

# **OLOKHAKTOMIUT COMMUNITY CONSERVATION PLAN Ulukhaqtuum Angalatchivingit Niryutinik**

A plan for the conservation and management of renewable resources and lands  
within  
The Inuvialuit Settlement Region in the vicinity of  
Ulukhaktok, Northwest Territories



Prepared by

The Olohaktomiut Hunters and Trappers Committee,  
Ulukhaktok Community Corporation, and  
The Wildlife Management Advisory Council (NWT), The  
Fisheries Joint Management Committee  
and the Joint Secretariat

2016

**Conservation (Nungorutitailinahuaknik) starts by taking care of the land, if it is looked after it will replenish itself, the same goes for our wildlife. If we limit how much we take and do not waste, future generations will continue to harvest successfully from the land.**

Ulukhaktok Working Group,  
Ulukhaktok, NT, 1994

2016

*The Olokhaktomiut Community Conservation Plan has been prepared in consultation with the Inuvialuit Community in Ulukhaktok and Inuvialuit and non-Inuvialuit bodies with an interest in the area. The undersigned representatives hereby adopt this document for the purpose of guiding policy and resource management in the planning area.*



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Gibson Kudlak  
President  
Olokhaktomiut Hunters and Trappers  
Committee



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Larry Carpenter  
Chair  
Wildlife Management Advisory Council  
(NWT)



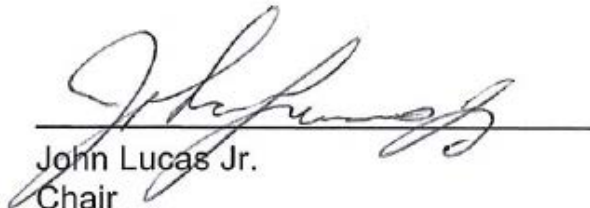
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## IMPORTANT DEFINITIONS AND ABBREVIATIONS

The following important words and abbreviations have been used in the Community Conservation Plan and are explained below.

### Community

Refers to all the Inuvialuit individuals living in the area and the local organizations which represent them. Those organizations include the Hunters and Trappers Committee, Elders, Community Corporation, Community Education Council and Hamlet.

### Conservation

Is ensuring that if we take caribou, there will be caribou the next year and the year after that. The same for anything else. This applies to all uses of the land: if it is used and enjoyed now, it must be left and preserved so that it will be there for the next year and for future years.

### Ecosystem

Refers to all of the plants and animals in an area, including the air, water and land on which they depend. The parts of the ecosystem are interconnected and influence one another. Food and energy flow through the ecosystem and are returned to it. Successful conservation and management depend on the recognition that changing one part of the ecosystem may affect the other parts.

**CCIW** - Canadian Centre for International Waters

**CWS** - Canadian Wildlife Service

**DFO** - Department of Fisheries and Oceans

**DoL** – Department of Lands, GNWT

**DOT** - Department of Transportation

**EIRB** - Environmental Impact Review Board

**EISC** - Environmental Impact Screening Committee

**ENR** - Department of Environment and Natural Resources, GNWT

**FJMC** - Fisheries Joint Management Committee

**GNWT** - Government of the Northwest Territories

**GRRB** - Gwich'in Renewable Resource Board

**GTC** - Gwich'in Tribal Council

**HCC** - Holman Community Corporation (note: now the Ulukhaktok Community Corporation)

**HTC** - Hunters and Trappers Committee

**IFA** - Inuvialuit Final Agreement

**IGC** - Inuvialuit Game Council

**ILA** - Inuvialuit Land Administration

**ILAC** - Inuvialuit Land Administration Commission

**IRC** - Inuvialuit Regional Corporation

**ISR** - Inuvialuit Settlement Region

**ITI** – Industry, Tourism and Investment

**NWT** - Northwest Territories

**OHTC** - Olokhaktomiut Hunters and Trappers Committee

**UCC** - Ulukhaktok Community Corporation

**PWNHC** - Prince of Wales Northern Heritage Centre

**WMAC(NS)** - Wildlife Management Advisory Council (North Slope)

**WMAC(NWT)** - Wildlife Management Advisory Council (Northwest Territories)

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## EXECUTIVE SUMMARY

The **Olokhaktomiut (Ulukhaktok) Community Conservation Plan** is a community-based planning document that was originally prepared in 1993 by the Olokhaktomiut Hunters and Trappers Committee, Ulukhaktok Community Corporation, and Ulukhaktok Elders Committee. Creation of community-based conservation plans was the first objective of the Inuvialuit Renewable Resource Conservation and Management Plan (1988), a document jointly prepared by the Wildlife Management Advisory Council (NWT) and the Fisheries Joint Management Committee in partial fulfilment of their obligations under the Inuvialuit Final Agreement. Numerous Inuvialuit and non-Inuvialuit organizations were consulted during the planning process. A wide range of existing conservation plans were considered by the joint working group and extensive use was made of the Land Use Plan for the Mackenzie Delta Beaufort Sea Region.

The updated 2000 Olokhaktomiut Community Conservation Plan built upon the work of the original document. A Working Group was re-established as part of the review exercise, and extensive consultation was once again undertaken with Inuvialuit and non-Inuvialuit organizations. Government agencies and co- management bodies also contributed a significant amount of time and effort to update the information in the Plan.

In the spring of 2008 the conservation plans were updated with new working groups from each of the Inuvialuit communities.

In early 2015, Community Conservation Plan Working Groups were re-established in all 6 ISR communities. The Working group reviewed the plans, provided feedback of changes and consultation was once again undertaken with Inuvialuit and non-Inuvialuit organizations. In spring of 2016, all 6 Working Groups were brought together for a verification workshop in Inuvik.

The document is intended to provide guidance to all those with an interest in the planning area, but is not a legally binding document.

The Plan contains a brief description of the current conservation and resource management system in the Inuvialuit Settlement Region and describes the strategy to address five broad goals:

1. To identify important wildlife habitat, seasonal harvesting areas and cultural sites and make recommendations for their management.
2. To describe a community process for land use decisions and managing cumulative impacts which will help protect community values and the resources on which priority lifestyles depend.
3. To identify educational initiatives for the Inuvialuit of Ulukhaktok and others interested in the area which will promote conservation, understanding and appreciation.
4. To describe a general system of wildlife management and identify population goals and conservation measures appropriate for each species of concern in the planning area using the knowledge of community and others with expertise.
5. To enhance the local economy by adopting a cooperative and consistent approach to

community decision making and renewable resource management.

All excerpts of other documents included in this plan are not a substitute for the originals; original source documents should be used for legal accuracy or citation purposes.

The Olokhaktomiut Community Conservation Plan will be subject to a progress review and potential amendment every five years or as needed. The HTC is responsible for initiating the review, to be conducted by the Community Conservation Plan Working Group. All feedback should be provided to the Joint Secretariat for integration in updated versions of the Plan. Minor revisions or corrections to the Plan may be sent to the Joint Secretariat at any time, for entry into subsequent versions. A complete review of the Plan by all stakeholders will occur a minimum of every eight years.

Copies of the Plan are available from the Wildlife Management Advisory Council (NWT), P.O. Box 2120, Inuvik, NWT, X0E 0T0. Phone (867) 777-2828.

## ACKNOWLEDGEMENTS

### 1994

The Olokhaktomiut Community Conservation Plan results from the efforts of many people. The Community Conservation Plan Working Group was established to represent the community in the development of a local conservation plan. Working Group members were Mark Ekootak (HTC), Annie Goose (HCC), Morris Nigiyok (Elders), Jimmy Memogana (Community) and Joshua Oliktoak (Hamlet). Development of the plan was facilitated by Randal Glaholt. Comments and guidance were also provided by the many other residents of Ulukhaktok, the Wildlife Management Advisory Council (NWT), Fisheries Joint Management Committee, Environmental Impact Screening Committee, Environmental Impact Review Board, GNWT Department of Renewable Resources, Canadian Wildlife Service, Indian and Northern Affairs Canada, Department of Fisheries and Oceans, the Science Institute of the N.W.T. and others.

### 2000

Revisions to the 2000 Olokhaktomiut Community Conservation Plan could not have been achieved without the dedicated efforts of: Dan Klengenber, Gary Bristow, John Kuneyuna, Mary Kudlak, Jim Heather, Laverna Goose, Lena Egotak, and the staff of the Joint Secretariat. Brian Johnston (Resource Person, WMAC(NWT)) and Michael Muller (GIS Specialist, Joint Secretariat) conducted community consultations and drafted the updated document, based on the recommendations of the community. The current plan is produced and distributed by the Joint Secretariat.

### 2008

The 2008 Olokhaktomiut Community Conservation Plan would have not been such a success if it were not for the following: The Olokhaktomiut Working Group, the Wildlife Management Advisory Council, Fisheries Joint Management Committee and the Joint Secretariat. Also a very big Thank You to the Environment and Natural Resources Department for making the old maps available to the Working Group and drafting the amended maps.

### 2015

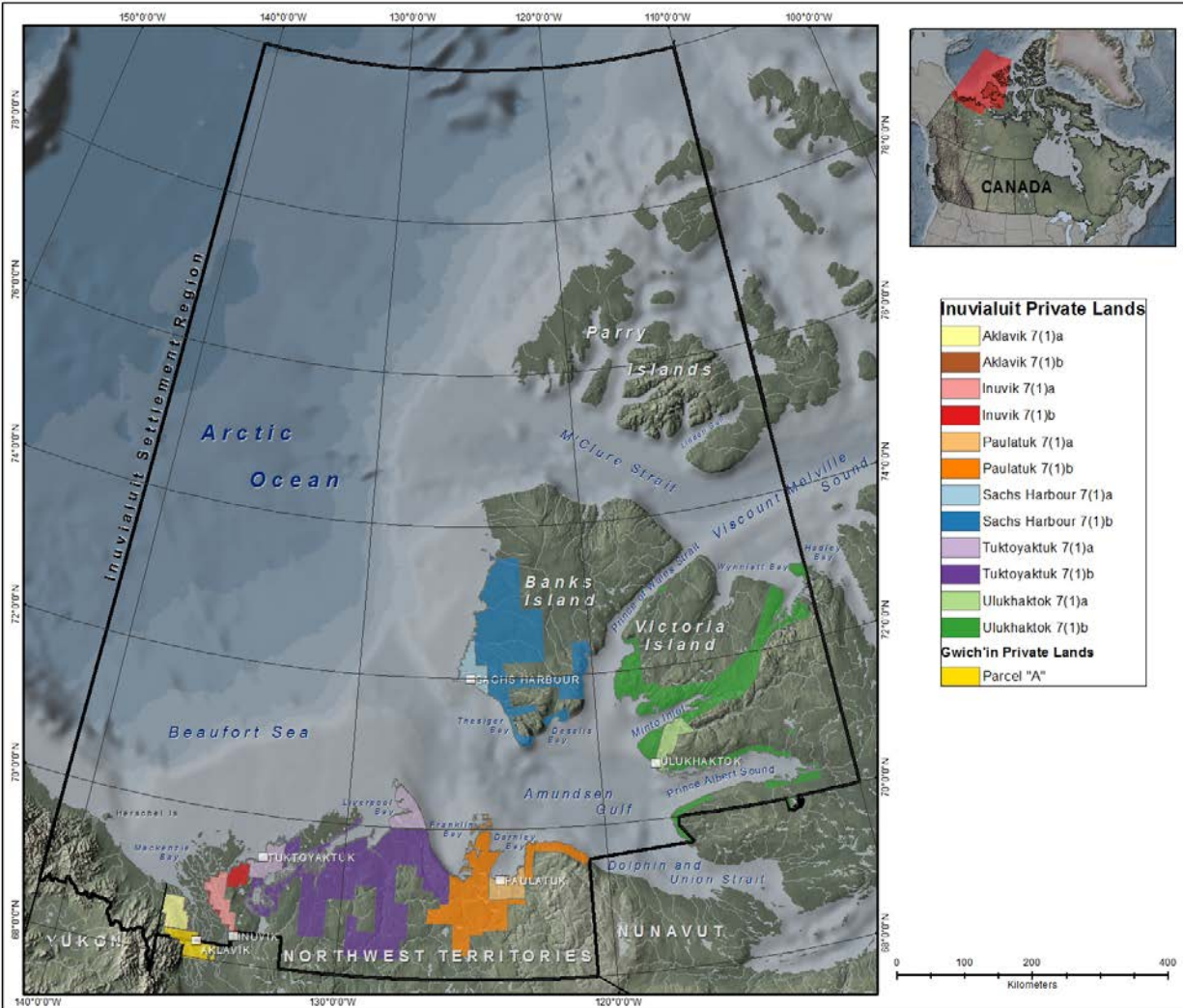
Revisions to the 2015 Olokhaktomiut Community Conservation Plan would not have been so successful without the dedicated efforts of: The Olokhaktomiut Community Working Group (Annie Goose, Margaret Kanayok, Adam Inuktalik, Tiffany Nigiyok), The Wildlife Management Advisory Council (NWT), Fisheries Joint Management Committee & Joint Secretariat. Thanks to CWS, DFO and ENR for reviewing and providing comments and to IRC and ENR for providing GIS support to change the maps. On behalf of the Olokhaktomiut Working Group, we would like to recognize and acknowledge the advice and wisdom of the elders who helped lay out the original document.

