

INUIT KNOWLEDGE AND CONSERVATION PLANNING IN THE KITIKMEOT REGION, NUNAVUT

SUBMITTED TO:

**SPENCE BAY HUNTERS AND
TRAPPERS ASSOCIATION, AND
CROWN-INDIGENOUS RELATIONS
AND NORTHERN AFFAIRS CANADA**

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SUNSET OVER THE FROZEN BAY IN FRONT OF GJOA HAVEN, NU PHOTO:G. LJUBICIC

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BACKGROUND

Conservation areas in Inuit Nunangat (Inuit homelands in the Canadian Arctic) are home to and accessed daily by Inuit, utilizing their own knowledge and culture. Enhanced understanding of a range of social and cultural values, preferences, and knowledge can inform marine conservation management decision-making, especially for Inuit-led protected areas. Harvesting, guardianship, monitoring, and social determinants of health are all components of a holistic and integrated Inuit approach to conservation. Inuit rely on animals, birds, fish, plants, and other natural resources for physical and mental wellbeing, in a region that is disproportionately affected by climate change. However, Inuit and their knowledge are often under-represented in marine conservation decision-making.

Nattilingmiut (people of Taloyoak, Nunavut) are working to create Aviqtuuq, an Inuit Protected and Conserved Area (IPCA). The vision for this IPCA is to protect the lands of Boothia Peninsula, and an equal amount of surrounding marine areas, from encroaching oil/gas and mining development. The marine areas around Boothia are also important to Uqsuqtuurmiut (people of Gjoa Haven, on King William Island) for travel, harvesting marine mammals, and caribou migrations. Creating the Aviqtuuq IPCA will provide critical ecological protection and ongoing access to important areas for subsistence harvesting. Aviqtuuq is also designed to provide a new model of social economy and food sovereignty. There is much to learn and lots of work to do to support the IPCA planning.

To date there has not been much focus on marine conservation initiatives in the Kitikmeot Region of Nunavut. To support planning of the emerging IPCA we searched for all available online documents and information (digital grey literature) related to Inuit knowledge and conservation planning in the Kitikmeot Region. This report presents a summary of our findings, as well as some key considerations we noted during our review.

CONSERVED AREAS IN CANADA

In Canada there are several types of conserved/protected areas. These include:

- [Indigenous protected and conserved areas](#);
- [National wildlife areas](#);
- [Migratory bird sanctuaries](#);
- [National, provincial, and territorial parks](#);
- [National marine conservation areas](#);
- [Marine refuges](#);
- [Marine protected areas](#); and
- [Others](#) such as resource management areas, Indigenous territories, and watersheds.

Box 1

The Nunavut Agreement and Conservation Areas

The Nunavut agreement recognizes that conservation areas and parks are desirable. It outlines how protected areas should be established:

"...which includes meaningful community involvement, joint planning and management, and impact and benefit measures related to protected areas.

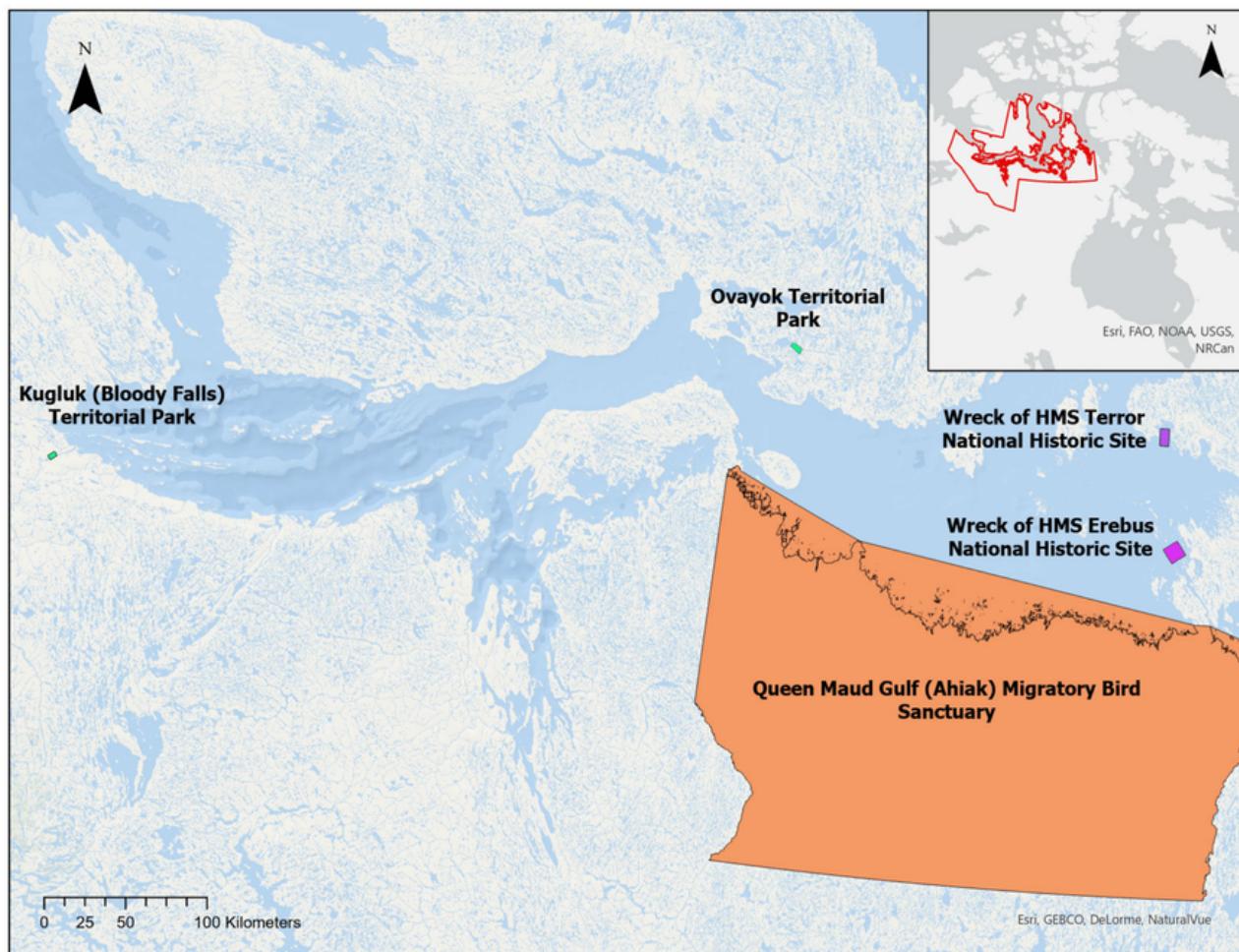
[The Nunavut Agreement] recognizes that parks are important for tourism, recreation, conservation, and economic development in Nunavut, and ensures that these benefits are maximized for Inuit... and it ensures that Inuit can continue to do everything they could do on the land before the [Nunavut Agreement] was signed. It makes sure Inuit can continue to hunt and fish in parks, and gives Inuit an active role in decision-making concerning things like harvesting, carving stone, and management of parks and conservation areas."

