᑭᐱᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦᑦᐃᑦ. ᑭᐱᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ ᑭᐱᑦᐃᑦᑦᐃᑦᑦᐃᑦ.





# ᐱᕐᐴᕐᐸ ᐸᕐᓴᕐᐸ ᐸᕐᓴᕐᐸ: ᐸᕐᓴᕐᐸ ᐸᕐᓴᕐᐸ ᐸᕐᓴᕐᐸ ᐸᕐᓴᕐᐸ ᐸᕐᓴᕐᐸ ᐸᕐᓴᕐᐸ ᐸᕐᓴᕐᐸ ᐸᕐᓴᕐᐸ ᐸᕐᓴᕐᐸ ᐸᕐᓴᕐᐸ ᐸᕐᓴᕐᐸ ᐸᕐᓴᕐᐸ ᐸᕐᓴᕐᐸ 3-18 2023



ᐸᕐᓴᕐᐸ ᐸᕐᓴᕐᐸ - ᐸᕐᓴᕐᐸ 5, 2023



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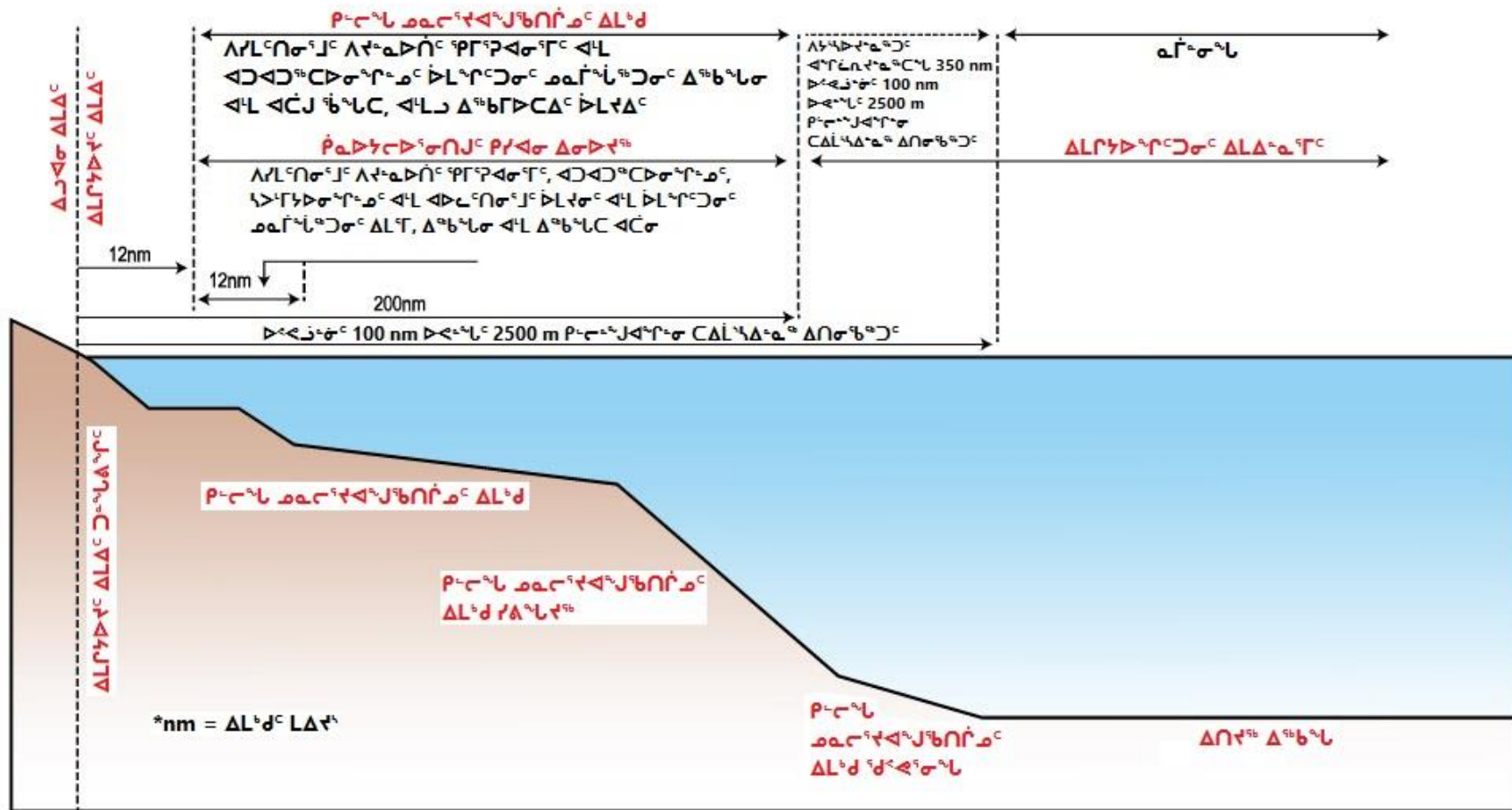


Figure 2. Coastal Profile





















ክፍል/ክፍሎች	ገጽ/ገጾች	ጉዳይ/ጉዳዮች	ግብር/ግብሮች
፪ ኃ	፩-፮	፩-፮	፩-፮
፫ ኃ	፯-፲፭	፯-፲፭	፯-፲፭
፬ ኃ	፲፬-፲፮	፲፬-፲፮	፲፬-፲፮
፭ ኃ	፲፯-፳፭	፲፯-፳፭	፲፯-፳፭
፮ ኃ	፳፯-፳፻፱	፳፯-፳፻፱	፳፯-፳፻፱