# 1 INTRODUCTION

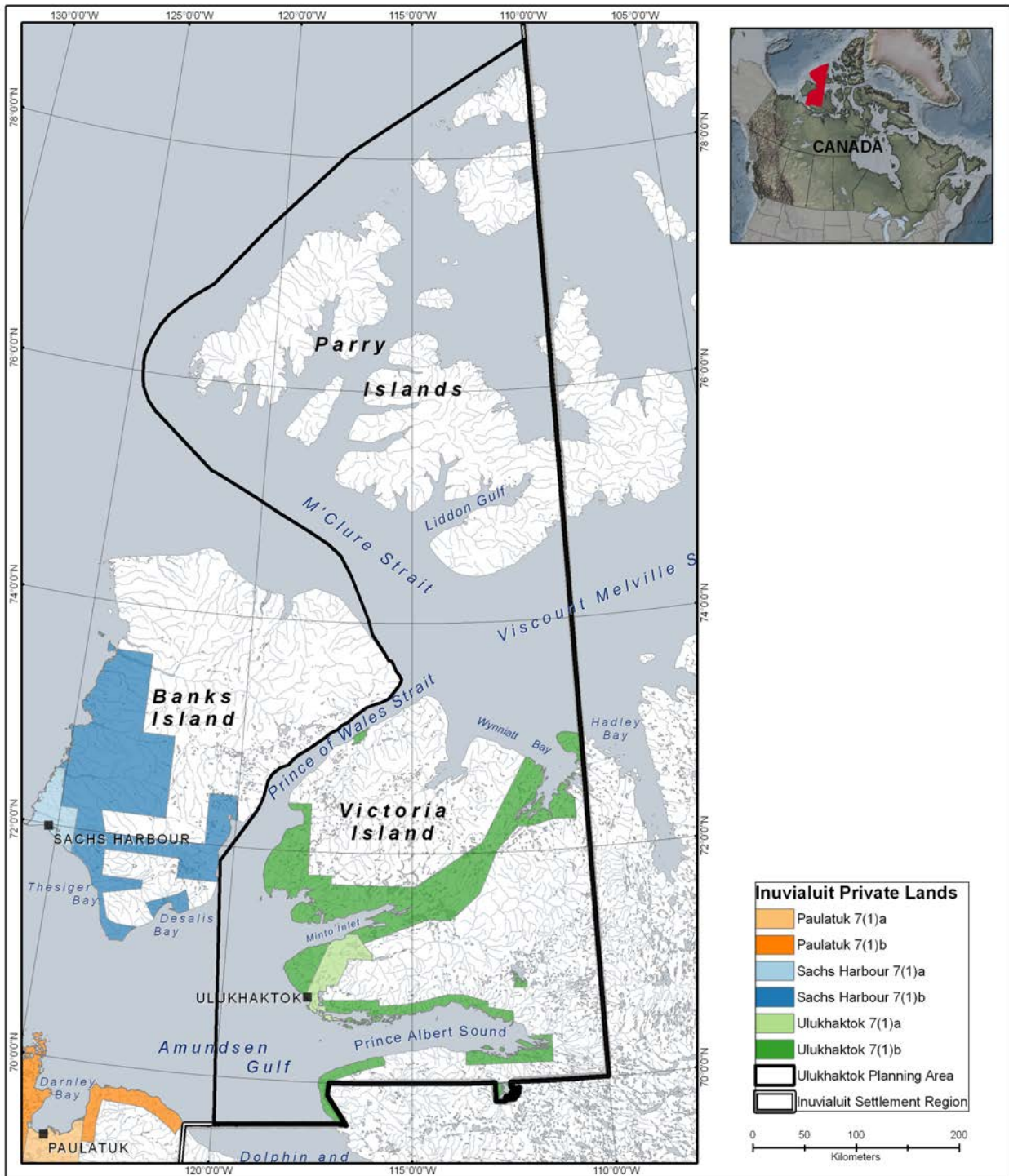
The Inuvialuit of Ulukhaktok have always tried to preserve the land and wildlife in the Ulukhaktok area, from generation to generation. This Conservation Plan will help to manage the renewable and non-renewable resources onshore and offshore, to protect the environment of northwestern Victoria Island and to ensure cultural survival of the Community, in accordance with the *Western Arctic (Inuvialuit) Claims Settlement Act* and the Inuvialuit Renewable Resource Conservation and Management Plan.

Development of the original plan has been coordinated by representatives of the Olokhaktomiut Hunters and Trappers Committee, Ulukhaktok Community Corporation, the Elders Committee, Hamlet Council of Ulukhaktok and a local community representative. To initially prepare this plan, the Ulukhaktok Community Conservation Plan Working Group carefully reviewed conservation plans already completed in other Inuvialuit communities, species management plans, the WMAC (NWT)/FJMC regional plan and the Regional Land Use Plan For the Mackenzie Delta-Beaufort Sea Region. In addition, considerable effort was made to obtain opinion and advice from members of the Community. The plan is intended to express the community's specific goals and objectives with respect to conservation of lands, waters and living resources in the vicinity of Victoria Island (Map 1). The plan describes a process for avoiding land use conflicts and dealing with cumulative impacts. We hope the plan will assist the Inuvialuit and others in ensuring conservation and environmental protection of Victoria Island.

The updating exercise of 2015 that has produced the current version of the Plan was spearheaded by the OHTC and UCC, a newly re-established Community Working Group, and the staff of the Joint Secretariat. Once again, consultation with Inuvialuit and non-Inuvialuit organizations and co-management bodies played an important role in the review process. A multi-stakeholder workshop was held in 2016 to exchange advice and recommendations before the final version of the Community Conservation Plans were drafted.



Map 1. Inuvialuit Settlement Region and Private Lands.



Map 2. Ulukhaktok Conservation Planning Area and Private Lands.

## 1.1 A BRIEF HISTORY AND DESCRIPTION OF THE ULUKHAKTOK AREA

### **Location:**

Ulukhaktok is located approximately 650 km (403 mi) northeast of Inuvik at approximately 70°43' N latitude and 117°43'W longitude on the west side of Victoria Island.

### **History:**

Victoria Island is the ancestral home of the Copper Inuit. In 1911, the explorer Viljalmur Stefansson, visiting the area, reported two Inuit villages with about 250 people in each. These Inuit hunted on Victoria Island and Banks Island (historically known as "Banksland") and occasionally travelled east to King William Island where they traded copper for wood.

Before the arrival of the whaling ships, the people of Victoria Island were engaged in a purely subsistence lifestyle. This lifestyle required seasonal movements that reflected the climate, availability of food, ease of travel, and the limitations and opportunities imposed by the available technology. Typically, families would move in spring to areas along the rivers and inlets of Minto Inlet and Prince Albert Sound to fish and hunt caribou. Spring and summer were an important time for families to get together. In fall and winter, families were more dispersed. Hunting groups typically moved offshore onto the sea ice where seals and polar bears were hunted.

In the early 1900's, fur trading posts were established by the Hudson Bay Company at Walker Bay and Reed Island. The CanAlaska Fur Company also operated a trading post out of Walker Bay for a brief period. With the arrival of the fur traders and trading posts, traditional lifestyles and harvesting patterns began to change. The people began to settle close to the trading posts and to adopt new technology such as firearms and steel traps. Traditional diets were also changed by the introduction of imported foods. These changes resulted in less but more efficient time spent subsistence harvesting, more time spent harvesting and preparing furs and reduced dependency on traditional foods.

Among the first Inuit to visit the current site of Ulukhaktok in conjunction with the fur trade were David Piqtaqana, with his schooner, the "Sea Otter" from Tuktoyaktuk, as well as Fred Carpenter, Bennett Ningaqsiq, Billy Natkusiak (Chief Guide for the Stefansson Expedition, locally known as Billy Banksland) and Jimmy Memogana who came on the schooner "Blue Fox" and other boats out of Sachs Harbour. Unable to reach Tuktoyaktuk from Sachs Harbour due to ice, the two schooners from Sachs Harbour went to Walker Bay for supplies then wintered at the site of what is now Ulukhaktok. White fox and polar bear were very abundant in the area. A year later Jimmy Memogana wintered by himself at Ulukhaktok after being dropped off along with some sled dogs, by Father Boulliard, a Roman Catholic missionary from Kugluktuk who was travelling from Walker Bay to Tuktoyaktuk. Father Boulliard convinced the Hudson Bay and others living in the Walker Bay area to move to Ulukhaktok in 1940. A Roman Catholic Mission was established at Ulukhaktok this same year. In 1960 the Reed Island Hudson Bay Store was closed down and its manager, Billy Joss, moved to Ulukhaktok. The origin of people currently living in Ulukhaktok is thus a mix of those from Walker Bay and Minto Inlet, Tuktoyaktuk and Sachs Harbour, and from Kugluktuk and Reed Island.

The first snow machine arrived in Ulukhaktok around 1969. This change along with the earlier introduction of the outboard motor had a significant effect on the lifestyle of the local people,

further increasing the efficiency of hunters. For example, a hunting trip formerly requiring a week by dog team could now be completed in a day by snow machine. With current technology, hunters can travel faster, pursue game more easily, and carry substantially more gear and harvested wildlife. The increased ability to harvest game has been offset to some extent by the reduced number of dogs to feed and by local consumption of imported and typically expensive foods.

Despite these changes the people of Ulukhaktok have a continued dependence and preference for food locally obtained from the land and coastal waters. Ulukhaktok's close linkage to natural resources of the area continues to be strongly reflected in the community's seasonal activity patterns and cultural expression. The Inuvialuit Final Agreement and the creation of the community conservation plans have in part, arisen out of a recognition of this change in community lifestyles and need to carefully and cooperatively manage resources at the local level.

**Climate:**

Average annual precipitation is 17.8 cm (7 in.) though may be as low as 11 cm (4.3 in.) on other parts of western Victoria Island. The maximum monthly value occurs as summer rains (2-2.5 cm/month). Snowfall peaks in early fall coinciding with the period of largest areas of open water. Lake ice usually remains on about 30% of the lakes until early August. July mean high temperature is 11.4°C (53°F), low 3.3°C (38°F). January mean high is -26.7°C (-16°F), mean low -32.7°C (-27°F). Prevailing winds are from the east averaging 18.2 km/h (11 mi/h).

**Geology:**

Victoria Island lies on a stable Paleozoic platform that includes portions of the Canadian Shield and the Arctic Platform and which are attached to the North American Tectonic plate. Bedrock is comprised of carbonate sedimentary rocks of different ages but all deposited in various marine environments. Most of Victoria Island, the northeastern portion of Banks Island, and the Dundas Peninsula on Melville Island are composed of Ordovician and Silurian sediments which are 400-500 million years old. These rocks lie on Precambrian sediments and older deformed rocks which are exposed in many areas. A large, uplifted area of Precambrian rocks is present on Victoria Island and forms the Shaler Mountains which are both sedimentary and igneous in origin. Igneous intrusions into the Precambrian rocks occurred 675 million years ago as a result of an upwelling in the earth's mantle.

A large amount of uplift has occurred since Devonian times, less than 345 million years ago. It is this uplift along the fault lines which is responsible for the steep, high cliffs characteristic of the region. A series of uplift and subsidence events has created a series of broad basins, platforms and highs.

These ancient sediments are overlain by a cover of Quaternary sediments left by the last glaciation. The northern boundary of the Laurentide Ice Sheet, which covered most of northern western Canada 18,000 years ago, included Victoria Island. By 10,000 years ago the massive ice sheet had retreated though it is believed to have still covered the east half of Victoria Island, and by 8,000 years ago was completely absent from Victoria Island. Deposition of sediments was controlled largely by topography. Thick glacial drift was deposited on scarps while deposition on the lowlands was thinner. Ice margin deposits consist of till and lateral and end moraines above sea level while stratified sediments were deposited below sea level. Outcrops of exposed bedrock are common on lowland areas heavily scoured by ice.

Prominent land forms include glacial and ground ice features. Glacial land forms include



drumlins, moraines and raised beaches. Victoria Island lies within the zone of continuous permafrost whose freeze-thaw layer ranges from 30-100 cm. Permafrost conditions are reflected in the widespread distribution of patterned ground, solifluction forms, thermokarst scars and lakes, and debris-flow lobes. All soils are cryosolic but few show extensive frost churned development. Many sediments in hummocky moraine deposits are undergoing redistribution as buried ground ice is exposed and melts to form thaw lakes, slump scars and sediment flows. Terrain sensitivity to future development is related mainly to the presence of massive ground ice.

### **Oceanography and Surface Waters:**

Amundson Gulf and Prince of Wales Strait are relatively shallow channels seldom exceeding 200 m (656ft) in depth and generally less than 100 m (328 ft.) deep. Viscount Melville Sound to the north of Victoria Island is connected to the Beaufort Sea via the 400 m (1,312 ft) deep channel of M'Clure Strait.

The most striking feature of tidal waters in the area is the long period of seasonal ice cover. The sea ice around Ulukhaktok begins slushing in early to mid-October and is generally frozen enough to travel on mid-November. Open leads can form at anytime during the winter. The presence of old multi-year ice is very uncommon in the Ulukhaktok area but is observed more frequently further west toward Banks Island and north toward Viscount Melville Sound.

The first spring shore leads appears around Ulukhaktok about mid-May to mid-June. During the summer open water period sheets and rafts of pack ice from Amundsen Gulf may occasionally be blown into shoreline areas.