(Nunavut Parks, n.d)

PROTECTED AREAS IN THE KITIKMEOT REGION, NU

In the Kitikmeot Region of Nunavut there are four protected areas:

- [Ahiak \(Queen Maud Gulf\) Migratory Bird Sanctuary](#);
- [Ovayok Territorial Park](#);
- [Kugluk \(Bloody Falls\) Territorial Park](#); and
- [Wrecks of HMS Erebus and HMS Terror National Historic Site](#).



Protected areas in the Kitikmeot Region, Nunavut.

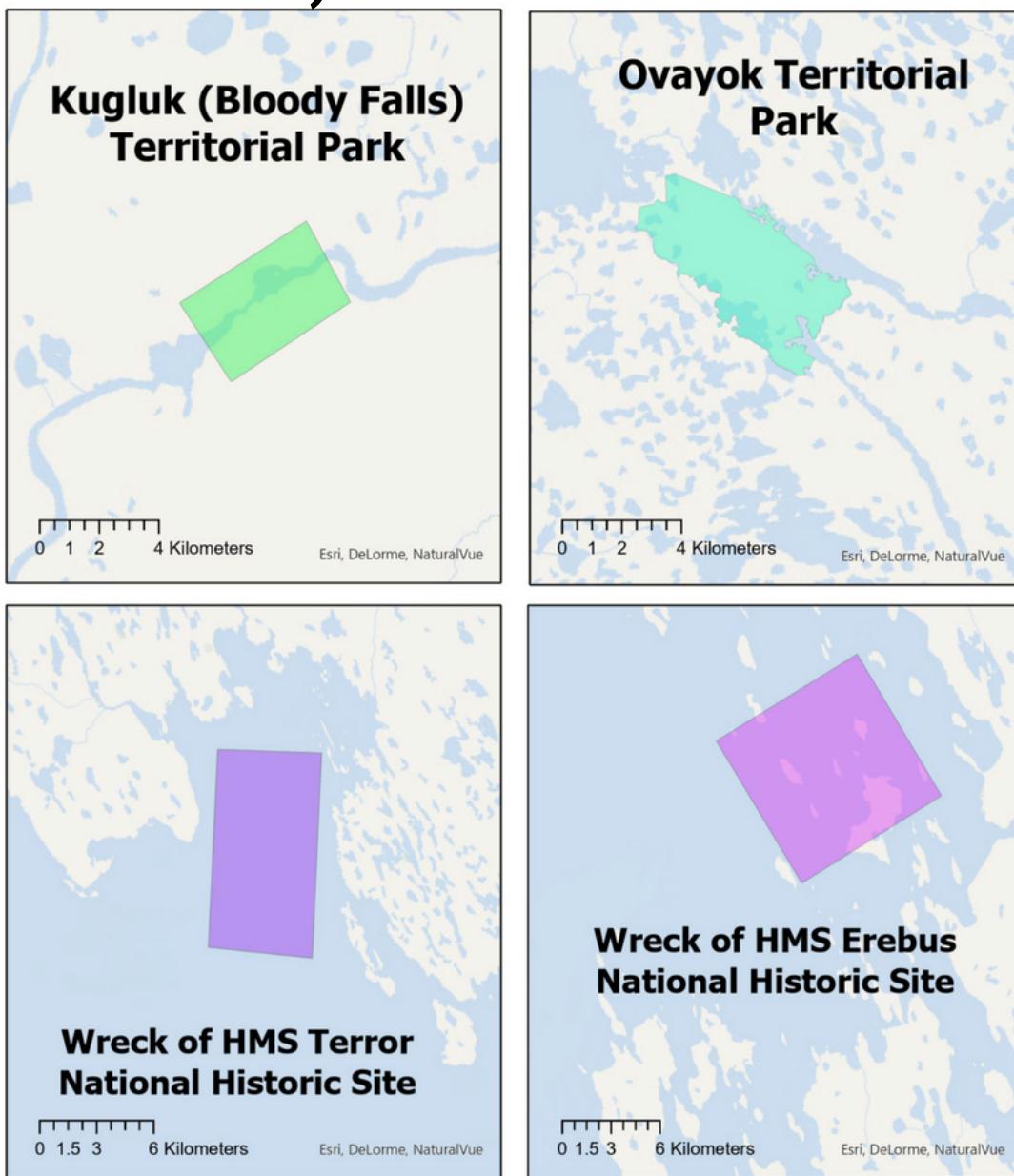
Source: Canadian Protected Area and Conserved Areas Database. 2022. Environment and Climate Change Canada.