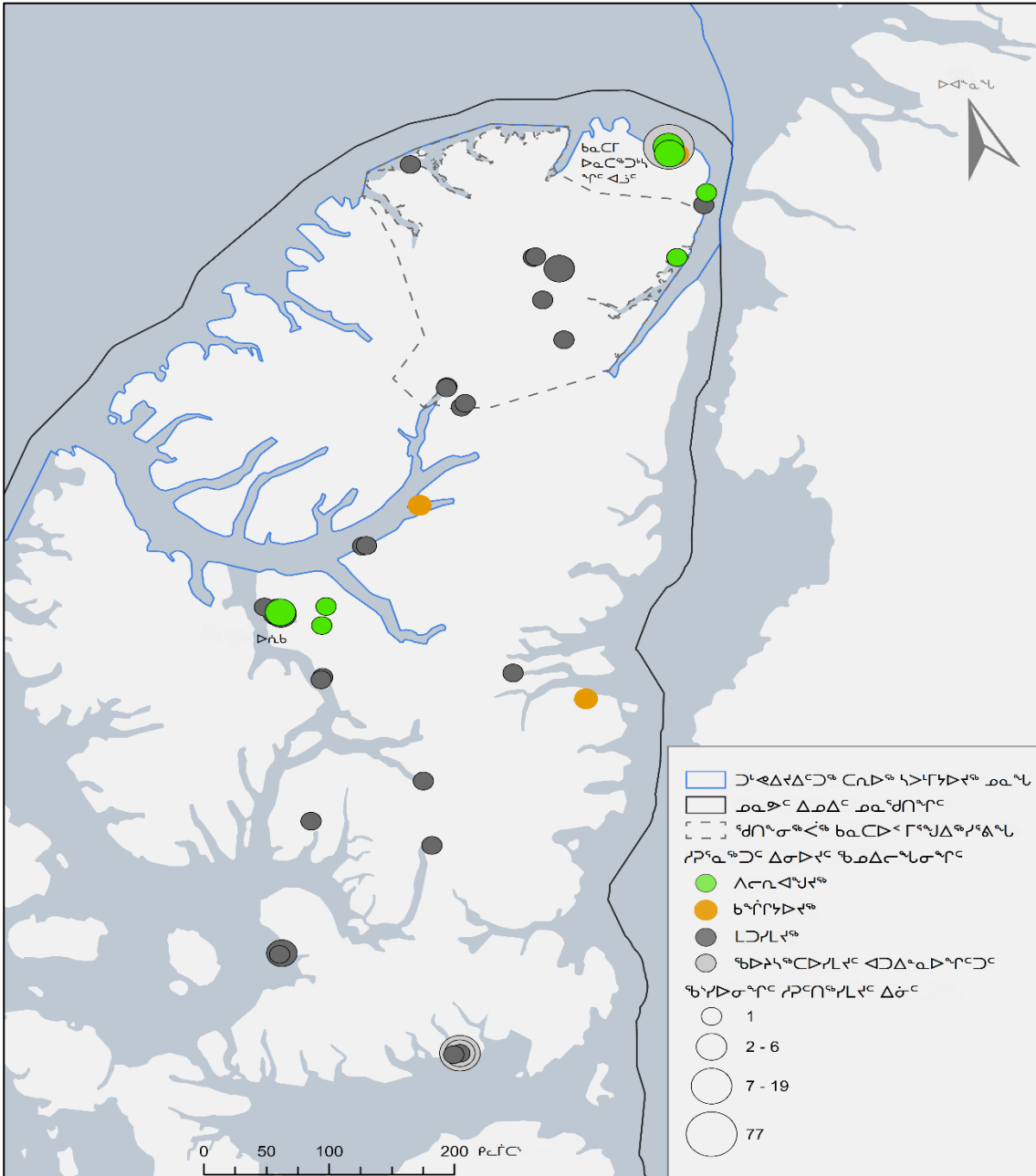
**15) ክፍል/ክፍሎች ላይ ያሉትን ጉዳዮች ለማረጋገጥ የሚያስፈልጉትን ጽሑፍ ለማግኘት ለሚገቡት ገጽ/ገጾች ላይ ምልክት ያድርጉ?**

፩-፮ ኃውንት ለማረጋገጥ የሚያስፈልጉትን ጽሑፍ ለማግኘት ለሚገቡት ገጽ/ገጾች ላይ ምልክት ያድርጉ። ፩-፮ ኃውንት ለማረጋገጥ የሚያስፈልጉትን ጽሑፍ ለማግኘት ለሚገቡት ገጽ/ገጾች ላይ ምልክት ያድርጉ። ፩-፮ ኃውንት ለማረጋገጥ የሚያስፈልጉትን ጽሑፍ ለማግኘት ለሚገቡት ገጽ/ገጾች ላይ ምልክት ያድርጉ።

፯-፲፭ ኃውንት ለማረጋገጥ የሚያስፈልጉትን ጽሑፍ ለማግኘት ለሚገቡት ገጽ/ገጾች ላይ ምልክት ያድርጉ። ፯-፲፭ ኃውንት ለማረጋገጥ የሚያስፈልጉትን ጽሑፍ ለማግኘት ለሚገቡት ገጽ/ገጾች ላይ ምልክት ያድርጉ። ፯-፲፭ ኃውንት ለማረጋገጥ የሚያስፈልጉትን ጽሑፍ ለማግኘት ለሚገቡት ገጽ/ገጾች ላይ ምልክት ያድርጉ።

፲፬-፲፮ ኃውንት ለማረጋገጥ የሚያስፈልጉትን ጽሑፍ ለማግኘት ለሚገቡት ገጽ/ገጾች ላይ ምልክት ያድርጉ። ፲፬-፲፮ ኃውንት ለማረጋገጥ የሚያስፈልጉትን ጽሑፍ ለማግኘት ለሚገቡት ገጽ/ገጾች ላይ ምልክት ያድርጉ። ፲፬-፲፮ ኃውንት ለማረጋገጥ የሚያስፈልጉትን ጽሑፍ ለማግኘት ለሚገቡት ገጽ/ገጾች ላይ ምልክት ያድርጉ።

ᓄᓇ ᓃᓱᓴᑦᑦ ᓈᓱᓂᓹᓄᓐ ᓴᓂᓸᓇᓂᓐ ᓄᓂᓴᓇᓂ ᓂᓴᓸᓇᓂᓄᓐ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ  
<https://www.gov.nt.ca/ecc/en/spills>, ᓴᓱ ᓂᓄᓴᓇ ᓈᓱᓂᓹᓄᓐ ᓴᓂᓸᓇᓂ ᓄᓂᓴᓇᓂ ᓂᓄᓴᓇᓂ  
 ᓄᓂᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ <https://www.tbs-sct.gc.ca/fcsi-rscf/home-accueil-eng.aspx>  
 ᓴᓱ <https://www.tbs-sct.gc.ca/fcsi-rscf/numbers-numeros-eng.aspx?qid=1680451>. ᓂᓄᓴᓇᓂ  
 ᓈᓱᓂᓹᓄᓐ ᓴᓂᓸᓇᓂ ᓄᓂᓴᓇᓂ ᓄᓂᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ (FCSAP) ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ  
 ᓂᓄᓴᓇᓂ <https://www.canada.ca/en/environment-climate-change/services/federal-contaminated-sites/action-plan.html>.