Viscount Melville Sound is never entirely free of ice. Open water in the sound generally occurs as an open lead along the south coast of Melville Island or north coast of Victoria Island up to 75 km (47 mi) wide. Significant shore leads appear in mid to late August and freeze up occurs by late September. Ice conditions are shorter in duration in the Prince of Wales Strait. Freeze up occurs by mid-October and break up begins in late June in the southern portion of the Strait. Summer ice conditions in the north portions of the Strait are variable as pack ice moves in and out from Viscount Melville Sound.

Studies of ocean current in the region show a high degree of variability both seasonally and from year to year which can be dominated by tidal effects. Several investigations in Prince of Wales Strait have all found differing patterns of oceanographic flow. Measurements taken in 1953 indicated a strong southerly flow along the Banks Island coast with a weak counterflow along Victoria Island. However, the Canadian Centre for Inland Water (CCIW) in 1989 found the Strait to be tidally dominated with weak flows trending towards the southwest. Currents in the Ulukhaktok area show some tendency for an east to west flow. Tides are generally quite minor in the Ulukhaktok area, although shallow depths in Prince Albert Sound have created relatively extensive intertidal and near intertidal zones.

In 1954 investigations in Viscount Melville Sound were conducted by H.M.C.S. Labrador, U.S.S Burton Island and U.S.S Northwind. Negligible flows were found with exception of a strong easterly current along the north coast of Victoria Island. Investigations in 1979 by the CCIW found no evidence of this current indicating that it is not a permanent feature. The flow in this Sound appears to be a slow eastward drift in the northern two thirds with a western counter flow over the southern third. Non-tidal surface flows over the sound are weak but tend

to be easterly.

Investigation in M'Clure Strait showed weak surface currents relative to greater depths. There is a weak easterly flow which is dominated by tidal current of up to 10 cm/s (4 in/s). Tides in the region are 70-100 cm (28-39 in) in magnitude.

"Polynya" which are discrete areas of seawater that remain unfrozen year-round, do not occur in the vicinity of Ulukhaktok, however at least one small polynya occurs at the north end of Victoria Island.

Surface hydrology is strongly influenced by low annual precipitation and permafrost. Frozen ground is not able to absorb large amounts of water during spring thaw so there is a large amount of runoff at this time. Summer rainfall is channeled into shallow waterbodies by permafrost. Because the landscape of the islands is fairly flat a large number of small, shallow lakes is formed. River ice freezes up in lakes in mid to late September and rivers between mid-September and mid-October. Break-up occurs in late June.

### **Biological Resources:**

The Ulukhaktok planning area provides suitable habitat for most species typical of the Western Arctic. Terrestrial environments support perhaps over two hundred species of plants, a variety of invertebrates, and breeding populations of about 50 species of bird and 9 species of mammal. Ulukhaktok's close proximity to the mainland Arctic Coast and adjacent islands, and seasonal presence of a continuous ice connection has also allowed periodic movements of caribou, muskox, grizzly bear and other species from these areas to and from Victoria Island. The coastal waters are home to a remarkable diversity of marine invertebrates including crabs, krill, sea urchins, nudibranchs, clams, over 10 species of fish and 5 species of marine mammal which feed on them. The numerous freshwater lakes and rivers within the planning area support populations of Arctic char, lake trout and whitefish.

### **Human Population:**

In 2016, the population of Ulukhaktok was estimated at 428; 49 percent were male, 51 percent female (NWT Bureau of Statistics)

### **Economy:**

Primary economic activities include government administration and support services, print-making, other arts and crafts, trapping, hunting, fishing, big game outfitting and tourism. The traditional renewable resource harvest includes fish, seals, caribou, muskox, fox, wolf, polar bear, Arctic hare, ptarmigan and waterfowl.

Activities of the anti-fur interest groups have increased community dependence on government support and competition for limited community employment opportunities. Non-renewal resources are not well documented but there is some potential for the discovery of copper and possibly other minerals in the planning area.

### **Status:**

Ulukhaktok achieved hamlet status on April 1, 1984.

## **1.2 INUVIALUIT FINAL AGREEMENT AND RENEWABLE RESOURCE MANAGEMENT**

### **1.2.1 Inuvialuit Final Agreement**

To secure and protect the homeland of the Inuvialuit in the Beaufort Sea region, known as the Inuvialuit Settlement Region (ISR), the Inuvialuit and the governments of Canada, the Northwest Territories, and the Yukon, negotiated The Inuvialuit Final Agreement (IFA). Proclaimed on July 24, 1984, the IFA includes the Northern Mackenzie Delta, Yukon North Slope and the western portion of the Arctic Islands. The IFA established several new management bodies to help ensure that the land and its living resources are conserved for the benefit of the Inuvialuit (see Appendices D and E). In addition to the summaries presented below, additional detailed information is available from the organizations described.

### **1.2.2 Wildlife Management Advisory Councils (NWT and North Slope) and Fisheries Joint Management Committee**

The IFA created three new co-management bodies: the Wildlife Management Advisory Council (NWT), (WMAC (NWT)), the Wildlife Management Advisory Council (North Slope) (WMAC (NS)) and the Fisheries Joint Management Committee (FJMC). The WMAC (NWT) provides advice to appropriate government ministers and Inuvialuit agencies on all matters relating to wildlife policy and the management, regulation and administration of wildlife, habitat and harvesting in the Northwest Territories portion of the Inuvialuit Settlement Region. The WMAC (NWT) also advises government on wildlife related issues of park planning and management. The WMAC (NS) fills a similar role as the WMAC (NWT) however, its focus is on the Yukon North Slope. In addition to providing advice to government ministers, the WMAC (NS) is also expected to provide advice to the Porcupine Caribou Management Board, the EIRB and other groups. The FJMC assists Canada and the Inuvialuit in a similar fashion, managing the area's marine mammals and marine and freshwater fisheries. The FJMC also coordinates delivery of the HTC registration system for fishing by non-beneficiaries on private land.

### **1.2.3 Inuvialuit Game Council and Hunters and Trappers Committees**

The IFA also created the Inuvialuit Game Council (IGC) and provided for the creation of a Hunters and Trappers Committee (HTC) in each of the six Inuvialuit communities. The IGC is intended to represent the collective or entire Inuvialuit interest in wildlife and to advise the government, often through the WMAC (NWT) and FJMC. The HTC is, among other things, responsible for local resource allocation and is expected to encourage and promote Inuvialuit involvement in conservation, research, management, enforcement and utilization.

### **1.2.4 Inuvialuit Land Administration**

The Inuvialuit Land Administration (ILA) manages and administers access to Inuvialuit 7(1)(a) and 7(1)(b) lands (see Maps 1 and 2). Development proposals are screened by the ILA although they may also be referred to the Environmental Impact Screening Committee by the Inuvialuit.

All applications submitted to the ILA are distributed to the local HTCs and Community Corporations for review and comment. Final approval of applications is made by the ILA. ILA has the authority to attach a variety of conditions to land use authorizations for projects on Inuvialuit lands as described in the IFA. ILA is concerned with ensuring development activities are carried out responsibly and that economic benefits from development flow to Inuvialuit. The Inuvialuit Land Commission provides ILA with advice and guidance, considers policy considerations and acts as a liaison between ILA and Inuvialuit communities.

### **1.2.5 Environmental Impact Screening Committee and Environmental Impact Review Board**

Under the terms of the IFA, the Environmental Impact Screening Committee (EISC) screens all development proposals on Crown lands within the ISR to determine if there is potential for significant negative environmental impact (see Appendix H). Projects in the offshore are also screened by the EISC, in response to a request from the Inuvialuit Game Council. Projects which may have significant negative impact are referred to the Environmental Impact Review Board (EIRB) or other equivalent environmental review processes for a public assessment and review. The EIRB has the authority to conduct a detailed public review and make recommendations to the competent governmental authority, with respect to proposed developments.

The community believes that the existing methods for environmental screening and review can be incorporated as part of the general conservation process for the Planning Area (see also Section 4.4). The community supports development where it is compatible with the Conservation Plan's land use and species management priorities. A copy of the EISC and EIRB "Operating Guidelines and Procedures" has been provided to the HTC for public information.

## 2 COMMUNITY VALUES

The following principles express Inuvialuit community beliefs and values with respect to conservation and resource management in the planning area (see Map 2).

(a) Conservation is First Priority

All uses of the land in the Planning Area, including renewable and non-renewable resource development, must recognize conservation of the renewable resource base as the foremost priority. This applies to uses of the land by the community and by other interests.

(b) Integrated Management

All parts of the environment are interconnected, so they must be managed together. Conservation, stable economic development and sound resource management can only be achieved if all parties work toward a common goal. The Inuvialuit community of Ulukhaktok recognizes the relationship between direct economic security and resource conservation and the importance of maintaining a spirit of cooperation between all people living in the region.

(c) Maximize Community Benefit

Renewable and non-renewable resource development in the Ulukhaktok planning area should be of maximum benefit to community residents, with priorities for Inuvialuit as detailed in the IFA. Development projects should be scaled to retain opportunities and ensure the most lasting benefit to the local economy.

(d) Protect Priority Community Activities

Priority activities to be protected by the Ulukhaktok Community Conservation Plan are hunting, fishing, guiding, trapping, tourism and arts and crafts manufacturing.

(e) Cooperative Management of Shared Resources

The Olokhaktomiut Community Conservation Plan recognizes a special need for cooperation in the management of migratory species which are also used by other Inuvialuit and non-Inuvialuit.

(f) Maintain Healthy Environment

The Inuvialuit of Ulukhaktok place a high priority on maintaining air and water quality and the health of the resources.

(g) Consistency

The Olokhaktomiut Community Conservation Plan should be consistent with the Principles of Wildlife Harvesting and Management from the IFA, (Appendix A), the goals and principles of the Inuvialuit Renewable Resource Conservation and Management Plan (1988), (Appendix B), the goals of the North Slope Wildlife Conservation and Management Plan (1993) (Appendix C), the Regional Land Use Plan (1991), the Arctic Environmental Strategy (1991), and other conservation plans or agreements endorsed by the Community's representatives (e.g. Management Agreement for Polar Bears in Population H1 (1991), the Beaufort Sea Beluga Management Plan (1991). The plan has also been developed in consideration of the draft Inuit Regional Conservation Strategy (1986) prepared for the Inuit Circumpolar Conference Environmental Commission.

### 3 GOALS

The Inuvialuit Community has identified an overall strategy for conservation and resource management in the Ulukhaktok Planning Area. This strategy is based on five general goals:

**1. Identify and Protect Important Habitats and Harvesting Areas**

To identify important wildlife habitat, seasonal harvesting areas and cultural sites (for example, cabin sites) and make recommendations for their management.

**2. Land Use Decisions**

To describe the community process for making land use decisions and managing cumulative impacts which will help protect community values and conserve the resources on which priority lifestyles depend.

**3. Education**

To identify educational initiatives for the Inuvialuit of Ulukhaktok and others interested in the area which will promote conservation, understanding and appreciation.

**4. Define Species Management**

To describe a general system for wildlife management and conservation and identify population goals and conservation measures appropriate for each species of concern in the planning area. This will be done using the knowledge of the Community and others with expertise.

**5. Enhance Economy**

To enhance the local economy by adopting a cooperative and consistent approach to community decision making and resource management. This approach will help ensure economic stability and maintenance of all components of the Arctic ecosystem.

Information and recommendations required to satisfy the above goals for the Planning Area are described in the sections which follow.

## 4 SPECIAL AREAS AND RECOMMENDED LAND USE PRACTICES FOR THE PLANNING AREA

Most of the areas and recommended land use practices described in this section were originally identified in the Regional Land Use Plan for the Mackenzie Delta-Beaufort Sea Region (1991). These areas have been identified because they contain important wildlife habitat and/or harvesting areas. Recommendations have been revised and in some cases moved to more appropriate sections of this plan. The method by which special areas were identified and designated to one land use category or another is consistent with selection criteria first described in the Report of the Task Force on Northern Conservation (1984).

Guidelines for land use practices to be followed in these areas are included in the area descriptions which follow, as well as in other sections of this plan. A set of general land use recommendations is provided at the end of Section 4.1. A community-based process for arriving at land use decisions is presented in Section 4.2. Processes to assist with the management of cumulative impacts and recommendations for environmental screening and review of development proposals are presented in Sections 4.3 and Section 4.4, respectively.

In designating land use categories, the Inuvialuit community has attempted to recognize priority land uses and activities, as well as areas of special ecological and cultural importance. Land designations may be modified as additional information becomes available and provided the health and biological productivity of the planning area is maintained. Each area of importance has been given a letter designation corresponding to the categories below:

### **Category A**

Lands where there are no known significant and sensitive cultural or renewable resources. Lands shall be managed according to current regulatory practices.

### **Category B**

Lands where there are cultural or renewable resources of some significance and sensitivity but where terms and conditions associated with permits and leases shall assure the conservation of these resources.

### **Category C**

Lands and waters where cultural or renewable resources are of particular significance and sensitivity during specific times of the year. These lands and waters shall be managed so as to eliminate, to the greatest extent possible, potential damage and disruption.

### **Category D**

Lands and waters where cultural or renewable resources are of particular significance and sensitivity throughout the year. As with Category C, these areas shall be managed so as to eliminate, to the greatest extent possible, potential damage and disruption.