<https://open.canada.ca/data/en/dataset/6c343726-1e92-451a-876a-76e17d398a1c>.

Source: Wrecks of HMS Erebus and HMS Terror National Historic Site. 2018. Parks Canada. Accessed through the Directory of Federal Heritage Designations.

https://www.pc.gc.ca/apps/dfhd/page_nhs_eng.aspx?id=334&i=83824

PROTECTED AREAS IN THE KITIKMEOT REGION, NU (CONTINUED)



Territorial Parks and National Historic Site locations in the Kitikmeot Region, Nunavut.

AHIAK (QUEEN MAUD GULF) MIGRATORY BIRD SANCTUARY

[Ahiak \(Queen Maud Gulf\) Migratory Bird Sanctuary](#) is home to many birds, caribou and many muskoxen, as well as many ringed seals offshore. It has been and still is a culturally important place for Inuit who often travel to the area from Cambridge Bay, Gjoa Haven, and Umingmaktok to harvest fish, berries, eggs, birds, and wildlife.

GOVERNANCE

Ahiak Migratory Bird Sanctuary (MBS) is

- **Managed** by Environment and Climate Change Canada (ECCC) in partnership with the Ahiak Area Co-management Committee (ACMC).
- **The Ahiak ACMC** is an advisory committee responsible for day-to-day management of the Ahiak MBS.

INUIT KNOWLEDGE IN DECISION-MAKING

- The ACMC members, appointed by the Kitikmeot Inuit Association and Canadian Wildlife Service, represent the communities of Cambridge Bay, Gjoa Haven, and Umingmaktok.
- There is one Inuit Impact and Benefit Agreement (IIBA) for all MBS in Nunavut, including Ahiak. The IIBA ensures that Inuit:
 - a. benefit from the operation and presence of Ahiak MBS; and
 - b. have a say in how Ahiak MBS is managed and what happens in it (NTI 2017).
- The ACMC:
 - reviews permits and advises the Canadian Wildlife Service, however the Minister of Environment and Climate Change has ultimate authority over decisions (veto power).
 - develops the MBS management plan that describes:
 - which activities are allowed, and which activities can be done only with a permit;
 - the Indigenous rights and practices that are protected by the Nunavut Agreement (i.e. anyone enrolled under the Nunavut Agreement does not need a permit to hunt for subsistence purposes in Ahiak MBS); and,
 - if any improvements to the Ahiak habitat are needed and when and where they should be done (ECCC 2019).
- The management plan is used by ECCC staff to guide their decision making, especially about permitting. The ACMC reviews the management plan five years after it was first approved and then every 10 years after that (ECCC 2019).



A KING EIDER PAIR AT AHIAK (QUEEN MAUD GULF) MIGRATORY BIRD SANCTUARY

PHOTO: KATELYN LUFF

Box 2

The 2021 Nunavut Draft Land Use Plan and Conservation

The [2021 Nunavut Draft Land Use Plan](#) is a framework for when, where, and how the land can be used. This includes:

- Wildlife protection and conservation;
- The plan for marine areas of importance, migratory bird habitat sites, caribou, polar bear dens, walrus haul-outs, whale calving areas, and climate change;
- The purpose of conservation planning which is “to protect the natural environment, culturally significant areas, and special places for the benefit of Nunavummiut and all Canadians” (NDLUP page 5); and,
- Future parks and conservation areas, and proposed marine protected areas.

The land use plan does not apply within established territorial and national parks, national historic sites, and national marine conservation areas. However, the Nunavut Planning Commission is involved when parks are being identified and established.

OVAYOK AND KUGLUK (BLOODY FALLS) TERRITORIAL PARKS

[Ovayok Territorial Park](#) has been and continues to be an important summer harvesting site for Inuit. It is located on Victoria Island, 15 kilometers east of Cambridge Bay.

[Kugluk \(Bloody Falls\) Territorial Park](#) has been and continues to be an important fishing place for Inuit. The ancestors of both Inuit and Dene hunted and fished at Kugluk falls. It is located about 13 kilometers south of Kugluktuk. The park is home to many birds, barren-ground caribou, and barren-ground grizzly bears.