ᓴᓱᓄᓴᓇᓂ 4. ᓄᓇᓂᓹᓄᓐ ᓂᓄᓴᓇᓂᓄᓐ ᓈᓱᓂᓹᓄᓐ, ᓈᓱᓂᓹᓄᓐ ᓄᓂᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ  
 ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ ᓂᓄᓴᓇᓂ  
 2023





ΔσΔῖς αΔῖΔῖ	ΔσῖΛC CΔJῖΔ / αῖσῖΛ	ΔσῖΛC ῖβσΔCῖΛσῖΛ	ῖβσΔCῖβCῖΔῖ ῖβCῖβ ῖCῖῖΛ	ῖCῖῖ	ῖσῖῖ	ῖσῖῖῖῖῖ ῖCῖῖῖῖῖῖῖ	ῖCῖῖῖῖῖῖ	ῖCῖῖῖῖ (ῖCῖῖῖῖῖῖ ῖῖῖῖ)	ῖβσΔCῖβCῖῖ
24259	ῖΓαΔ - ῖῖῖῖῖ E-10 ῖῖῖῖῖῖῖῖ ΔσῖΛ	ῖCῖῖῖῖῖῖῖ	ῖβCῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖ	79.9902	-84.0690	ῖβCῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖ (CIRNAC)	ῖβCῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖ (PHC), ῖῖῖῖῖῖῖ, ῖCῖῖῖῖῖῖ, ῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖ	1500	ῖCῖῖῖῖῖῖῖῖῖῖ ῖβCῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖ ῖβCῖῖῖῖῖῖῖῖῖῖ ῖCῖῖῖῖῖῖῖῖῖῖῖῖ
27530	ῖῖῖῖ ῖῖῖῖῖ ῖῖ ῖβCῖῖῖῖῖῖῖῖ (ῖῖῖῖῖῖῖ - ῖῖῖῖ)	ῖCῖῖῖῖῖῖῖῖ	ῖβCῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖ	82.4535	-62.5135	ῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖ ῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖ (ECCC)	ῖβCῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖ (PHC)	0	ῖCῖῖῖῖῖῖῖῖῖῖ ῖβCῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖ ῖβCῖῖῖῖῖῖῖῖῖῖ ῖCῖῖῖῖῖῖῖῖῖῖῖῖ
202470 06	ῖῖῖῖ ῖCῖῖῖῖῖῖῖῖῖῖ ῖῖῖ	ῖCῖῖῖῖῖῖῖῖ	ῖβCῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖ	82.4981	-62.3367	ῖCῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖ (DND)	ῖβCῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖ (PHC), ῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖ (PAH), ῖῖῖῖῖῖῖ, ῖCῖῖῖῖῖῖῖ, ῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖ	14500	ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖβCῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖ ῖCῖῖῖῖῖῖῖῖῖῖῖῖῖ
202470 25	ῖῖῖῖ Tx ΔσῖΛ	ῖCῖῖῖῖῖῖῖῖ	ῖβCῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖ	82.4528	-62.5020	ῖCῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖ (DND)	ῖβCῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖ (PHC)	600	ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖβCῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖCῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖῖ
202470 29	ῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖ	ῖCῖῖῖῖῖῖῖῖ	ῖβCῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖ	82.4998	-62.3611	ῖCῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖ (DND)	ῖβCῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖ (PHC), ῖῖῖῖῖῖῖ, ῖῖῖῖῖῖῖ, ῖῖῖῖῖῖῖῖῖῖῖῖ, ῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖῖ (BTEX), ῖῖῖῖῖῖῖ, ῖCῖῖῖῖῖῖῖῖ, ῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖ	3	ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖβCῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖCῖῖῖῖῖῖῖῖῖῖῖῖῖ
700690 14	ῖῖῖῖῖῖ - ῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖ	ῖCῖῖῖῖῖῖῖῖ	ῖβCῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖ	79.9977	-85.8406	ῖCῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖ (DND)	ῖβCῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖ (PHC), ῖῖῖῖῖῖῖ, ῖῖῖῖῖῖῖῖ, ῖῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖ (BTEX) ῖῖῖῖῖῖῖῖῖῖῖῖῖ	1755	ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖβCῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖῖῖῖῖῖῖῖῖῖῖῖῖ ῖCῖῖῖῖῖῖῖῖῖῖῖῖῖ







**ბელარუსის რესპუბლიკის შესახებ**

3. აღნიშნულ რესპუბლიკის შესახებ **საგარეო ურთიერთობების კანონის 35.1(2) მუხლის** [დასაბუთების მიზნით](#), აღნიშნული რესპუბლიკის შესახებ ბელარუსის რესპუბლიკის შესახებ დადგინებული ნორმების შესახებ:

- (a) ბელარუსის რესპუბლიკის შესახებ რეგისტრირებული ინფორმაციის ბაზა; და
- (b) ნორმების შესახებ ინფორმაცია.

**საგარეო ურთიერთობების**

4 (1) საგარეო ურთიერთობების დადგენილი ნორმების შესახებ რეგისტრირებული ინფორმაციის ბაზაში – აღნიშნული ნორმების შესახებ დამატებითი ინფორმაციის მიწოდების მიზნით, საგარეო ურთიერთობების დეპარტამენტის მიერ დადგინებული ნორმების შესახებ დამატებითი ინფორმაციის მიწოდების მიზნით დადგინებული ნორმების შესახებ:

**საგარეო ურთიერთობების**

(2) საგარეო ურთიერთობების კანონის (1) მუხლის მიხედვით, დადგინებული ნორმების შესახებ რეგისტრირებული ინფორმაციის ბაზაში:

- (a) ნორმების შესახებ ინფორმაციის ბაზაში, საგარეო ურთიერთობების დეპარტამენტის მიერ დადგინებული ნორმების შესახებ ინფორმაციის მიწოდების მიზნით დადგინებული ნორმების შესახებ;
- (b) საგარეო ურთიერთობების დეპარტამენტის მიერ დადგინებული ნორმების შესახებ ინფორმაციის ბაზაში.