### **Category E**

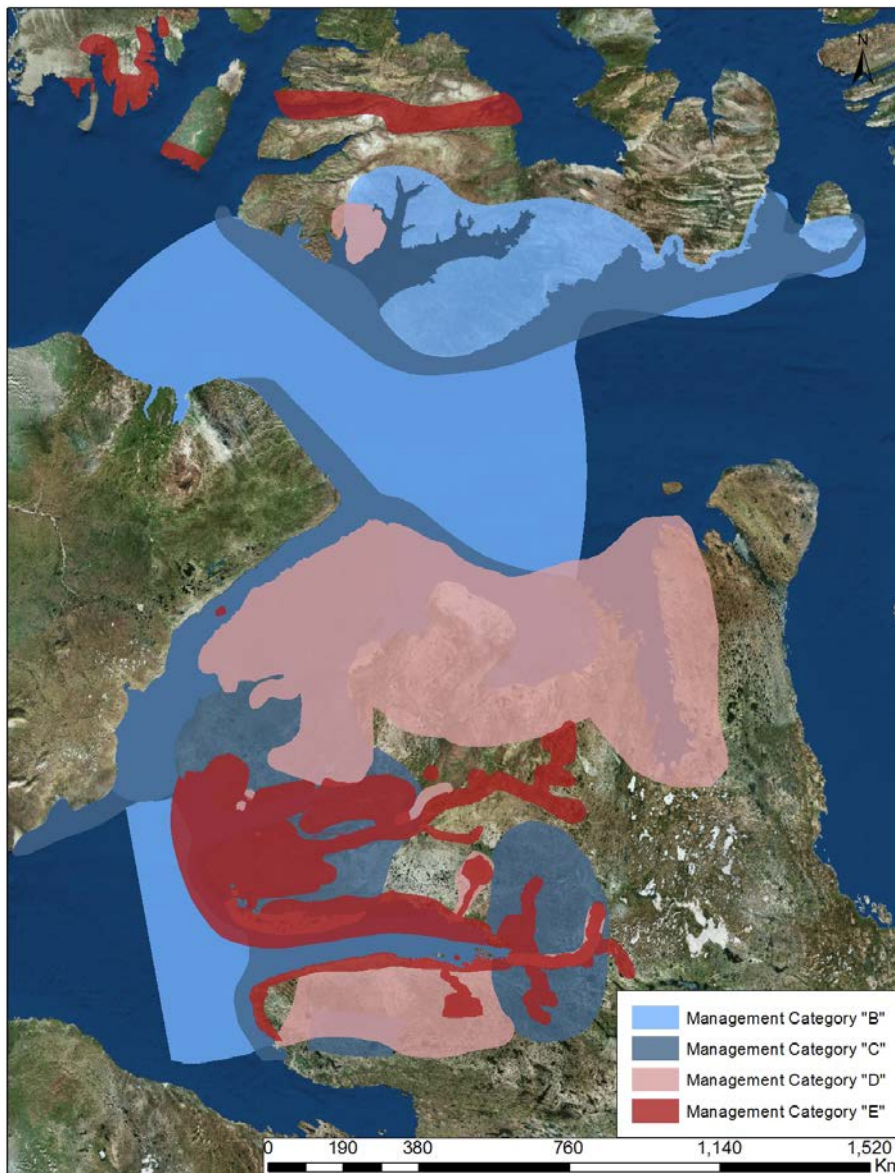
Lands and waters where cultural or renewable resources are of extreme significance and sensitivity. There shall be no development on these areas. These lands and waters shall be managed to eliminate, to the greatest extent possible, potential damage and disruption. This category recommends the highest degree of protection in this document.

**Note:** Sites which cross the boundary into Nunavut are included in their totality to indicate areas of importance to the peoples of Ulukhaktok. This is done in the spirit of co-operation with neighbouring land management agencies.

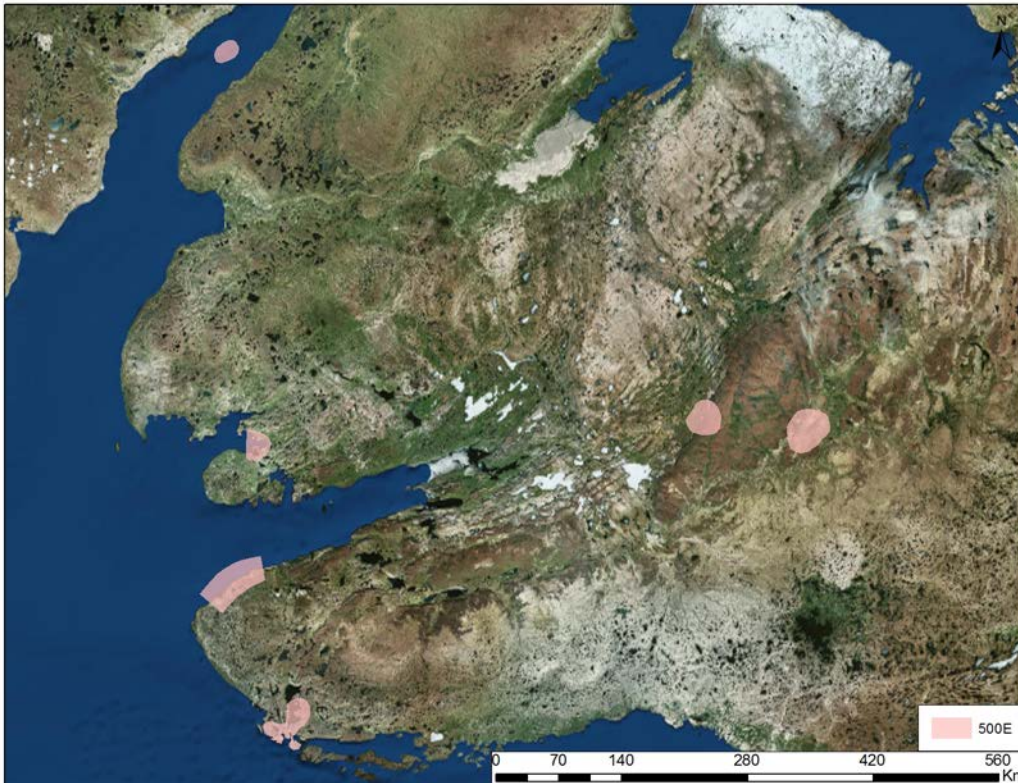


## 4.1 SPECIAL DESIGNATED AREAS

Maps and detailed description of the special designated lands listed below are described in the text which follows (see list of maps on page 7 for list of Ulukhaktok planning area sites). The following map (Map 3) shows an overlay of all designated sites in the Ulukhaktok planning area by management category.



**Map 3. Overlay of all sites in the Ulukhaktok planning area by management category.**

**SITE 500E****CULTURALLY IMPORTANT SITES LOCATED  
THROUGHOUT THE REGION**

**Map 4. Site 500E Culturally important sites located throughout the region.**

**Identified By**

Ulukhaktok Community Working Group

**Management Category**

E

**Ownership**

Private 7(1)(a) and 7(1)(b) and Public lands within the Inuvialuit Settlement Region (Maps 1 & 2)

**Description**

The site consists of six specific sites: two sites northeast of Hikongiyoitok Lake, Naoyat on the south shore of Minto Inlet, Walker Bay, and a site on the Diamond Jenness Peninsula coastline about 20 km (12.4 mi) southeast of Ulukhaktok. An area on the Diamond Jenness peninsula, 5 km (3 mi) wide that extends north from Freshwater Bay about 20 km (12.4 mi);

**Importance of the Site to the Community of Ulukhaktok**

Of historical importance to the community of Ulukhaktok.

Currently used for fishing, caribou harvesting, and harvesting of arctic hare, caribou, and trapping of arctic and red fox from mid-October through April.

Specifically, the sites that Ulukhaktok wants to protect (on a year-round basis) are fossils of marine animals at the site on the Diamond Jenness Peninsula coastline, an old RCMP cairn at Walker Bay, the site of an old Dorset Inuit settlement at Naoyat, the two native copper deposits northeast of Hikongiyoitok Lake and a cultural site with spiritual significance that occurs in the vicinity of Pitootuk/ Freshwater Bay.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area, National, and International Conservation Interest**

Emangyok Sound Coastline (Site no. 502B)

Kuujjua River and Diamond Jenness Peninsula Coastal Zone (Site no. 512E)

Habitat/Harvesting Areas around Minto Inlet: Kikiktalok Island; Akolgotak; Tahikyoak North; Tahikyoak; Pingokyoak and Nigiyok Naghak (Site no. 517E)

Southwest Victoria Island Coastal zone (Site no. 522C)

Prince Albert Peninsula Wildlife Area of Special Interest (Site no. 524C)

Minto Inlet Wildlife Area of Special Interest (Site no. 525C)

Beluga Management Plan Zone 1B - Prince Albert Sound (Site no. 528E)

Viscount Melville Sound and Adjacent Areas (Site no. 733C)

Prince of Wales Strait (Site no. 734C)

**Overlapping Nonrenewable Resource Interests and Activities**

None.

**Overlapping Military, Transportation, and Tourism Interests and Activities**

None.

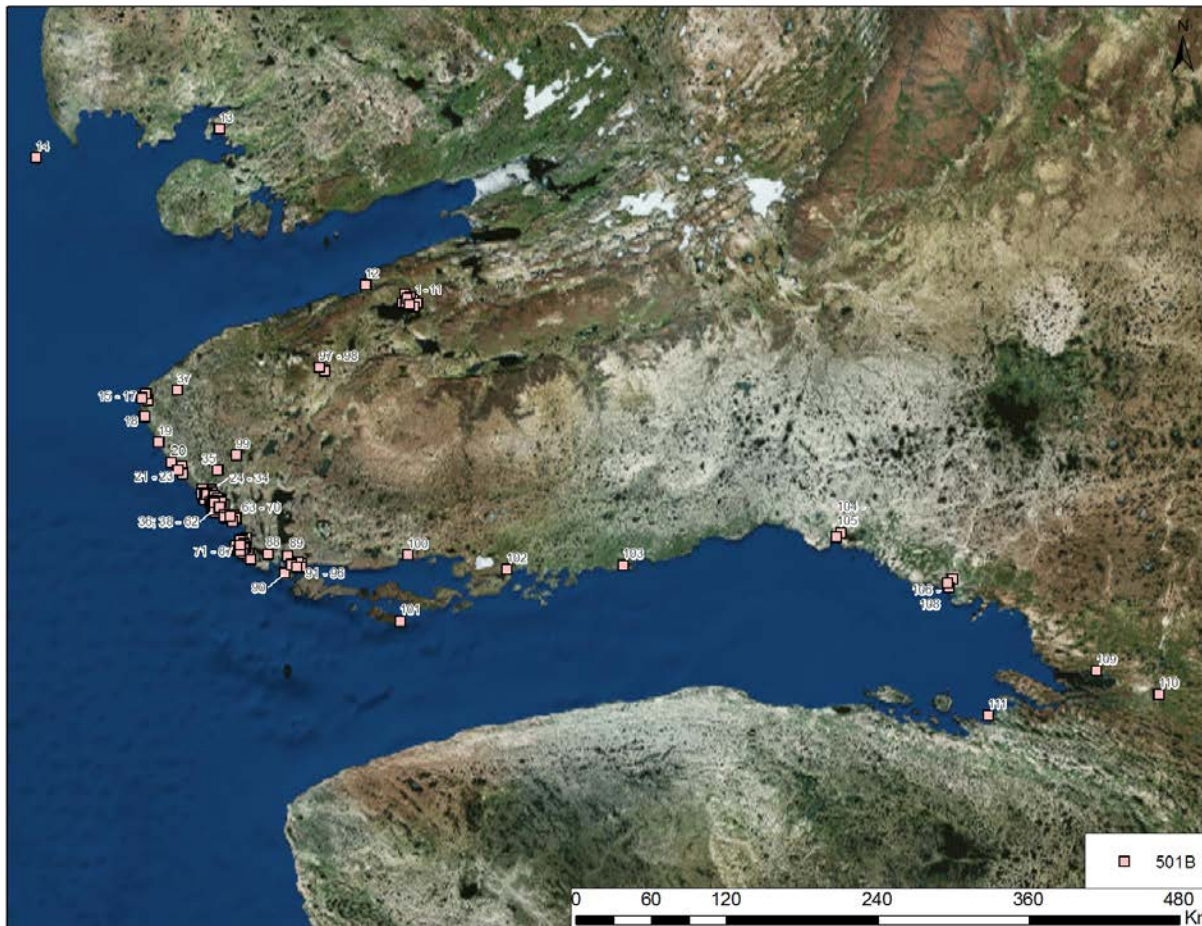
**Community Concerns**

The Ulukhaktok Community Working Group is concerned that any development will disturb the historical, spiritual, and cultural significance of these areas. In recent years, there has been vandalism and removal of artifacts from these sites and others.

**Community Recommendations**

1. The removal of fossils and cultural artifacts will only be done where endorsed by the HTC, Community Corporation and Prince of Wales Northern Heritage Centre.
2. The community requests that a Historical Resources Impact Assessment be done as part of any development proposal in these areas and that the consultant doing such assessment be approved by the HTC and involve a community representative as a field assistant.
3. An Historical Resources Impact Assessment should be prepared as part of any development proposal in the vicinity of Pitootuk (Freshwater Bay).