GOVERNANCE

Ovayok and Kugluk Territorial Parks are:

- Managed jointly by the Government of Nunavut and communities;
- Each park has a Community Joint Planning and Management Committee (CJPMC); and,
- The CJPMCs advise on and recommend how to plan, establish, operate, and manage their respective park.

INUIT KNOWLEDGE IN DECISION-MAKING

- CJPMC members from Cambridge Bay (Ovayok) and Kugluktuk (Kugluk) are appointed by Nunavut Parks and the Kitikmeot Inuit Association.
- There is one Umbrella Inuit Impact and Benefit Agreement (IIBA) for all territorial parks in Nunavut, including Ovayok and Kugluk. The IIBA ensures that:
 - all park planning and management is done jointly by Inuit and the Government of Nunavut.

The CJPMCs develop a Park Master Plan and Park Management Plan for their respective park. The Government of Nunavut and communities management the parks together.

Community members and organizations are involved at every stage including:

- approving the concept for the park;
- guiding, commenting on and approving a feasibility study;
- planning, establishing, and operating the park.

Box 3

Establishing a Territorial Park in Nunavut

The Government of Nunavut Department of the Environment is responsible for, "Parks, tourism, wildlife management, economic development and other matters related to activities on the land, and how people use and benefit from this resource in Nunavut". Nunavut Parks works closely with community members when developing, planning, and managing parks and conservation areas (Nunavut Parks n.d.).

The [Nunavut Parks website](#) outlines in detail the various stages involved when establishing a park in Nunavut, including:

- identifying an Area of Interest (including those identified by communities);
- assessing feasibility;
- establishing the park; and,
- operating the park.



COMMUNITY JOINT PLANNING & MANAGEMENT COMMITTEE
ON THE ROAD TO KUGLUK (BLOODY FALLS) TERRITORIAL PARK, KUGLUKTUK
PHOTO: NUNAVUT PARKS

WRECKS OF HMS *EREBUS* AND HMS *TERROR* NATIONAL HISTORIC SITE

[Wrecks of HMS Erebus and HMS Terror National Historic Site](#) is designed to protect the shipwrecks of the same name, which were lost in the 1840s and located in 2014 and 2016. Public access is not allowed, except by Nunavut Inuit for harvesting purposes. Gjoa Haven, is the closest community to the shipwrecks, about 15 km away.

GOVERNANCE

Wrecks of HMS Erebus and HMS Terror is **the first National Historic Site to be jointly managed by Parks Canada and Inuit.**

- The Franklin Interim Advisory Committee (FIAC) advises on the management of the wrecks until an Inuit Impact and Benefit Agreement (IIBA) is finalized between the Kitikmeot Inuit Association and Parks Canada. The IIBA is currently being negotiated.
- Canada and the Inuit of Nunavut, through Inuit Heritage Trust and Parks Canada, are joint owners of the artefacts from the wrecks and have a Memorandum of Understanding "detailing how the two organizations will work together to protect, study, conserve and share these important artefacts" (Parks Canada, 2019).

INUIT KNOWLEDGE IN DECISION-MAKING

- Inuit Qaujimajatuqangit played a pivotal role in the discovery of the wrecks.
- The FIAC includes representatives from the Kitikmeot Inuit Association, Inuit Heritage Trust, community members, Government of Nunavut as well as Parks Canada and the tourism and heritage industry.



The FIAC and Parks Canada co-developed a Guardians Program for the wrecks which involves Gjoa Haven community members who monitor and protect the wreck sites. Parks Canada works closely with [Nattilik Heritage Centre](#) and the Guardians when conducting archeological work, including monitoring and studying changes to the wrecks.

INITIATIVES HAPPENING IN THE KITIKMEOT REGION THAT CAN CONTRIBUTE TO MARINE CONSERVATION

Projects focused on Inuit knowledge and conservation have been happening more in recent years. These cover a range of topics including:

- documenting Inuit-identified recommendations for low-impact shipping corridors;
- learning about caribou, community, and well-being; and,
- harvest studies.

Several marine monitoring initiatives have also been made possible through the Ocean Protections Plan and partnerships with Inuit communities.

The knowledge documented and data collected through these initiatives, are an important body of evidence to inform marine conservation decision-making. The processes and approaches used to plan, implement, and manage these initiatives can serve as models for current and future marine conservation initiatives and ocean monitoring. Conservation-related projects also provide guidance and insight into best practices, lessons learned, and the path to meaningful involvement of - and leadership by - Inuit.



Arctic char drying outside of Gjoa Haven, NU.

Photo: Gita Ljubicic

INUIT MARINE MONITORING PROGRAM

ABOUT

Summary: The [Inuit Marine Monitoring Program](#) (IMMP) is an Inuit-led marine vessel monitoring program focused on marine vessel traffic and expanding the role of Inuit in shipping management.