**საგარეო ურთიერთობების - დამატებითი ინფორმაცია**

5. ბელარუსის რესპუბლიკის შესახებ დადგინებული ნორმების შესახებ რეგისტრირებული ინფორმაციის ბაზაში – აღნიშნული ნორმების შესახებ დამატებითი ინფორმაციის მიწოდების მიზნით, საგარეო ურთიერთობების დეპარტამენტის მიერ დადგინებული ნორმების შესახებ:

**დადგინებული ნორმების შესახებ**

6. ბელარუსის რესპუბლიკის შესახებ დადგინებული ნორმების შესახებ რეგისტრირებული ინფორმაციის ბაზაში.

ᐱᐱᐱᐱ ᐱᐱᐱᐱᐱᐱ: ᐱᐱᐱᐱ ᐱᐱᐱᐱᐱᐱᐱᐱᐱᐱᐱᐱ  
 ᐱᐱᐱᐱ ᐱᐱᐱᐱᐱᐱ ᐱᐱᐱᐱᐱᐱᐱᐱᐱᐱᐱᐱ ᐱᐱᐱᐱᐱᐱᐱ  
 ᐱᐱᐱᐱᐱᐱ ᐱᐱᐱᐱᐱᐱᐱᐱᐱᐱ ᐱᐱᐱᐱᐱᐱᐱᐱᐱᐱᐱᐱ  
 ᐱᐱᐱᐱᐱ 3-18 2023



ᐱᐱᐱᐱᐱᐱᐱᐱ - ᐱᐱᐱᐱᐱ 18, 2023













**ዎላ ጋህናርጋር፡**

**ላሊጢጋር ልዑጎ**

- ልጋሪ ግንባራ ስፔሻላይዥን ማድረግ የሚችል ገጠማዊ ፍጥነት ለመስጠት ለሚችል ልማት ገጠማዊ ጥራት ማረጋገጥ ለመቻሉ ማዘጋጀት ይኖርበታል።

**ዎላ ማጠቃለያ ለሌሎች ማድረግ**

- ልጋሪ ግንባራ ስፔሻላይዥን ማድረግ ለሚችል ገጠማዊ ጥራት ማረጋገጥ ለመቻሉ ማዘጋጀት ይኖርበታል።

**ዎላ ማጠቃለያ:**

- ጋሪ ማህበረሰብ ለማድረግ ወይም ለማዘጋጀት ለሚችል ገጠማዊ ጥራት ማረጋገጥ ለመቻሉ ማዘጋጀት ይኖርበታል።
- ልጋሪ ግንባራ ስፔሻላይዥን ማድረግ ለሚችል ገጠማዊ ጥራት ማረጋገጥ ለመቻሉ ማዘጋጀት ይኖርበታል።