## SITE 501B ULUKHAKTOK OUTPOST CAMPS



**Map 5. Site 501B Ulukhaktok Outpost Camps.**

**Identified By**

Ulukhaktok Community Working Group

**Management Category**

B

**Ownership**

Crown lands and private 7(1)a and 7(1)b lands

**Description**

The site is made up of outpost camps used by families from Ulukhaktok.

**Importance of the Site to the Community of Ulukhaktok**

Extremely important to the families of Ulukhaktok for hunting, fishing and trapping.

**Overlapping Nonrenewable Resource Interests and Activities**

None.

### Overlapping Military, Transportation and Tourism Interests and Activities

Sport hunting for caribou, muskox and wolf takes place in the vicinity of some of these outpost camps.

The following list of campsites and cabins have been identified by the Olokhaktomiut HTC. Camps are important focal points for subsistence harvesting and cultural activities. The Inuvialuit community is strongly interested in protecting these sites and the quality of the local environment around them.

Camp/Cabin Site and Name	Location	Camp/Cabin Site and Name	Location
1. Morris Nigiyok	Aimaogatahook	57. Brenda Egotak	3 <sup>rd</sup> Point
2. John Alikamik	Aimaogatahook	58. Lena Egotak	3 <sup>rd</sup> Point
3. Kate Kanayok	Aimaogatahook	59. Lena Egotak	3 <sup>rd</sup> Point
4. Wallace Joss	Aimaogatahook	60. George Alanak	2 <sup>nd</sup> Point
5. Brian Kudlak	Aimaogatahook	61. Walter Olifie	2 <sup>nd</sup> Point
6. Robert Kuptana	Aimaogatahook	62. Kelly Negiyok	1 <sup>st</sup> Point
7. David Kuptana	Aimaogatahook	63. Isaac Inuktalik	Behind 2 <sup>nd</sup> Hill
8. David Kuptana	Aimaogatahook	64. Alan Pogotak	Below 3 <sup>rd</sup> Hill
9. Okheena Family	Aimaogatahook	65. Andy Akoaksion	Below 3 <sup>rd</sup> Hill
10. Isaac Aleekuk	Aimaogatahook	66. Morris Nigiyok	Below 3 <sup>rd</sup> Hill
11. Andrew Banksland	Aimaogatahook	67. Mark Ekootak	Behind Kings Bay
12. Agnes Goose	Aimaogatahook	68. Doug Goose	Near Island
13. Jimmy Memogana	Walker Bay	69. Harold Wright	Island
14. HTC Cabin	Ramsey Island	70. Lori Ovilok	Kings Bay Point
15. David Kuptana	Kitikat	71. Joanne Ogina	By Mashookyak
16. Robert Kuptana	Kitikak	72. Adam Kudlak	By Mashookyak
17. Travis Kuptana	Kitikak	73. Julia Ogina	By Mashookyak
18. Tent Frame	Kijjivik UAL	74. Pat Ekpakohak	Mashookyak
19. Pat Ekpakohak	Tahihoit Coast	75. Peter Okheena	Mashookyak
20. George Alanak	Potoitaks Point	76. John Alikamik	Mashookyak
21. Donald Notaina	Natgohiak	77. Alan Joss	Mashookyak
22. Danny Taptuna	Kitikak	78. David Kuptana	Mashookyak
23. Colin Okheena	Natgohiak	79. Danny Taptuna	Mashookyak
24. Pat Ekpakohak	Past 3 <sup>rd</sup> River	80. Rose Kuptana	Mashookyak
25. Isaac Aleekuk	Past 3 <sup>rd</sup> River	81. Joseph Kuptana	Mashookyak
26. Edward Kaodloak	Past 3 <sup>rd</sup> River	82. Joseph Haluksit	Mashookyak
27. Winnie Akhiatak	3 <sup>rd</sup> River	83. John Alikamik	Mashookyak
28. Joseph Kitikudlak	Before 3 <sup>rd</sup> River	84. Ross Klengenber	Mashookyak
29. Joseph Jr Kitikudlak	Before 3 <sup>rd</sup> River	85. Justin Memogana	Mashookyak
30. Bradley Carpenter	Before 3 <sup>rd</sup> River	86. Matthew Inuktalik	Mashookyak
31. Kirby Nokadlak	Before 3 <sup>rd</sup> River	87. Elder's Cabin	Hologahook
32. Kirby Nokadlak	Before 3 <sup>rd</sup> River	88. Fred Akoaksion	Kuugaruk
33. Gary Bristow	Before 3 <sup>rd</sup> River	89. David Kanayok	Naoyat Bay
34. Gary Bristow	Before 3 <sup>rd</sup> River	90. Wallace Joss	Kotoikvik
35. David Kanayok	Pocket Knife Lake	91. Allan Joss	Kotoikvik
36. David Kanayok	Before 3 <sup>rd</sup> River	92. Joe Kuneyunga	Kotoikvik
37. Kate Kanayok	Nahaodlik Lake	93. Andrew Banksland	Kotoikvik
38. Janet Kanayok	Coast Past Airport	94. Winnie Akhiatak	Kotoikvik Point
39. Philip Inuktalik	Coast Past Airport	95. Wallace Joss	Nipaloakyok
40. Joe Kuneyuna	Coast Past Airport	96. David Kuptana	Nipaloakyok
41. Peter Alikamik	Coast Past Airport	97. Colin Okheena	Haningayok

42. Joseph Haluksit	Coast Past Airport	98. Pat Ekpakohak	Kayalihok
43. Peter Okheena	Coast Past Airport	99. Justin Memogana	Iluvili
44. Larry Olifie	Coast Past Airport	100. Elders Cabin	Emigahook
45. Robert Kuptana	Coast Past Airport	101. HTC	Evitalik
46. Wallace Joss	Coast Past Airport	102. HTC	Halahikbik
47. Joe Kuneyuna	Coast Past Airport	103. HTC	Halahikbik
48. Tony Alanak	Ahangiktok	104. Pat Ekpakohak	Kuuk
49. Colin Okheena	Ahangiktok	105. HTC	Kuuk
50. Mary T. Okheena	Ahangiktok	106. HTC	Kuuk
51. Donald Notaina	Ahangiktok	107. Pat Ekpakohak	Halahikbik
52. Danny Taptuna	Ahangiktok	108. HTC	Kingua
53. Eddie Okheena	Ahangiktok Point	109. George Alanak	Naloakyok
54. Joe Kuneyuna		110. HTC	Glenelg Bay – Research Cabin
55. Lena Egotak	3 <sup>rd</sup> Point	111. George & Connie Alanak	
56. Matt Hokanak	3 <sup>rd</sup> Point		

**SITE 503B KANGIKHOKYOAK GULF (LIDDON GULF) COASTLINE**



**Map 6. Site 503B Kangikhokyoak Gulf (Liddon Gulf) coastline.**

**Identified By**

Ulukhaktok Community Working Group

**Management Category**

B

**Ownership**

Public lands within the Inuvialuit Settlement Region

**Description**

The site includes an area, approximately 10 km (6.3 mi) in diameter, at Emnakyoak (Cape Smith) and an additional area extending from Kangikhoalok (Hardy Bay) around Murray Inlet, Kangikhokyoak Gulf and all of Dundas Peninsula.

**Importance of Site to the Community of Ulukhaktok**

Important habitat for polar bear, muskox, wolf, fox, lemming, gyrfalcon, and Peary caribou as well as for subsistence harvesting from November to May.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

Bailey Point Wildlife Area of Special Interest (Site 506D)

Viscount Melville Sound and adjacent areas (Site 733C)

**Overlapping Nonrenewable Resource Interests and Activities**

Proposed Melville Island gas pipeline.

**Overlapping Military, Transportation and Tourism Interests and Activities**

Sport hunting for muskox.

**Community Concerns**

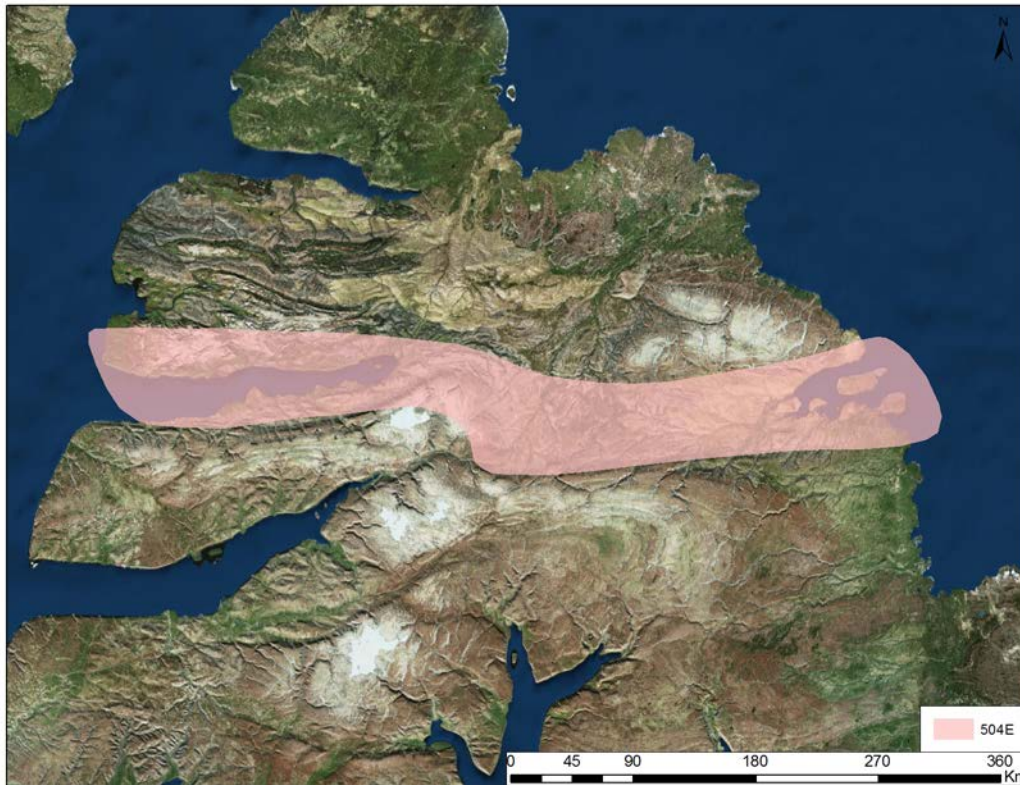
The Ulukhaktok Community Working Group is concerned that future oil and gas development in the area will have a negative impact on the habitat of the wildlife found in this site. As well, the Community Working Group is concerned that there has been very little consultation with the community of Ulukhaktok regarding the future of oil and gas development.

**Community Recommendations**

1. Canadian Coast Guard should seek a way to seasonally restrict ship traffic in this sensitive area.
2. WMAC (NWT) should address this area in the course of developing species management plans or agreements for polar bear, muskox and Peary caribou.
3. ENR should undertake a population census of polar bears in this area.



**SITE 504E IBBETT BAY TO MCCORMICK INLET**



**Map 7. Site 504E Ibbett Bay to McCormick Inlet.**

**Identified By**

Community of Ulukhaktok

**Management Category**

E

**Ownership**

Public lands within the Inuvialuit Settlement Region

**Description**

On northwestern Melville Island, it includes the mouth of Ibbett Bay and its shoreline, inland heading east to the mouth of McCormick Inlet.

**Importance of Site to the Community of Ulukhaktok**

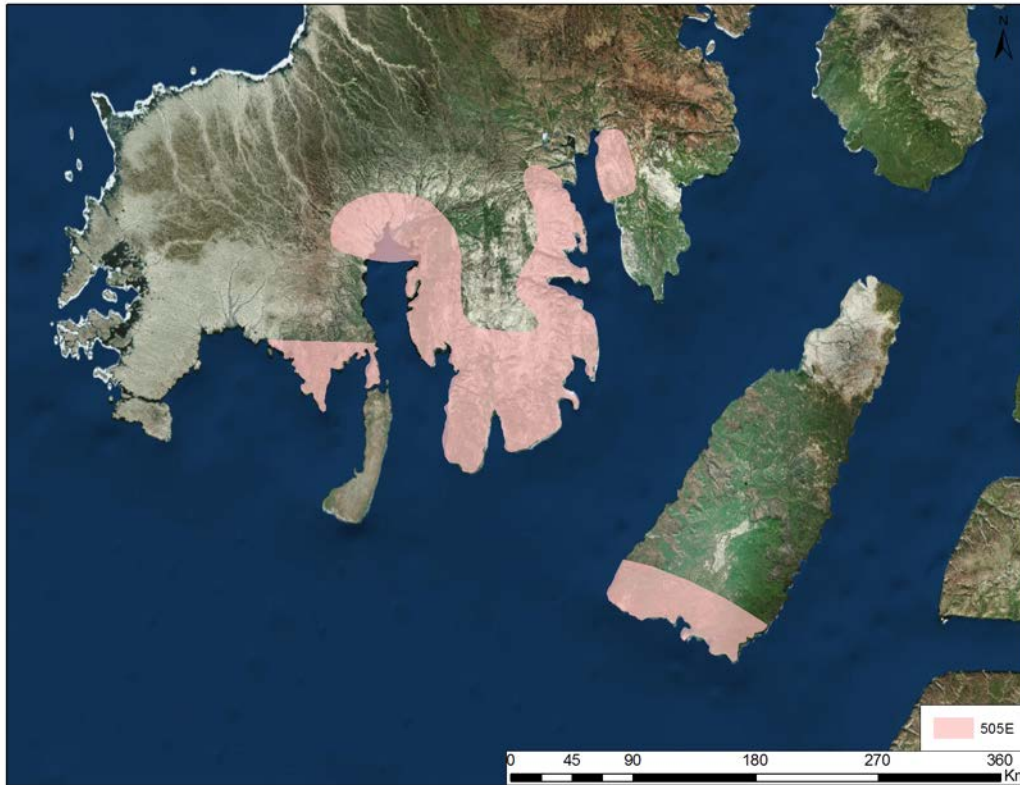
Extremely dense arctic willow communities.