Timeline: 2017 - ongoing

Location: Cambridge Bay (and additional communities in Inuit Nunangat)

Led by: Nunavut Tunngavik Incorporated (NTI)

INUIT INVOLVEMENT

- Led by NTI to enhance the role Inuit play in shipping management.
- The Kitikmeot Inuit Association identified core areas of interest to monitor.
- The Ekaluktutiak Hunters and Trappers Association (EHTA) identified local Inuit hunters to hire as monitors, and key locations to monitor.
- Inuit marine monitors organize and use Inuit knowledge as they observe and record vessel activities in their area, then report back to Cambridge Bay community members.
- EHTA identified in which culturally/environmentally significant areas to place real-time vessel-tracking technology, Automatic Identification System (AIS) transmitter.
- AIS data are transmitted into Cambridge Bay for community members to access.

POTENTIAL CONTRIBUTION TO MARINE CONSERVATION

- Multiple types and sources of accurate, real-time information and observations that incorporate local Inuit Knowledge are made available by Inuit for Inuit. This helps community members know what shipping, yachting, and tourism activities are happening near Cambridge Bay and near their harvesting areas.
- The information gathered is important when making decisions that may affect current and future disturbances to wildlife and wildlife health, and possible interferences with hunting and cultural practices.
- The information helps the community develop and implement policies or guidelines in the future, especially for the Northwest Passage.

ARCTIC CORRIDORS AND NORTHERN VOICES

ABOUT

Summary: The [Arctic Corridors and Northern Voices](#) research project increased understanding of community-identified impacts of marine shipping and documented recommendations for managing shipping in 14 communities across Inuit Nunangat.

Timeline: 2017 - 2020

Location: Cambridge Bay, Gjoa Haven (and 12 other communities in Inuit Nunangat)

Led by: the Environment Society and Policy Group at University of Ottawa (uOttawa), in partnership with the Ekaluktutiak Hunters and Trappers Organization in Cambridge Bay; and in Gjoa Haven: Ikaarvik, Qiqirtaq High School, Gjoa Haven Hunters and Trappers Organization, and the Hamlet of Gjoa Haven.

INUIT INVOLVEMENT

- 20 Inuit and Northern youth cultural liaisons co-developed and co-facilitated participatory mapping and discussion workshops, and community open houses.
- 20 Cambridge Bay and Gjoa Haven community members shared their expert knowledge of
 - culturally significant marine areas;
 - marine vessel impacts on local people, wildlife, and environment; and,
 - recommendations for managing ship traffic including in the Government of Canada proposed [Low-Impact Shipping Corridors](#).

POTENTIAL CONTRIBUTION TO MARINE CONSERVATION

- Information about culturally significant marine areas, wildlife presence and habitat, harvesting activities, potential impacts of marine vessels, and recommendations designed to minimize marine vessel impacts provide important baseline data. These data can be used to generate indicators and undertake assessments for use by decision-makers when developing guidelines for conservation management.

ENHANCED MARITIME SITUATIONAL AWARENESS PROGRAM

ABOUT

Summary: The [Enhanced Maritime Situational Awareness](#) (EMSA) program is a user-friendly web platform that provides marine environmental information about local waters, including marine vessel activity.

Timeline: 2018 - ongoing

Location: Cambridge Bay (and numerous communities across Canada)

Led by: Transport Canada, and co-developed with Indigenous communities and industry

INUIT INVOLVEMENT

- Ekaluktutiak Hunters and Trappers Association was a pilot project partner.
- Technology is used by Cambridge Bay to increase ocean awareness.
- We were unable to find information about the Inuit communities' role. Pilot programs were hosted in Cambridge Bay, Nain, and Tuktoyaktuk.
- Transport Canada reports, "working with Indigenous communities across the country to develop, test, and refine [EMSA]...to make sure it meets regional and local needs...use their local knowledge and expertise to test, provide feedback, and improve the maritime awareness information system" (Transport Canada n.d. p.1).

POTENTIAL CONTRIBUTION TO MARINE CONSERVATION

- Enables community members to access near real-time information about vessel traffic, weather, ice, wind, wildlife, pollution, and sensitive areas.
- Accessing this information gives community members a chance for everyone in Cambridge Bay to have the 'same picture' of what is happening.
- Having that common picture can make it easier for community members to collaboratively plan, analyze the information, and make decisions.
- Community members can use the information to plan the routes that vessel should take, identify sensitive areas, protect the environment, and decide how to respond to concerns about future threats to local habitat and marine activities.

CUMULATIVE EFFECTS OF MARINE SHIPPING

ABOUT

Summary: The [Cumulative Effects of Marine Shipping](#) (CEMS) program is a national framework for assessing the impacts (cultural, social, environmental) of marine shipping.

Timeline: 2017 - ongoing

Location: Cambridge Bay (and numerous communities across Canada)

Led by: Transport Canada, and guided by the Victoria Island Waterway Safety Committee (VIWSC).

INUIT INVOLVEMENT

- Ekaluktutiak Hunters and Trappers Association (EHTA) in Cambridge Bay jointly conducts the CEMS pilot project in Cambridge Bay and formed the VIWSC.
- The VIWSC includes representatives from EHTA, Nunavut Tunngavik Inc., the Kitikmeot Inuit Association, Inuit Marine Monitoring Program, the Kitikmeot Regional Wildlife Board, Canadian Rangers, Cambridge Bay Elders and local hunters, and other Arctic communities involved in Oceans Protection Plan initiatives.
- The VIWSC meets quarterly to move Oceans Protection Plan activities forward in the region, and co-developed Terms of Reference (goals, responsibilities, roles, decision-making processes etc.) for the CEMS program.