**ጋሪ ማዘጋጀት**

- ለማዘጋጀት ለሚችል ገጠማዊ ጥራት ማረጋገጥ ለመቻሉ ማዘጋጀት ይኖርበታል።

**ጋሪ ማዘጋጀት ለማድረግ**

ለማዘጋጀት ለሚችል ገጠማዊ ጥራት ማረጋገጥ ለመቻሉ ማዘጋጀት ይኖርበታል።



ጋሪ ማዘጋጀት ለማድረግ ለሚችል ገጠማዊ ጥራት ማረጋገጥ ለመቻሉ ማዘጋጀት ይኖርበታል።







































ΔσΔρϵϵ αΔϵϵΔϵ	Δσϵϵϵ ϵΔϵϵϵ / αϵϵϵϵ	Δσϵϵϵ ϵϵΔϵϵϵϵ	ϵϵΔϵϵϵϵϵϵ ϵϵϵϵ ϵϵϵϵ	ϵϵϵϵ	ϵϵϵϵ	ϵϵϵϵϵϵ ϵϵϵϵϵϵϵϵ	ϵϵϵϵϵϵ	ϵϵϵϵϵ (ϵϵϵϵϵ ϵ ϵϵϵ)	ϵϵΔϵϵϵϵ
24259	ϵϵϵϵ - ϵϵϵϵ E-10 ϵϵϵϵϵϵ Δσϵϵ	Λϵϵϵϵϵϵϵϵ	ϵϵΔϵϵϵϵϵϵ ϵϵΔϵϵϵϵϵϵ	79.9902	-84.0690	Δσϵϵϵϵϵϵ ϵϵϵ ϵϵϵϵ (CIRNAC)	ϵϵϵϵϵϵϵϵ ϵ ϵϵϵϵϵ (PHC), ϵϵϵϵ, LCϵΔϵ, ϵϵ ϵϵϵϵϵϵ	1500	Λϵϵϵϵϵϵϵϵ ϵϵΔϵϵϵϵϵ Λϵϵϵϵϵϵϵϵ. αϵαϵΔϵϵϵϵ ϵϵΔϵϵϵϵ Λϵϵϵϵϵϵϵϵ.
27530	σϵϵ ϵϵϵϵ ϵϵ ϵϵΔϵϵϵϵ (ϵϵϵ - ϵϵϵ)	Λϵϵϵϵϵϵϵϵ	ϵϵΔϵϵϵϵϵϵ ϵϵΔϵϵϵϵϵϵ	82.4535	-62.5135	ϵϵϵϵϵϵϵϵ ϵϵ ϵϵϵ ϵϵϵϵϵϵϵϵ Δσϵϵϵϵ (ECCC)	ϵϵϵϵϵϵϵϵ ϵ ϵϵϵϵϵ (PHC)	0	Λϵϵϵϵϵϵϵϵ ϵϵΔϵϵϵϵϵ Λϵϵϵϵϵϵϵϵ. αϵαϵΔϵϵϵϵ ϵϵΔϵϵϵϵ Λϵϵϵϵϵϵϵϵ.
202470 06	ϵϵϵ Λϵϵϵϵϵϵ ϵϵ	Λϵϵϵϵϵϵϵϵ	ϵϵΔϵϵϵϵϵϵ ϵϵΔϵϵϵϵϵϵ	82.4981	-62.3367	ϵϵϵϵϵϵϵϵ ϵϵϵ ϵϵϵϵϵ (DND)	ϵϵϵϵϵϵϵϵ ϵ ϵϵϵϵϵ (PHC), ϵϵϵϵ ϵϵϵϵ ϵϵϵϵϵ (PAH), ϵϵϵϵ, LCϵΔϵ, ϵϵ ϵϵϵϵϵϵ	14500	αϵαϵΔϵϵϵϵ ϵϵΔϵϵϵϵϵϵ Λϵϵϵϵϵϵϵϵ. ϵϵϵϵϵϵ αϵϵϵϵϵϵϵ Λϵϵϵϵϵϵϵϵ.
202470 25	ϵϵϵ Tx Δσϵϵ	Λϵϵϵϵϵϵϵϵ	ϵϵΔϵϵϵϵϵϵ ϵϵΔϵϵϵϵϵϵ	82.4528	-62.5020	ϵϵϵϵϵϵϵϵ ϵϵϵ ϵϵϵϵϵ (DND)	ϵϵϵϵϵϵϵϵ ϵ ϵϵϵϵϵ (PHC)	600	αϵαϵΔϵϵϵϵ ϵϵΔϵϵϵϵϵϵ Λϵϵϵϵϵϵϵϵ. ϵϵϵϵϵϵϵϵ ϵϵΔϵϵϵϵϵϵ ϵϵϵϵϵϵϵϵ. Λϵϵϵϵϵϵϵϵ.
202470 29	ϵϵϵ ϵϵϵϵϵϵ	Λϵϵϵϵϵϵϵϵ	ϵϵΔϵϵϵϵϵϵ ϵϵΔϵϵϵϵϵϵ	82.4998	-62.3611	ϵϵϵϵϵϵϵϵ ϵϵϵ ϵϵϵϵϵ (DND)	ϵϵϵϵϵϵϵϵ ϵ ϵϵϵϵϵ (PHC), ϵϵϵ, ϵϵϵ, ϵϵϵϵϵ, ϵϵ ϵϵϵ (BTEX), ϵϵϵϵ, LCϵΔϵ, ϵϵ ϵϵϵϵϵϵ	3	αϵαϵΔϵϵϵϵ ϵϵΔϵϵϵϵϵϵ Λϵϵϵϵϵϵϵϵ. ϵϵϵϵϵϵϵϵ αϵϵϵϵϵϵϵ Λϵϵϵϵϵϵϵϵ.
700690 14	Δϵϵϵ - ϵϵϵϵ ϵϵϵϵ ϵϵϵϵϵϵ	Λϵϵϵϵϵϵϵϵ	ϵϵΔϵϵϵϵϵϵ ϵϵΔϵϵϵϵϵϵ	79.9977	-85.8406	ϵϵϵϵϵϵϵϵ ϵϵϵ ϵϵϵϵϵ (DND)	ϵϵϵϵϵϵϵϵ ϵ ϵϵϵϵϵ (PHC), ϵϵϵ, ϵϵϵ, ϵϵϵϵϵ, ϵϵ ϵϵϵ (BTEX) ϵϵϵ ϵϵϵϵ	1755	αϵαϵΔϵϵϵϵ ϵϵΔϵϵϵϵϵϵ Λϵϵϵϵϵϵϵϵ. ϵϵϵϵϵϵϵϵ αϵϵϵϵϵϵϵ Λϵϵϵϵϵϵϵϵ.







ᐱᓐᓇ ᑕᓴᓴᑕᓄᓐ: ᓄᓇᓕᓐᓂ ᐅᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴ  
 ᓄᑕᒥᓕ ᒥᓂᓴᑕᐅᓕ ᓴᑕᐅᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴ  
 ᐅᓂᐅᓕ ᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴᓴ  
 ᐱᐅᓴᓴᓴ 3-18 2023



ᒥᓴᓴᑕᓕᓴ - ᐱᐅᓴᓴᓴ 4, 2023



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ልዩ ምርመራ 2. የምርመራ ምርመራ ላይ ለምርመራ ላይ ለምርመራ ላይ ለምርመራ .....	30

### ኖታሞፈሩኤርዲሮ

ጋዴላፎገኛኛ ለሰራዊቱ ኖታሮሪሲቲ ወደፊት ልንጓዝ፣ ፍሰገርጌ፣ ኑሮኔጋሲጌ፣ ኔፋሪኛ፣ ላላጋ ላፊሪኛ ለጸናኤባፍባሪኛ ጋራ ላላ ጋሜሲካፊሪኛ ጋራ ወደፊት ጎረፍባጋር። ኖታሞፈሩኤርዲሮ ከላሲናፍባክሮ (HTA), ዘብላሪክሮ ከባሊኑሮ, ሊፊላፊ ላሲኑሮ ለኔርዲሮ ጋራ ላላ ኔፋሪኛ ጋራ ድክላኑሮ ድክላኑሮ። ሲሆኑ፣ ልሲናፍባክሮ ለኔርዲሮ ጋራ ገጥሞክሮ ጋራ ላላ ጋራ ሲኖሩ፣ ሲኖሩ ከባሊኑሮ።

### ለሰራዊቱ ኖታሮሪሲቲ

ጋዴላፎገኛኛ ለሰራዊቱ ልሲናፍባክሮ ኖሮኔጋሲጌ (QIA), ልኔርዲሮ ለገግጋር ልኔርዲሮ (DFO), ፍሰገዲኛ ለሰራዊቱ ኔፋር (PCA), ላላ ወደፊት ሊኔሪካኛ ሲኖሩ (GN). ጎረፍባጋር ለኔርዲሮ ልሲናፍባክሮ ሲኖሩ ጋራ ነፍሰጋላጌ ላላ ነፍሰጋላጌ ለኔርዲሮ ልሲናፍባክሮ።



ጋዴላፎገኛኛ ለሰራዊቱ ነፍሰጋላጌ ለሰራዊቱ ንፍሰጋላጌ፣ ልኔላፍባግር ላላ ፍሰገርጌ (ኔፋሪኛ ላላ ኔፋሪኛ) ላላ ኔፋሪኛ ላላ ላፊሪኛ (ሰራዊቱ ላላ ኔፋሪኛ). ኔፋሪኛ ላላ ኔፋሪኛ, ኔፋሪኛ ሰራዊቱ (ኖሮኔጋሲጌ ለኔርዲሮ), ሰራዊቱ (ልኔርዲሮ ለገግጋር ለኔርዲሮ ኔፋር), ሊሲኖ ኔርዲሮ (ልኔርዲሮ ለገግጋር ለኔርዲሮ ኔፋር), ጎረፊላክኛ (ወደፊት ሊኔሪካኛ), ላላ ኔግግ ለኔሮ (ወደፊት ሊኔሪካኛ) ላላ ኔፋሪኛ, ኔፋሪኛ ሰራዊቱ: ላላ ኔፋር (ልኔርዲሮ ለገግጋር ለኔርዲሮ ኔፋር), ለሰራዊቱ ላላ ኔፋር (ልኔርዲሮ ለገግጋር ለኔርዲሮ ኔፋር), ለኔርዲሮ (ኖሮኔጋሲጌ ለኔርዲሮ), ሰራዊቱ (ወደፊት ሊኔሪካኛ), ላላ ጎረፊላክኛ (ወደፊት ሊኔሪካኛ)።