Important habitat for caribou and muskoxen year-round. High densities of muskoxen in eastern part. Large populations of wolves and foxes.

Dorset encampment site is most northwesterly known Inuit site in Canadian Arctic.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

None.

**SITE 505E****PRINCE PATRICK ISLAND KEY MIGRATORY BIRD  
TERRESTRIAL HABITAT**

**Map 8. Site 505E Prince Patrick Island key migratory bird terrestrial habitat.**

**Identified By**

Canadian Wildlife Service

**Management Category**

E

**Ownership**

Public lands within the Inuvialuit Settlement Region

**Description**

Includes various sections of land on the southern tip of Prince Patrick Island, and Eglinton Island.

**Importance of Site to the Community of Ulukhaktok**

Coastal lowlands are important nesting and moulting areas for brant. Brant found here are possibly a subspecies.

Birds are present during part of year; nesting season is May to August. Wetland habitat is sensitive year-round.

Important area for polar bear habitat and subsistence harvesting.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

None

**Community Recommendations**

1. ENR and/or CWS should undertake a population census of polar bears in this area.
2. CWS should put forth recommendations for the protection of this area. These recommendations will be reviewed for inclusion in the conservation plan.

## SITE 506D BAILEY POINT WILDLIFE AREA OF SPECIAL INTEREST



**Map 9. Site 506D Bailey Point wildlife area of special interest.**

**Identified By**  
ENR

**Management Category**  
D

**Ownership**  
Public lands within the Inuvialuit Settlement Region

**Description**  
Includes a parcel of land on the northern shore of the mouth of Liddon Gulf.

**Importance of Site to the Community of Ulukhaktok**  
Among the best habitats for muskoxen in the Canadian High Arctic. Refugium for muskoxen during periods of extreme climatic conditions November to March.

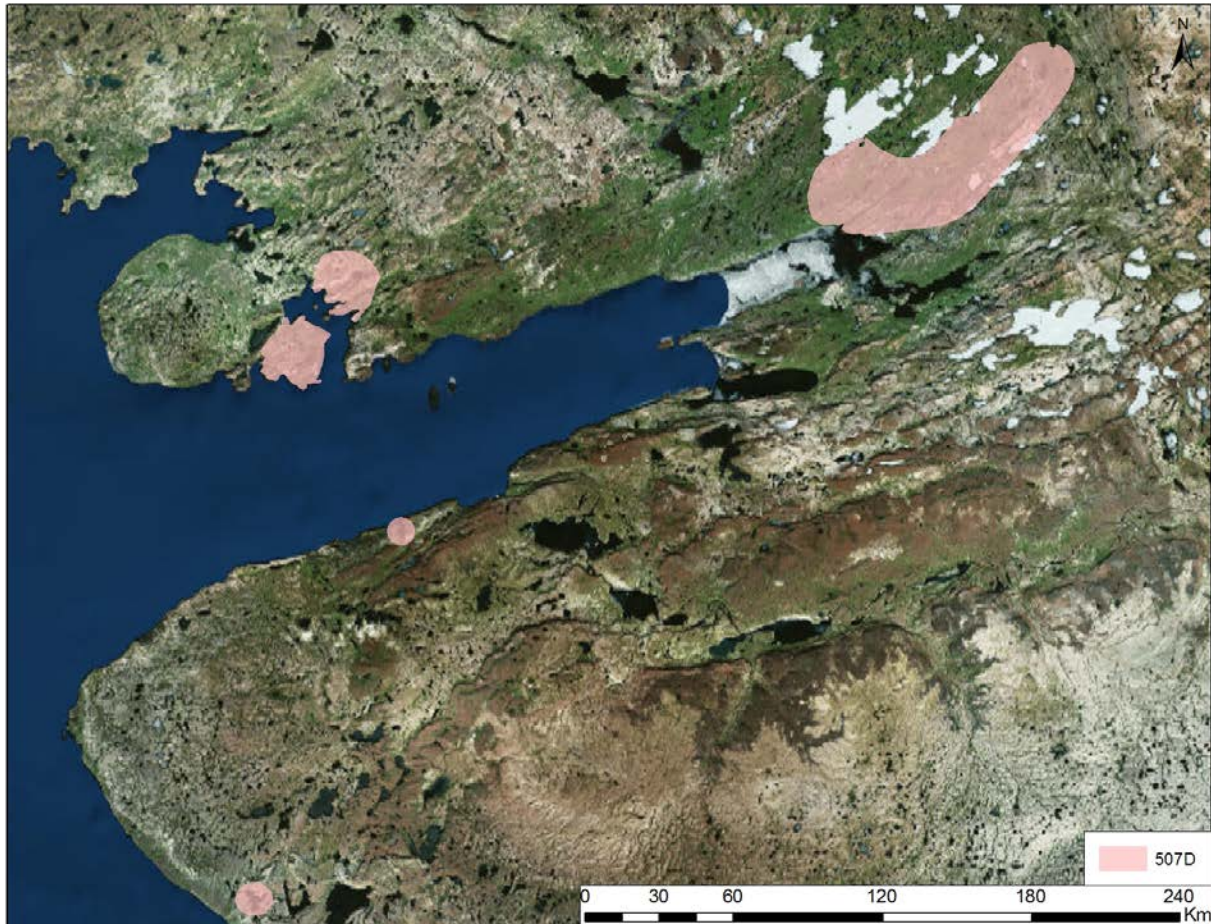
Important area for polar bear habitat and subsistence harvesting.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**  
Kangikhokyoak (Liddon) Gulf Coastline (Site 503B)

**Community Recommendations**

ENR should undertake a population census of polar bears in this area.

## SITE 507D OMINGMAKYOK, UNGIRUT BAY AND OKPILIK LAKE AREAS



**Map 10. Site 507D Omingmakyok, Ungirut Bay and Okpilik Lake areas.**

### Identified By

Ulukhaktok Community Working Group

### Management Category

D

### Ownership

Private 7(1)(a) and 7(1)(b) lands within the Inuvialuit Settlement Region (Maps 1 & 2)

### Description

The site is composed of four areas. One site (Okpilik) is located approximately 10 km (6.2 mi) north of Ulukhaktok and two other sites (Omingmakyok and Ungirut Bay) are located on the north side of Minto Inlet. Kiyuktugak River (western river) and Kiyuktuluak River (eastern river) are located at the northeast end of Minto Inlet.

### Importance of the Site to the Community of Ulukhaktok

The areas all have an unusual landscape feature (willow bushes) for this geographic region.

Important habitat for Peary caribou, muskox, wolf, arctic and red fox, arctic hare, and fish such as trout and char year-round.

Important subsistence harvesting sites for the people of Ulukhaktok year-round.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

Kuujjua River and Diamond Jenness Peninsula Coastal Zone (Site no. 512E)

Tahikpalok Lake Region and North Shore of Prince Albert Sound (Site no. 513E)

Kuukyuak (Kuujjua) River / Minto Inlet System (Site no. 519E)

Southwest Victoria Island Coastal zone (Site no. 522C)

Prince Albert Peninsula Wildlife Area of Special Interest (Site no. 524C)

Minto Inlet Wildlife Area of Special Interest (Site no. 525C)

Beluga Management Plan Zone 1B - Prince Albert Sound (Site no. 528E)

**Overlapping Nonrenewable Resource Interests and Activities**

None.

**Overlapping Military, Transportation, and Tourism Interests and Activities**

None.

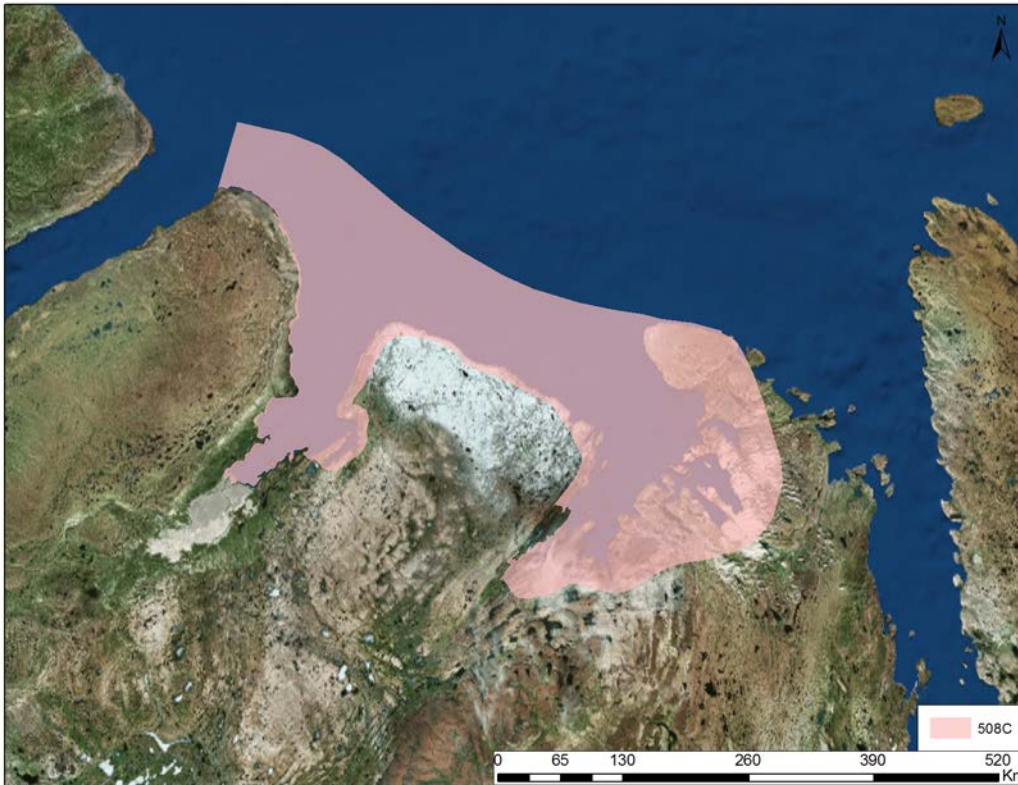
**Community Concerns**

Ulukhaktok is concerned that these sites are very environmentally sensitive, especially where the willow bushes are located, and any development in the area will destroy the unique landscape.

**Community Recommendations**

ILA should consider the sensitivity of this site when dealing with land use permits for the area.

## SITE 508C RICHARD COLLINSON INLET AND GLENELG BAY



**Map 11. Site 508C Richard Collinson Inlet and Glenelg Bay.**

### Identified By

Ulukhaktok Community Working Group

### Management Category

C

### Ownership

Onshore Private 7(1)(b) lands and offshore and onshore Public lands within the Inuvialuit Settlement Region and Nunavut.

### Description

The site includes marine and coastal areas at the northern end of Victoria Island. It includes all of Glenelg Bay and Richard Collinson Inlet and extends approximately 10 km (6.2 mi) offshore.

### Importance of the Site to the Community of Ulukhaktok

Used for subsistence hunting of polar bear by the community of Ulukhaktok from beginning of November to May.

The area south of Glenelg Bay is important habitat for wolves, caribou, muskox and other animals from November to May.

Prince of Wales Strait is an important travel route for beluga from June to September. This travel



route is not necessarily used every year.

The waters north of Glenelg Bay are important summer feeding areas for beluga and bowhead.

#### **Overlap with other Special Designated Areas within the Ulukhaktok Planning Areas**

Emangyok Sound Coastline (Site no. 502B)

Hadley Bay Wildlife Area of Special Interest (Site no. 523D)

Viscount Melville Sound and Adjacent Areas (Site no. 733C)

Prince of Wales Strait (Site no. 734C)

#### **Overlapping Nonrenewable Resource Interests and Activities**

Proposed gas pipeline from Melville Island.

#### **Overlapping Military, Transportation, and Tourism Interests and Activities**

Part of the Northwest Passage shipping corridor. Used for sport hunting of polar bear.

#### **Community Concerns**

The Ulukhaktok Community Working Group is concerned that potential marine traffic in this area will have a negative impact on polar bear denning and on a critical community harvesting area.

Specifically, the Community Working Group is concerned that ships will destroy polar bear dens in multi-year ice, that the noise from ship traffic will disturb denning bears and that ship tracks will pose dangers to hunters in the area.

#### **Community Recommendations**

1. As a general guideline, the community would prefer no ship traffic in the area from November to June.
2. Species management planning should consider the importance of this area for polar bear.
3. DFO should give Glenelg Bay a higher priority rating because of a possible future fish project by Ulukhaktok.
4. The information for this site should be cross referenced with the Sachs Harbour Community Conservation Working Group.
5. Consult with Canadian Coast Guard to discuss limiting ship traffic during periods of ice cover (November to June). These consultations should include the Community Conservation Plan Working Group, the Hunters and Trappers Committee, and the Inuvialuit Game Council.