POTENTIAL CONTRIBUTION TO MARINE CONSERVATION

- Partners with diverse expertise develop a framework to understand an activity's effect on the ocean (such as cumulative effects of shipping).
- Minimizes duplication of efforts since it brings together existing data and knowledge.
- Makes it possible for the effects of activities such as shipping to be addressed proactively (before they become a bigger problem).
- The partnered approach leads to deeper understanding of the potential effects of activities such as shipping on Inuit and the environment.
- Enables development of tools that are relevant for and tailored to the region.

PERSPECTIVES OF GJOA HAVEN COMMUNITY MEMBERS ON TOURISM DEVELOPMENT

ABOUT

Summary: A research project documenting [Gjoa Haven community members' perspectives and recommendations](#) for tourism development related to the ongoing establishment of the Wrecks of HMS *Erebus* and HMS *Terror* National Historic Site.

Timeline: 2020

Location: Gjoa Haven

Led by: Environment Society and Policy Group at the University of Ottawa with support from the Hamlet of Gjoa Haven and the Nattilik Heritage Center.

INUIT INVOLVEMENT

- 3 Gjoa Haven youth raised awareness about the study, recruited participants, and co-facilitated interviews with community members.
- 17 Gjoa Haven residents participated in interviews, sharing their views and recommendations for tourism development related to the establishment of Wrecks of HMS *Erebus* and HMS *Terror* National Historic Site.

POTENTIAL CONTRIBUTION TO MARINE CONSERVATION

- This study was an opportunity for community members to express concerns about future tourism development, which could be addressed during marine conservation planning, before they become a problem.
- The results from this kind of study can support communities to plan, develop, and manage tourism in a particular area of interest (e.g. a protected area).
- This study identified that:
 - an increase in visitors in areas beyond a community, can impact the community itself; and,
 - it is critical to plan for tourism before the tourism gets started.
- This study documented key factors to consider as part of marine conservation planning; which kind of tourism should be allowed or restricted; community readiness; infrastructure and resource needs; community benefits and opportunities.

TALOYOAK LAND GUARDIANS EXPAND DUTIES TO INCLUDE OCEANS AND FRESHWATER

ABOUT

Summary: [Land guardians have expanded their responsibilities](#) to include patrolling and monitoring freshwater and oceans in the Boothia Peninsula region.

Timeline: 2022 - ongoing

Location: Taloyoak

Led by: Taloyoak Guardians

INUIT INVOLVEMENT

- Inuit Guardians are trained experts who “act as the eyes and ears of traditional lands and waters” (Kennedy, 2022).
- Inuit Guardians are measuring and monitoring boat traffic, species population diversity and health, and impacts of climate change in the ocean and freshwater environments.

POTENTIAL CONTRIBUTION TO MARINE CONSERVATION

- This program presents opportunities to pass on knowledge (Inuit and scientific) between generations and protect the ocean, while harvesting country food sustainably; an integral aspect of Inuit-led marine conservation.
- Guardians are compiling and expanding their own collection of observations and data that can inform marine conservation decision-making.

CANADIAN RANGER OCEAN WATCH

ABOUT

Summary: [Canadian Ranger Ocean Watch](#) (CROW) is a program where, during the ice-covered period, Canadian Rangers travel by snowmobile to measure environmental conditions such as: the thickness and temperature of snow and ice; and, sea water characteristics (e.g. the temperature, depth, amount of salt (salinity), plant material, etc.). The Rangers also share their view on the conditions they are measuring and ways that they might be changing. The work of the Rangers helps to improve researchers' understanding of how local conditions compare with information in satellite images.

Timeline: 2014 - 2017

Location: Kugluktuk, Cambridge Bay, Gjoa Haven and Taloyoak

Led by: Canadian Rangers as part of their regular Department of National Defence activities. Fisheries and Oceans Canada provides equipment and training, and they also study the information that the Rangers collect.

INUIT INVOLVEMENT

- Canadian Rangers conduct baseline ocean monitoring while applying their highly honed (local) Inuit knowledge and observational skills.
- Canadian Rangers conduct observations near communities in the Kitikmeot Region, year-round and over a number of years.

POTENTIAL CONTRIBUTION TO MARINE CONSERVATION

- Observations like those being collected through CROW are rare in that they are being done year-round. More year-round continuous (baseline) observations are needed in Inuit Nunangat so that any changes in the marine ecosystem that might affect animals, birds, fish, and plants, and the people who harvest them, can be detected.
- CROW creates a better understanding of changes in the ocean and can help with predicting when break-up will happen.
- CROW contributes to other studies about marine ecosystems and climate change.
- The partnered approach ensures that when ocean science is conducted it is informed by local ocean conditions, community members' priorities, and Inuit knowledge.

SMARTICE

ABOUT

Summary: [SmartICE](#) is an Indigenous-led and operated northern social enterprise. Through the integration of monitoring technology and Inuit knowledge of sea ice, the program offers community members tools and services that support climate change adaptation.