**4) Ի՞նչ է մեզ հարկում արվում և արժեքները ի՞նչ են? Ի՞նչ է մեզ հարկում արվում և արժեքները ի՞նչ են?**

Ի՞նչ է մեզ հարկում արվում և արժեքները ի՞նչ են? Ի՞նչ է մեզ հարկում արվում և արժեքները ի՞նչ են?

Լճերի մաքրումը և արժեքները ի՞նչ են? Լճերի մաքրումը և արժեքները ի՞նչ են?

**5) Ի՞նչ է մեզ հարկում արվում և արժեքները ի՞նչ են? Ի՞նչ է մեզ հարկում արվում և արժեքները ի՞նչ են?**

Ի՞նչ է մեզ հարկում արվում և արժեքները ի՞նչ են? Ի՞նչ է մեզ հարկում արվում և արժեքները ի՞նչ են?

Ի՞նչ է մեզ հարկում արվում և արժեքները ի՞նչ են? Ի՞նչ է մեզ հարկում արվում և արժեքները ի՞նչ են?

**6) Ի՞նչ է մեզ հարկում արվում և արժեքները ի՞նչ են? Ի՞նչ է մեզ հարկում արվում և արժեքները ի՞նչ են?**

Ի՞նչ է մեզ հարկում արվում և արժեքները ի՞նչ են? Ի՞նչ է մեզ հարկում արվում և արժեքները ի՞նչ են?





7) **ክፍል ለመሆን ለመመዘን የሚያስፈልጉ ነገሮች ምንድን ናቸው?**

ገደብ መግቢያ ለማድረግ የሚያስፈልጉ ስነ-ምግባር ለማድረግ ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው? ገደብ መግቢያ ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው? ገደብ መግቢያ ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው?

የሥራ ስምያዎን ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው? ገደብ መግቢያ ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው? ገደብ መግቢያ ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው?

8) **የሥራ ስምያዎን ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው?**

የሥራ ስምያዎን ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው? ገደብ መግቢያ ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው? ገደብ መግቢያ ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው?

በገደብ መግቢያ ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው? ገደብ መግቢያ ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው? ገደብ መግቢያ ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው?

የሥራ ስምያዎን ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው? ገደብ መግቢያ ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው? ገደብ መግቢያ ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው?

9) **የሥራ ስምያዎን ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው?**

- የሥራ ስምያዎን ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው?
- የሥራ ስምያዎን ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው?
- የሥራ ስምያዎን ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው?

10) **የሥራ ስምያዎን ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው?**

- የሥራ ስምያዎን ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው?
- የሥራ ስምያዎን ለማድረግ የሚያስፈልጉ ነገሮች ምንድን ናቸው?















ናይድራክሮን ለገጠኞቻቸው	ለርብ ጭማቅ	ፈርግሳይ ግራፍ	ለርብ ጭማቅ
ሲብስ	ሲብስ ልብጋት ኮሎኒያል ግራፍ	ክሊን ሲብስ	ሲብስ ግራፍ ለሲብስ ኮሎኒያል ግራፍ
ኒዮ ግራፍ	ኒዮ ግራፍ ግራፍ	ኒዮ ግራፍ ግራፍ	ኒዮ ግራፍ ግራፍ
ግራፍ-ኒዮ ግራፍ	ግራፍ-ኒዮ ግራፍ	ግራፍ-ኒዮ ግራፍ	ግራፍ-ኒዮ ግራፍ
ግራፍ ሲብስ	ግራፍ ሲብስ	ግራፍ ሲብስ	ግራፍ ሲብስ
ሲብስ ግራፍ	ሲብስ ግራፍ	ሲብስ ግራፍ	ሲብስ ግራፍ
ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ
ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ
ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ
ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ
ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ
ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ
ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ
ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ
ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ
ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ
ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ
ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ
ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ	ግራፍ ግራፍ