## SITE 509BE PRINCE ALBERT SOUND AND MINTO INLET



**Map 12. Site 509BE Prince Albert Sound and Minto Inlet.**

### Identified By

Ulukhaktok Community Working Group

### Management Category

B

E: public lands on shoreline

### Ownership

Shoreline Public and Private 7(1)(b) lands; offshore Public Lands in the Inuvialuit Settlement Region (Maps 1 & 2)

### Description

The site encompasses the offshore areas of Minto Inlet, Prince Albert Sound and extends into Amundsen Gulf. It also includes the southern coastal area of Prince Albert Sound.

### Importance of the Site to the Community of Ulukhaktok

Important habitat for bearded and ringed seal, polar bear, beluga, migratory birds and char year-round. These species are harvested for subsistence by the people of Ulukhaktok year-round.

A number of archaeological sites located along the coast.

### Overlapping Waters of Territorial, National, and International Conservation Interest

Emangyok Sound Coastline (Site no. 502B)

Anmalokitak Lake and Tahok Lake Region (Site no. 515C)  
Hikongiyoitok Lake and Kugaluk River Region (Site no. 516D)  
Kuukyuak (Kuujjua) River / Minto Inlet System (Site no. 519E)  
Kagluk River/ Quunnguq Lake System (Site no. 521E)  
Southwest Victoria Island Coastal zone (Site no. 522C)  
Prince Albert Peninsula Wildlife Area of Special Interest (Site no. 524C)  
Minto Inlet Wildlife Area of Special Interest (Site no. 525C)  
Beluga Management Plan Zone 1B - Prince Albert Sound (Site no. 528E)  
Viscount Melville Sound and Adjacent Areas (Site no. 733C)  
Prince of Wales Strait (Site no. 734C)

### **Overlapping Nonrenewable Resource Interests and Activities**

None.

### **Overlapping Military, Transportation, and Tourism Interests and Activities**

Polar bear sports hunting; sports fishing.

Shipping, community resupply and tanker traffic through the Amundsen Gulf.

### **Community Concerns**

The Ulukhaktok Community Working Group is concerned that marine traffic will have a negative impact on the area's resources and resource users. These impacts may be caused by the disruption of ice, from noise disturbances to marine life, or interference to traditional land use activities. In addition, if tanker traffic occurs, the Community Working Group is concerned about the impact that an oil spill will have on the renewable resource base in the region.

A second concern of the Community Working Group is the disruption and vandalism of archaeological sites and heritage resources along the shoreline.

### **Community Recommendations**

1. ILA should consider the impacts of any land use activity that affects the shoreline and near shore of this site.
2. The community requests that an Historical Resource Impact Assessment be done as part of any development proposed along coastal sites in this area.
3. Consult with Canadian Coast Guard to discuss limiting ship traffic during periods of ice cover (November to June). These consultations should include the Community Conservation Plan Working Group, the Hunters and Trappers Committee, and the Inuvialuit Game Council.

## SITE 510D TAHIOYAK (SAFETY CHANNEL)



**Map 13. Site 510D Tahiyak (Safety Channel).**

### Identified By

Ulukhaktok Community Working Group

### Management Category

D

### Ownership

Private 7(1)(b) lands within the Inuvialuit Settlement Region (Maps 1 & 2)

### Description

The site includes the shallow marine areas known as Tahiyak (Safety Channel) southeast of the community of Ulukhaktok and includes Albert and Ulukhaktok Islands, among others.

### Importance of the Site to the Community of Ulukhaktok

Important wildlife habitat for caribou, muskox, seals, migratory birds and various species of fish and shellfish year round.

Beluga whale occasionally use the area June to October.

Currently used by the people of Ulukhaktok for the subsistence harvesting of these species year-round. Contains archaeological, cultural and historic sites.

### Overlap with other Special Designated Areas within the Ulukhaktok Planning Area

Kuujjua River and Diamond Jenness Peninsula Coastal Zone (Site no. 512E)  
Southwest Victoria Island Coastal zone (Site no. 522C)  
Minto Inlet Wildlife Area of Special Interest (Site no. 525C)  
Beluga Management Plan Zone 1B - Prince Albert Sound (Site no. 528E)

**Overlapping Nonrenewable Resource Interests and Activities**

None.

**Overlapping Military, Transportation, and Tourism Interests and Activities**

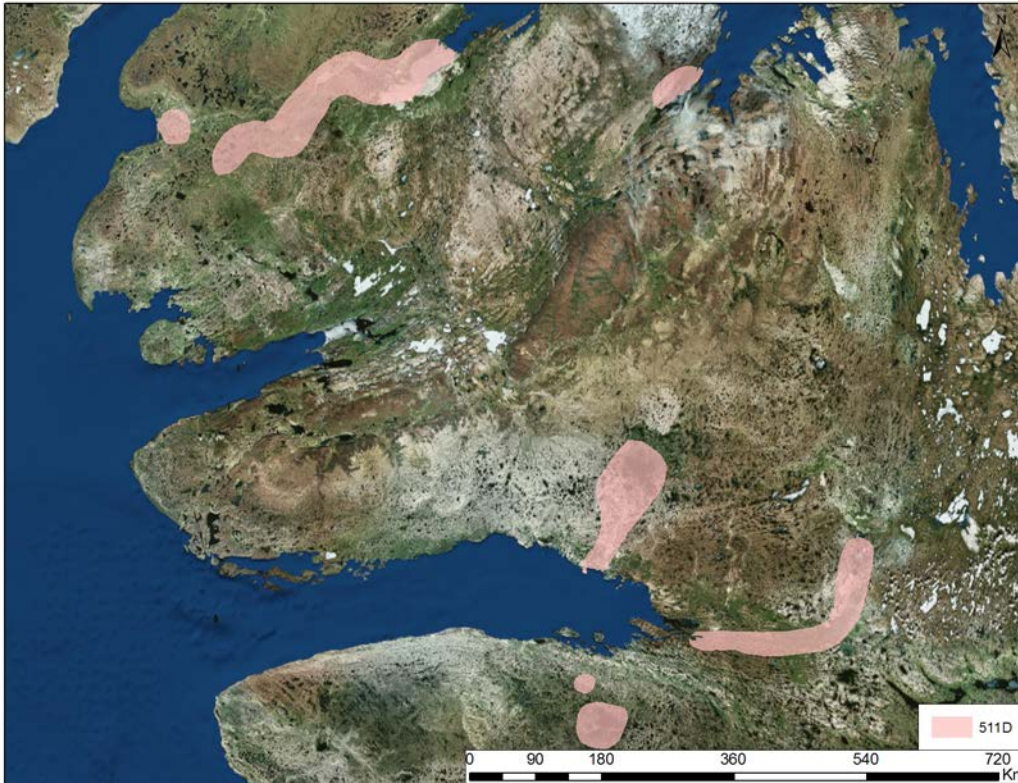
None.

**Community Concerns**

The Ulukhaktok Community Working group is concerned that any type of development would have a negative impact on this sensitive location.

**Community Recommendations**

1. FJMC and WMAC should ensure there is adequate information necessary to develop specific management guidelines for ringed and bearded seals, capelin, halibut, shellfish, char, trout, caribou, eider ducks, swans, geese and other ecosystem components.
2. A Historical Resources Impact Assessment should be done as part of any development proposal along coastal sites in this area.
3. Review as potential Marine Protected Areas site.

**SITE 511D****TAHIKYUAK LAKES (SOUTH, EAST) AND KANGIKIHNIAK LAKE,  
AND KAGLOKYUAK, ENGALOAK RIVERS**

**Map 14. 511D Tahiyuak Lakes (South, East) and Kangikihnik Lake, and Kaglokyuak, Engaloak Rivers.**

**Identified by**

Ulukhaktok Community Working Group

**Management Category**

D

**Ownership**

Private 7(1) (b) and Public lands within the Inuvialuit Settlement Region; Kaglokyuak River runs into Tungavik Federation of Nunavut Settlement Region (Maps 1 & 2).

**Description**

The site is composed of six areas: the Kaglokyuak River at the head of Prince Albert Sound; Engaloak River at the head of Richard Collinson Inlet Kangikihnik Lake east of Deans Dundas Bay; Ikaluktutiak Lake on west shore of Glenelg Bay; Tahikyuoak Lake (south) (Tahikyuoak hivugakhik) south of Prince Albert Sound; Tahikyuoak Lake (east) (Tahikyuoak kivalik) northeast of Prince Albert Sound.

**Importance of the Site to the Community of Ulukhaktok**

Important habitat for a variety in fish including char, trout and whitefish year-round.

Habitat for Peary caribou, muskox, wolves and foxes year-round.

Bearded seal feed in the area in July.

Kaglokyuak River is important as a breeding area during spring and summer for eider, brant, and Canada goose.

Tahikyoak hivugakhik (south) was a traditional trading area. Significant archaeological, cultural and historic sites in the area.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

Kuujjua River and Diamond Jenness Peninsula Coastal Zone (Site no. 512E)

Kuuk River / Tahiryuak Lake System (Site no. 520E)

Kagluk River/ Quunnguq Lake System (Site no. 521E)

Hadley Bay Wildlife Area of Special Interest (Site no. 523D)

Prince Albert Peninsula Wildlife Area of Special Interest (Site no. 524C)

Kagloryuak River and Associated Tributaries (Site no. 527E)

**Overlapping Nonrenewable Resource Interests and Activities**

Historically proposed gas pipeline from Melville Island.

**Overlapping Military, Transportation, and Tourism Interests and Activities**

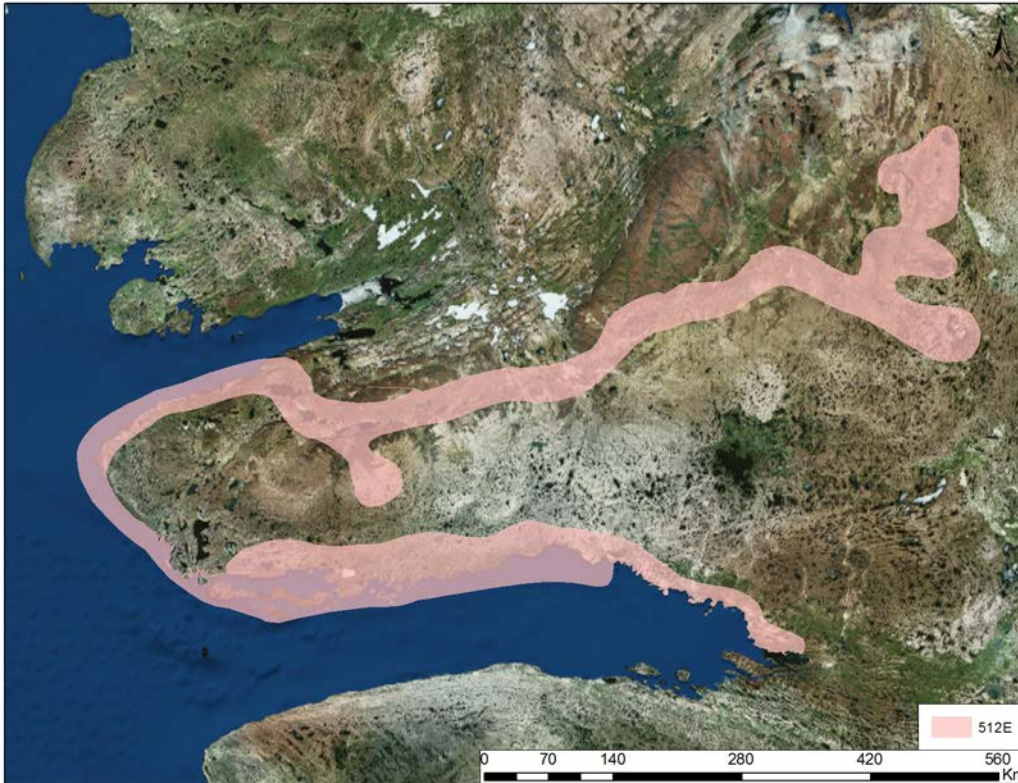
Fly-in fishing for commercial tourism and sport fishing is common in these areas.

**Community Concerns**

As well, the Community Working Group is concerned about the impact that commercial tourism is having on the sites.

**Community Recommendations**

1. DFO should exclude these lakes and rivers from sports fishing and commercial tourism. The community of Ulukhaktok has already identified areas where these land use activities can occur.
2. DFO and FJMC should send all fishing licences to the Ulukhaktok HTC so that all permit applications can be reviewed.
3. FJMC should ensure that the sport fishing guide, which is included with a fishing licence, give a better description of the ISR and its related licencing requirements.

**SITE 512E****KUUKYUAK (KUUIJUA) RIVER AND DIAMOND JENNESS PENINSULA COASTAL ZONE**

**Map 15. Site 512E Kuukyuak (Kuujuua) River and Diamond Jenness Peninsula coastal zone.**

**Identified By**

Ulukhaktok Community Working Group

**Management Category**

E

**Ownership**

Private 7(1)(a) 7(1)(b) and Public lands within the Inuvialuit Settlement Region (Maps 1 & 2)

**Description**

The site includes the coastal region (extending approximately 5 km (3 mi) offshore) along the north shore of Prince Albert Sound, and at the head of the Sound near the Kaglokyuak River, and extending around the tip of the Diamond Jenness Peninsula from southeast of Ulukhaktok to the mouth of the Kuukyuak River in Minto Inlet. The site also includes the Kuukyuak River itself.