Timeline: 2013 - ongoing

Location: Cambridge Bay, Gjoa Haven, Kugluktuk, Taloyoak (and 25+ other communities)

Led by: Inuit Community Management Committees (CMCs) in each SmartICE-serviced community. The social-enterprise Board of Directors is currently 43% Indigenous and 43% female.

INUIT INVOLVEMENT

- SmartICE either partners directly with an existing community organization to develop sea ice monitoring and safety programs, or convenes a CMC made up of 6-10 community representatives to ensure all activities are community-led (e.g., Hamlet Council, Hunters and Trappers Association, Elders, Search and Rescue, Wildlife Officer, tourism outfitters, and young hunters/youth).
- The CMCs govern SmartICE activities in each community and approve new projects.
- The CMCs determine where and when SmartICE monitors the ice, and how to document and communicate their Inuit knowledge for safe sea ice travel.
- SmartICE hires community coordinators to support the operation of each CMC, and these staff also play the role of Knowledge Co-Production Coordinators where Inuit Knowledge projects are being undertaken.

POTENTIAL CONTRIBUTION TO MARINE CONSERVATION

- SmartICE is creating a knowledge database of information about lake and sea ice that can inform marine conservation decision-making.
- SmartICE-generated baseline data can be used to measure and monitor change and inform decisions about existing and future conservation.
- SmartICE support safe travel and harvesting; an integral part of marine conservation.

CONNECTING INUIT ELDERS AND YOUTH: LEARNING ABOUT CARIBOU, COMMUNITY, AND WELL-BEING

ABOUT

Summary: A research project developed to learn about the [connections between caribou, community, and well-being in Gjoa Haven](#). The main focus was on facilitating Elder-youth land camps, and documenting Inuit knowledge of caribou health and implications for local diets, livelihoods and cultural practices.

Timeline: 2011 - 2018

Location: Gjoa Haven

- **Led by:** A land camp planning committee established in Gjoa Haven, and Carleton University researchers.

INUIT INVOLVEMENT

- Guided by a Community Research Coordinator and Elders in a local land camp planning committee established to plan and facilitate the camps.
- Elders and hunters participated in 39 interviews, 5 workshops, and 3 land camps.
- Local Inuit and northern youth participated in on-the-land activities and workshops.
- Project partners included the Kitikmeot Inuit Association, Elder's Qaggivik, Nattilik Heritage Centre, Qiqirtaq High School, Tahiurtiit (Justice) Committee, District Education Authority, Hamlet of Gjoa Haven, and Gjoa Haven Hunters and Trappers Associated supported the three land-camps.

POTENTIAL CONTRIBUTION TO MARINE CONSERVATION

- This study identified Inuit-determined approaches for research and education, centering inter-generational learning opportunities, land-based learning, and uplifting community well-being.
- This study highlights the importance of local marine environments for land mammals like caribou, and the challenges posed by increased marine vessel traffic and changing sea ice conditions.

HARVEST MONITORING

ABOUT

Summary: A collaborative harvest bio-monitoring program using inReach Satellite devices and a series of atlases supported by the [Nunaliit Atlas Framework](#) to monitor harvesting practices and support local priorities for harvest economies. Harvesters complete questionnaires after each harvesting trip to link to what was tracked using the inReach devices. Harvesters can use custom forms on the inReach devices to record harvesting success and ecological observations, as well as to request emergency services. Taloyoak joined the program in 2021.

Timeline: 2015 - ongoing

Location: Gjoa Haven and Taloyoak

Led by: Gjoa Haven Hunters and Trappers Association (HTA), Spence Bay (Taloyoak) Hunters and Trappers Association (HTA), Geomatics and Cartographic Research Centre at Carleton University.

INUIT INVOLVEMENT

- Numerous workshops and interviews, to learn about Elders', active harvesters', and women's knowledge and experiences of harvesting and wildlife conservation.
- 5 youth interns and 3 harvest facilitators employed long-term to manage and lead community-based project operations and co-lead community event planning.
- Project methods and information sharing are co-developed with the HTAs.
- Team members receive training in Global Positioning System (GPS) use, program management, data stewardship, and hosting community events.
- Youth interns and harvest facilitators lead day-to-day in-community operations.

POTENTIAL CONTRIBUTION TO MARINE CONSERVATION

- Informs governmental and non-profit programs responsible for supporting Inuit food security (i.e. Nutrition North, Government of Nunavut Health, Fisheries and Sealing).
- Identifies potential avenues for fostering local and regional harvest economies.
- Provides community partners with documented knowledge and data to support their local goals for developing protected areas.

FOSTERING INDIGENOUS SMALL-SCALE FISHERIES FOR HEALTH, ECONOMY, AND FOOD SECURITY (FISHES)

ABOUT

Summary: Fostering Indigenous Small-scale fisheries for Health, Economy, and food Security ([FISHES](#)) is a research project with the aim of connecting “genomics and fisheries science with Indigenous Knowledge in support of sustainable harvests of the most preferred and beneficial local use of fisheries for subsistence, recreational and commercial harvesting” (FISHES 2018).