ᐃᐱᓄᓂᓐ ᐅᓄᓂᓐ	ᐃᐱᓄᓂᓐ ᐅᓄᓂᓐ / ᐅᓄᓂᓐ	ᐃᐱᓄᓂᓐ ᐅᓄᓂᓐ	ᐅᓄᓂᓐ ᐅᓄᓂᓐ	ᐅᓄᓂᓐ	ᐅᓄᓂᓐ	ᐅᓄᓂᓐ	ᐅᓄᓂᓐ	ᐅᓄᓂᓐ (ᐅᓄᓂᓐ) ᐅᓄᓂᓐ	ᐅᓄᓂᓐ
24259	ᐅᓄᓂᓐ - ᐅᓄᓂᓐ E-10 ᐅᓄᓂᓐᐅᓄᓂᓐ ᐅᓄᓂᓐ	ᐅᓄᓂᓐ	ᐅᓄᓂᓐ ᐅᓄᓂᓐ	79.9902	-84.0690	ᐅᓄᓂᓐ ᐅᓄᓂᓐ (CIRNAC)	ᐅᓄᓂᓐ ᐅᓄᓂᓐ (PHC), ᐅᓄᓂᓐ, ᐅᓄᓂᓐ, ᐅᓄᓂᓐ	1500	ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ
27530	ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ (ᐅᓄᓂᓐ - ᐅᓄᓂᓐ)	ᐅᓄᓂᓐ	ᐅᓄᓂᓐ ᐅᓄᓂᓐ	82.4535	-62.5135	ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ (ECCC)	ᐅᓄᓂᓐ ᐅᓄᓂᓐ (PHC)	0	ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ
202470 06	ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ	ᐅᓄᓂᓐ	ᐅᓄᓂᓐ ᐅᓄᓂᓐ	82.4981	-62.3367	ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ (DND)	ᐅᓄᓂᓐ ᐅᓄᓂᓐ (PHC), ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ (PAH), ᐅᓄᓂᓐ, ᐅᓄᓂᓐ, ᐅᓄᓂᓐ	14500	ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ
202470 25	ᐅᓄᓂᓐ Tx ᐅᓄᓂᓐ	ᐅᓄᓂᓐ	ᐅᓄᓂᓐ ᐅᓄᓂᓐ	82.4528	-62.5020	ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ (DND)	ᐅᓄᓂᓐ ᐅᓄᓂᓐ (PHC)	600	ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ
202470 29	ᐅᓄᓂᓐ ᐅᓄᓂᓐᐅᓄᓂᓐ	ᐅᓄᓂᓐ	ᐅᓄᓂᓐ ᐅᓄᓂᓐ	82.4998	-62.3611	ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ (DND)	ᐅᓄᓂᓐ ᐅᓄᓂᓐ (PHC), ᐅᓄᓂᓐ, ᐅᓄᓂᓐ, ᐅᓄᓂᓐᐅᓄᓂᓐ, ᐅᓄᓂᓐ ᐅᓄᓂᓐ (BTEX), ᐅᓄᓂᓐ, ᐅᓄᓂᓐ, ᐅᓄᓂᓐ	3	ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ
700690 14	ᐅᓄᓂᓐ - ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐᐅᓄᓂᓐ	ᐅᓄᓂᓐ	ᐅᓄᓂᓐ ᐅᓄᓂᓐ	79.9977	-85.8406	ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ (DND)	ᐅᓄᓂᓐ ᐅᓄᓂᓐ (PHC), ᐅᓄᓂᓐ, ᐅᓄᓂᓐ, ᐅᓄᓂᓐᐅᓄᓂᓐ, ᐅᓄᓂᓐ ᐅᓄᓂᓐ (BTEX) ᐅᓄᓂᓐ ᐅᓄᓂᓐ	1755	ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ ᐅᓄᓂᓐ







ᐱᑭᐱᑦ ᑕᐱᑦᑕᑦᑕᑦ: ᑕᐱᑦᑕᑦᑕᑦ ᑕᐱᑦᑕᑦᑕᑦ  
ᑕᐱᑦᑕᑦᑕᑦ ᑕᐱᑦᑕᑦᑕᑦ ᑕᐱᑦᑕᑦᑕᑦ  
ᑕᐱᑦᑕᑦᑕᑦ ᑕᐱᑦᑕᑦᑕᑦ ᑕᐱᑦᑕᑦᑕᑦ  
ᑕᐱᑦᑕᑦᑕᑦ 3-18 2023



ᑕᐱᑦᑕᑦᑕᑦ - ᑕᐱᑦᑕᑦᑕᑦ 17, 2023



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- ᓄᓇᑦᑕᑦ ᐃᑦᑲᑦᓂᓴᑦᑕᑦ ᑦᓴᑦᓴᑦᑦᑦᑦ ᑕᑦᐃᑦᐃᑦᑕᑦᑦᑦ, ᐅᓯᓴᓯᑦᑕᑦ ᐃᑦᑦᑦ ᑕᑦᐅᑦᑦ ᓯᑦᑕᑦ ᑕᑦᑕᑦᑕᑦᑦ ᐃᓴᑦᑦ ᑲᓇᑕᑦ ᐃᓴᑦᑦ ᐱᑦᑕᑦᓂᓴᑦᑕᑦᑦ ᐃᑦᓴᑦᑦᑦ. ᑲᓯᓴᑦᑦᑦ ᑦᓴᑦᓴᑦᑦᑦᑦ ᐃᑦᓂᑦᐅᑦᑦ ᑕᐃᑲᑦᓂᓴᑦᑕᑦᑦ ᐱᓴᓴᑦᑕᑦᑦ, ᑕᓴᓇᑕᑦ ᑲᓯᓴᑦᑦᑦ ᐅᓯᓴᓯᑦᑕᑦᑦ ᐅᑦᑕᑦᑦᑦ ᑦᑲᓄᑦ ᐱᑦᑕᑦᑕᑦᑦᑦᑦ ᑦᓴᑦᑦᑦ ᐅᑕᑕᑦᑦᑦᑦᑦᑦ. ᓯᑦᑕᑦ, ᓇᑦᓯᓇᓯᑦᑦᑦ ᓄᓇᑦᑕᑦ ᐱᑦᑲᑕᑦᐅᑦᑦ ᐅᑕᑕᑦᑦᑦᑦᑦᑦ ᐅᑕᑕᑦᑦ ᑲᑕᑦᓴᑦᑦᑦᑦᑦᑦᑦ ᐅᑕᑕ ᐱᑦᑕᑦᓂᓴᑦᑦᑦ ᐱᑦᑕᑦᑕᑦᑦᑦᑦᑦ.

ᑦᑭᑭᑦᑕᑦ ᐃᓄᐃᑦ ᑲᑕᑦᓴᑦᑦᑦᑦᑦ ᑕᑦᑕᑦᑦᑦᑦᑦ ᓄᓇ ᑦᑲᑦᑲᑦᓂᓴᑦᑦᑦ ᑦᓴᑦᓴᑦᑦᑦᑦ ᐅᑕᑕ ᐱᑦᑕᑦᓂᓴᑦᑦᑦᑦᑦ ᐃᑦᑦᑦ (IPCA)

- ᐃᑦᑲᑦᓂᓴᑦᑦᑦ ᑦᑭᑭᑦᑕᑦ ᐃᓄᐃᑦ ᑲᑕᑦᓴᑦᑦᑦᑦᑦ ᑕᑦᑕᑦᑦᑦᑦᑦ ᑕᑦᐃᑦᐃᑦᑕᑦᑦᑦ, ᓇᑦᓯᓇᓯᑦᑦᑦ ᐅᑕᑕᑦᑦᑦ ᐅᑕᑕᑦᑦᑦᑦᑦ ᐅᑕᑕᑦᑦᑦᑦᑦ ᐅᑕᑕᑦᑦᑦ ᐅᑕᑕᑦᑦᑦᑦᑦ ᑦᑲᓄᑦ ᐅᑕᑕᑦᑦᑦᑦᑦᑦ ᐱᑦᑕᑦᓂᓴᑦᑦᑦᑦ ᑦᑭᑭᑦᑕᑦ ᐃᑦᓴᑦᑦᑦ.