Timeline: 2016 - ongoing

Location: Cambridge Bay, Gjoa Haven, and Taloyoak

Led by: Sixteen Indigenous (Inuit, Cree, and Dene) partners, communities, government, non-government, and universities

INUIT INVOLVEMENT

- The Spence Bay and Gjoa Haven Hunters and Trappers Association (HTA) boards lead the selection of all project activities; including workshop themes, key community contributors, sampling strategies and sites.
- Project themes and goals evolve with the priorities and interests of HTA partners. These priorities are identified through frequent visits to the community, and in-person and online meetings with HTA boards and executives.

POTENTIAL CONTRIBUTION TO MARINE CONSERVATION

- Answers questions about the economics of developing commercial fisheries whilst protecting key fishing locations for community subsistence. Information on regional fish population size, health and distribution can inform ecologically and economically sustainable commercial fishery development.
- Decision-making surrounding fish harvesting is more fully informed when it:
 - integrates different types of knowledge;
 - is guided by rights-holders and stakeholders together; and,
 - considers a range of end-users and opportunities for human well-being (food security, recreational/subsistence/commercial fishing).

KEY CONSIDERATIONS FOR MARINE CONSERVATION INITIATIVES

Through this review we identified seven key considerations that may be relevant and important for the Spence Bay Hunters and Trappers Association (HTA) to consider when planning Aviqtuuq Inuit Protected and Conserved Area (IPCA). We offer these considerations in an effort to further discussions about Inuit-led conservation efforts, and to support enhanced Inuit leadership and self-determination in planning and developing protected and conserved areas in the Kitikmeot Region and beyond.

- 1) The Nunavut Agreement** is an essential reference for the Spence Bay HTA when developing Aviqtuuq IPCA to ensure Inuit rights are upheld. The Nunavut Agreement articulates the importance and desirability of conservation within Nunavut and clearly outlines Inuit rights within conserved areas, as well as Inuit roles in decision-making and management of such areas.
- 2) The 2021 Nunavut Draft Land Use Plan** does not apply within established National Parks, National Marine Conservation Areas, Territorial Parks, and National Historic Sites administered by Parks Canada. When planning Aviqtuuq IPCA it will be important for the Spence Bay HTA to fully understand whether or not the 2021 Nunavut Draft Land Use Plan will apply, and the role of the Nunavut Planning Commission during planning.
- 3) There is one umbrella Inuit Impact Benefit Agreement** for all territorial parks in Nunavut and similarly, one for all Migratory Bird Sanctuaries and National Wildlife Areas in Nunavut. These Inuit Impact Benefit Agreements may be helpful models for future conservation areas. It will be important for the Spence Bay HTA to consider how well these Inuit Impact Benefit Agreements address current needs and priorities of Inuit, and if found lacking then a park/migratory bird sanctuary/ and national wildlife area may not be the most suitable mode of protected area to implement.

KEY CONSIDERATIONS FOR MARINE CONSERVATION INITIATIVES (CONTINUED)

4) Veto power ('the final say') rests with the federal Minister responsible for co-managed (federal government and Inuit) protected areas. Deciding who will have ultimate decision-making authority in protected areas decision-making will be an important aspect of protected areas planning. Should the Spence Bay HTA want Inuit to retain full authority of Aviqtuuq IPCA, a joint federal-Inuit initiative may not be the most appropriate governance model.

5) Critical aspects of governance to discuss and agree upon during Aviqtuuq IPCA planning may include:

- who will represent Inuit;
- what roles Inuit will play; and,
- how and how often decisions will be made.

The range of existing governance structures outlined in this report, among others, can serve as models for the Spence Bay HTA to discuss and refine approaches that best suit their goals for Aviqtuuq IPCA.

6) It will be important to learn from other Inuit-led and co-managed protected areas in the Kitikmeot Region and beyond. A knowledge exchange between communities, organizations and agencies can create valuable learning and partnership opportunities. A review of available digital grey literature related to Inuit knowledge and conservation planning *beyond* the Kitikmeot Region may also be helpful to support the Spence Bay HTA in planning and decision-making surrounding Aviqtuuq IPCA.

7) There is potential to expand this kind of review of conservation initiatives to other SmartICE-partnered communities. Undertaking similar syntheses in other regions can support community/region-specific conservation planning or co-management committees by compiling information on diverse existing protected areas, and informing plans for future Inuit-led conservation, including Aviqtuuq IPCA.

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LIST OF ABBREVIATIONS

ACMC	Area Co-Management Committee
AIS	Automatic Identification System
CEMS	Cumulative Effects of Marine Shipping
CJPMC	Community Joint Planning and Management Committee
CMC	Community Management Committee
CROW	Canadian Ranger Ocean Watch
ECCC	Environment and Climate Change Canada
EHTA	Ekaluktutiak Hunters and Trappers Association
EMSA	Enhanced Maritime Situational Awareness program
FIAC	Franklin Interim Advisory Committee
FISHES	Fostering Indigenous Small-scale fisheries for Health, Economy, and food Security
GPS	Global Positioning System
HTA	Hunters and Trappers Association
IIBA	Inuit Impact and Benefit Agreement
IMMP	Inuit Marine Monitoring Program
IPCA	Inuit Protected and Conserved Area
MBS	Migratory Bird Sanctuary
NDLUP	Nunavut Draft Land Use Plan
NTI	Nunavut Tunngavik Incorporated
NU	Nunavut
VIWSC	Victoria Island Waterway Safety Committee