ᑭᑦᑕᑦᑦᑦ:

- ᑦᑭᑭᑦᑕᑦ ᐃᓄᐃᑦ ᑲᑕᑦᓴᑦᑦᑦᑦᑦ ᐅᑦᑲᑦᑦᑦᑦᑦ ᐅᑕᑕᑦᑦᑦᑦ ᐅᑕᑕᑦᑦᑦᑦᑦ ᐅᑕᑕᑦᑦᑦᑦᑦ ᑕᑦᑦᑕᑦᑦᑦᑦᑦ.

ᐃᓯᓴᑦᑦ:

- ᐃᓴᑦᑦ ᓯᑦᑕᑦᑕᑦᑦᑦ ᓯᑦᑕᑦᑦᑦᑦ ᐃᓴᑦᑦ ᐅᑕᑕ ᐅᑦᑦᑦᑦᑦ. ᐅᑕᑕᑦᑦᑦᑦ ᐅᑕᑕᑦᑦᑦᑦᑦ ᑦᑕᑦᑦᑦᑦᑦᑦ ᐅᑕᑕᑦᑦᑦᑦᑦᑦ ᑕᑕᑦᑦᑦᑦᑦ ᓯᑦ, ᐅᑕᑕᑦᑦᑦ ᐅᑕᑕᑦᑦᑦ ᓇᑦᑦᑦᑦᑦᑦᑦ ᑦᑲᓄᐃᓴᓯᑦᑦᑦᑦᑦᑦ ᐅᑕᑕᑦᑦᑦᑦᑦ ᑕᐃᓴᑦᑦᑦᑦ ᐅᑕᑕᑦᑦᑦᑦᑦᑦ.

**ᓄᓇᑦᑕᑦ ᓴᑕᐃᑦᑦᑦᑦᑦ**

ᐱᑦᑕᑦᑦᑦᑦ ᓄᓇᑦᑕᑦ ᓴᑕᐃᑦᑦᑦᑦᑦᑦᑦ ᐅᑕᑕᑦᑦᑦ 17, 2023-ᑦᑦ 7:00 ᐅᑦᓄᑦᑦ. ᑲᑦᑕᑦᑦᑦᑦᑦ ᓄᓇᑦᑕᑦ ᐱᑦᑕᑦᑦᑦᑦᑦ, 7-ᑦᑦᑦᑦᑦᑦᑦᑦ ᐃᑦᓄᐃᑦ ᐅᑕᑕᑦᑦᑦᑦ. ᓯᑦᑦ ᐅᑕᑕ ᓴᑕᑦᑦᑦ ᑕᑦᑕᑦᑦᑦᑦᑦᑦᑦ.

ᑭᑦᑕᑦᑦᑦ:

ᐱᓴᓴᑦᑦᑦ ᐃᓄᑦᑦᑦ

- ᓄᓇᑦᑕᑦᑦᑦ ᑲᑦᓯᑦᑦᑦ ᐃᑦᑕᑦᑦᑦ ᐃᓯᓴᑦᑦᑦᑦᑦ ᑕᑦᐃᑦᐃᑦᑕᑦᑦᑦ, ᐃᑦᑦᑦᑦ ᐃᓄᑦᑦᑦ ᐅᑕᑕᑦᑦᑦᑦᑦ ᐅᑕᑕ ᐱᑦᑕᑦᑦᑦᑦᑦᑦ. ᐱᑕᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ ᑦᑭᑭᑦᑕᑦ ᐃᓄᐃᑦ ᑲᑕᑦᓴᑦᑦᑦᑦᑦ ᐱᑦᑕᑦᑦᑦᑦᑦ ᐅᑕᑕᑦᑦᑦᑦᑦᑦ ᐅᑕᑕᑦᑦᑦᑦᑦᑦ.



ᓄᓇᑦᑕᑦᑦᑦ ᑲᑦᑦᑦᑦᑦᑦᑦ ᑕᑦᐃᑦᐃᑦᑕᑦᑦ ᐱᑦᑕᑦᑦᑦᑦ ᑲᑦᑕᑦᑦᑦᑦ, ᐅᑕᑕ 17, 2023.































ክፍል/ክፍሎች/ክፍሎች	ገጽ/ገጽ	ገጽ/ገጽ	ገጽ/ገጽ
ገጽ 1	ገጽ 2	ገጽ 3	ገጽ 4
ገጽ 5	ገጽ 6	ገጽ 7	ገጽ 8
ገጽ 9	ገጽ 10	ገጽ 11	ገጽ 12
ገጽ 13	ገጽ 14	ገጽ 15	ገጽ 16
ገጽ 17	ገጽ 18	ገጽ 19	ገጽ 20
ገጽ 21	ገጽ 22	ገጽ 23	ገጽ 24
ገጽ 25	ገጽ 26	ገጽ 27	ገጽ 28
ገጽ 29	ገጽ 30	ገጽ 31	ገጽ 32
ገጽ 33	ገጽ 34	ገጽ 35	ገጽ 36
ገጽ 37	ገጽ 38	ገጽ 39	ገጽ 40
ገጽ 41	ገጽ 42	ገጽ 43	ገጽ 44
ገጽ 45	ገጽ 46	ገጽ 47	ገጽ 48
ገጽ 49	ገጽ 50	ገጽ 51	ገጽ 52
ገጽ 53	ገጽ 54	ገጽ 55	ገጽ 56
ገጽ 57	ገጽ 58	ገጽ 59	ገጽ 60
ገጽ 61	ገጽ 62	ገጽ 63	ገጽ 64
ገጽ 65	ገጽ 66	ገጽ 67	ገጽ 68
ገጽ 69	ገጽ 70	ገጽ 71	ገጽ 72
ገጽ 73	ገጽ 74	ገጽ 75	ገጽ 76
ገጽ 77	ገጽ 78	ገጽ 79	ገጽ 80
ገጽ 81	ገጽ 82	ገጽ 83	ገጽ 84
ገጽ 85	ገጽ 86	ገጽ 87	ገጽ 88
ገጽ 89	ገጽ 90	ገጽ 91	ገጽ 92
ገጽ 93	ገጽ 94	ገጽ 95	ገጽ 96
ገጽ 97	ገጽ 98	ገጽ 99	ገጽ 100