**Importance of the Site to the Community of Ulukhaktok**

Important habitat for migratory birds, caribou, muskox, wolves, foxes and a variety of fish year-round.

Used by the people of Ulukhaktok for: fishing whitefish, lake trout, char and flatfish (Spring to



early Fall); hunting caribou, muskox (year-round); ducks, geese and swans (mid-May to September).

Many archaeological, cultural and historic sites located along the coastlines and Kuukyuak River shoreline.

### **Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

Culturally important sites located throughout the region (Site no. 500E)

Omingmaktok, Ungirut Bay, Okpilik Lake Areas; Kiyuktugak River, Kiyuktuluak (Site no. 507D)

Tahiyok (Safety Channel) (Site no. 510D)

Tahikyuk Lakes (South, East), Kangikihnik Lake, Kaglokyuk and Engaloak River (Site no. 511D)

Habitat\Harvesting Areas South of Wynniatt Bay (Site no. 514D)

Habitat\Harvesting Areas around Minto Inlet: Kikiktalok Island; Akolgotak; Tahikyoak North; Tahikyoak; Pingokyoak and Nigiyok Naghak (Site no. 517E)

Kuukyuak (Kuujuua) River / Minto Inlet System (Site no. 519E)

Kuuk River / Tahiryuk Lake System (Site no. 520E)

Southwest Victoria Island Coastal zone (Site no. 522C)

Minto Inlet Wildlife Area of Special Interest (Site no. 525C)

Kagloryuk River and Associated Tributaries (Site no. 527E)

Beluga Management Plan Zone 1B - Prince Albert Sound (Site no. 528E)

### **Overlapping Nonrenewable Resource Interests and Activities**

Historically proposed gas pipeline from Melville Island.

### **Overlapping Military, Transportation, and Tourism Interests and Activities**

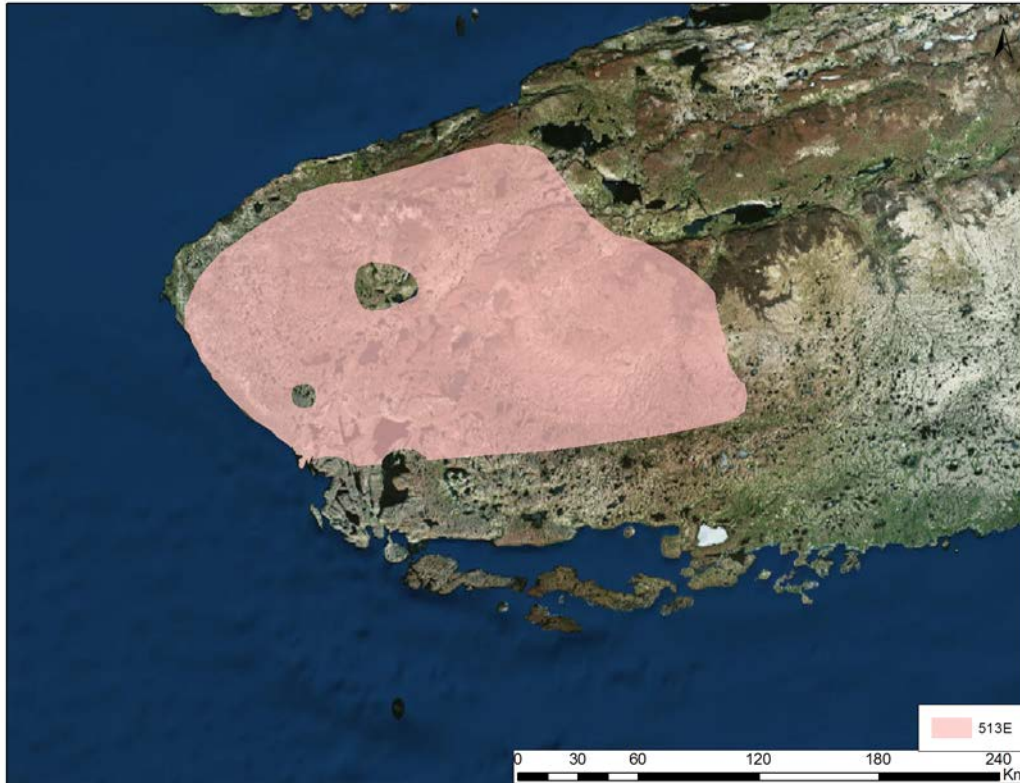
Fly-in fishing for commercial tourism and sport fishing is common in these areas, along with sport hunting for caribou and muskox. Shipping and community resupply.

### **Community Concerns**

The Ulukhaktok Community Working Group is concerned about the negative impacts that sport and commercial fishing is having on the community fish lakes/ivers.

### **Community Recommendations**

1. ILA should ensure adequate protection of Tatik Lakes (Fish Lakes) and the lakes and rivers located in the vicinity of Ulukhaktok and exclude lakes and rivers on private lands from sports fishing and commercial tourism.
2. EISC should carefully consider the importance of the lakes and rivers in this area for aquatic resources and resource harvesting.
3. FJMC should ensure that the sport fishing guide, which is included with a fishing licence, give a better description of the ISR and its related licensing requirements.
4. See also Section 4.1.1.

**SITE 513E****TAHIKPALOK LAKE REGION AND NORTH SHORE OF PRINCE ALBERT SOUND**

**Map 16. Site 513E Tahikpalok Lake region and north shore of Prince Albert Sound.**

**Identified By**

Ulukhaktok Community Working Group

**Management Category**

E

**Ownership**

Private 7(1)(a) 7(1)(b) and Public lands within the Inuvialuit Settlement Region (Maps 1 & 2)

**Description**

The site includes an on-land corridor approximately 5 km (3 mi) wide that extends from Kuuk River to Freshwater Bay along the north shore north of Prince Albert Sound. The site also includes the section at the end of the Diamond Jenness Peninsula that is north of Ulukhaktok and west of the Kuukyuak River.

**Importance of the Site to the Community of Ulukhaktok**

Important habitat to migratory birds, peregrine falcons, rough-legged hawks (May-September); and various species of fish, arctic hare, arctic fox, wolf, caribou and muskox during winter.

The people of Ulukhaktok use these areas for: harvesting caribou and muskox; fishing for trout and char; hunting migratory birds; and harvesting arctic hare and trapping arctic and red fox year-

round.

Many archaeological, cultural and historic sites are located along the coastlines.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

Culturally important sites located throughout the region (Site no. 500E)

Omingmaktok, Ungirut Bay, Okpilik Lake Areas; Kiyuktugak River, Kiyuktuluak (Site no. 507D)

Kuukyuak (Kuujjua) River / Minto Inlet System (Site no. 519E)

Minto Inlet Wildlife Area of Special Interest (Site no. 525C)

**Overlapping Nonrenewable Resource Interests and Activities**

None.

**Overlapping Military, Transportation, and Tourism Interests and Activities**

Sport hunting for muskox takes place in the Diamond Jenness Peninsula area from October to April.

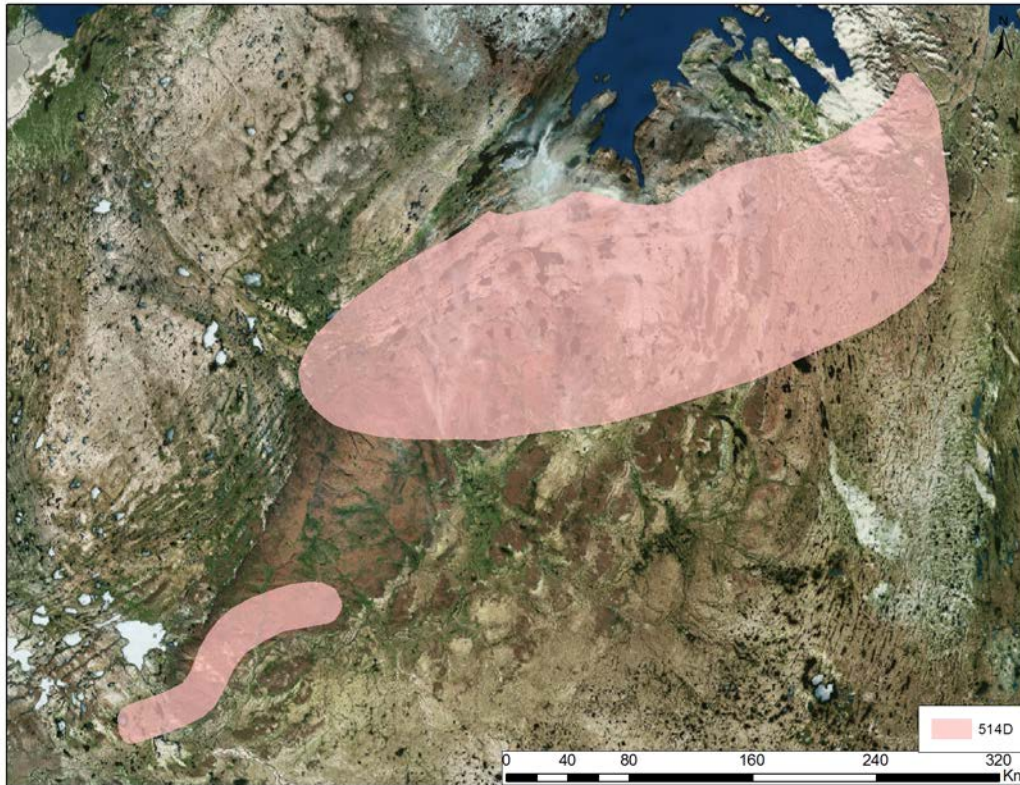
**Community Concerns**

The Ulukhaktok Community Working Group is concerned that any kind of development will have a negative impact on these critical community harvesting areas.

**Community Recommendation**

ILA and EISC should consider the importance of this site when reviewing land use applications.

## SITE 514D HABITAT / HARVESTING AREAS SOUTH OF WYNNIATT BAY



**Map 17. Site 514D Habitat/harvesting areas south of Wynniatt Bay.**

### Identified By

Ulukhaktok Community Working Group

### Management Category

D

### Ownership

Private 7(1)(b) and Public lands within the Inuvialuit Settlement Region; and within Nunavut.

### Description

The site is made up of two critical habitat and species areas: a large area southeast of Glenelg Bay, which extends half way across Natkusiak Peninsula towards Hadley Bay and then extends southwest along the bottom of Glenelg Bay. The area is 175 km (109 mi) long and 50 km (30 mi) wide. An area along the Kuukyuak River 5 km (3 mi) wide and 50 km (30 mi) long.

### Importance of the Site to the Community of Ulukhaktok

Important habitat for wildlife species including caribou, muskox, migratory birds, fish, arctic hare and fox year-round.

The area south of Glenelg Bay is used for hunting/trapping of wolves November to April. Subsistence fishing occurs along the Kuukyuak River as well as subsistence muskox hunting.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

Emangyok Sound Coastline (Site no. 502B)

Kuujjua River and Diamond Jenness Peninsula Coastal Zone (Site no. 512E)

Habitat\Harvesting Areas around Minto Inlet: Kikiktalok Island; Akolgotak; Tahikyoak North; Tahikyoak; Pingokyoak and Nigiyok Naghak (Site no. 517E)

Kuukyuak (Kuujjua) River / Minto Inlet System (Site no. 519E)

Hadley Bay Wildlife Area of Special Interest (Site no. 523D)

Minto Inlet Wildlife Area of Special Interest (Site no. 525C)

Viscount Melville Sound and Adjacent Areas (Site no. 733C)

**Overlapping Nonrenewable Resource Interests and Activities**

Historically proposed gas pipeline from Melville Island.

**Community Concerns**

The Ulukhaktok Community Working Group is concerned that any development will have a negative impact on critical habitat and species (especially raptors) as well as disturb an area of spiritual significance.

**Community Recommendation**

Further research is needed for this site, so that habitat size and range for the wildlife species can be determined. Once this research has been completed, the community HTC may make recommendations for protection. These recommendations will be incorporated into the Community Conservation Plan.

## SITE 515C ANMALOKITAK LAKE AND TAHEK LAKE REGION



**Map 18. Site 515C Anmalokitak Lake and Tahek Lake region.**

### Identified By

Ulukhaktok Community Working Group

### Management Category

C

### Ownership

Private 7(1)(b) and Public lands within the Inuvialuit Settlement Region and within Nunavut.

### Description

The site contains two areas on Victoria Island. The first is a large area east of Prince Albert Sound. The second is located on Prince Albert Peninsula between Walker Bay and Deans Dundas Bay, and extends approximately one hundred miles inland.

### Importance of the Site to the Community of Ulukhaktok

Important habitat for caribou, muskox, wolf, Arctic fox and char year-round.

Important area for harvesting caribou and muskox; trapping wolves and and arctic and red fox during winter; and fishing for char in the Kaglokyuak River in summer until October.

### Overlap with other Special Designated Areas within the Ulukhaktok Planning Areas

Prince Albert Sound and Minto Inlet and Shoreline (Site no. 509BE)

Prince Albert Peninsula Wildlife Area of Special Interest (Site no. 524C)  
Minto Inlet Wildlife Area of Special Interest (Site no. 525C)  
Kagloryuak River and Associated Tributaries (Site no. 527E)

**Overlapping Nonrenewable Resource Interests and Activities**

Historically proposed gas pipeline from Melville Island.

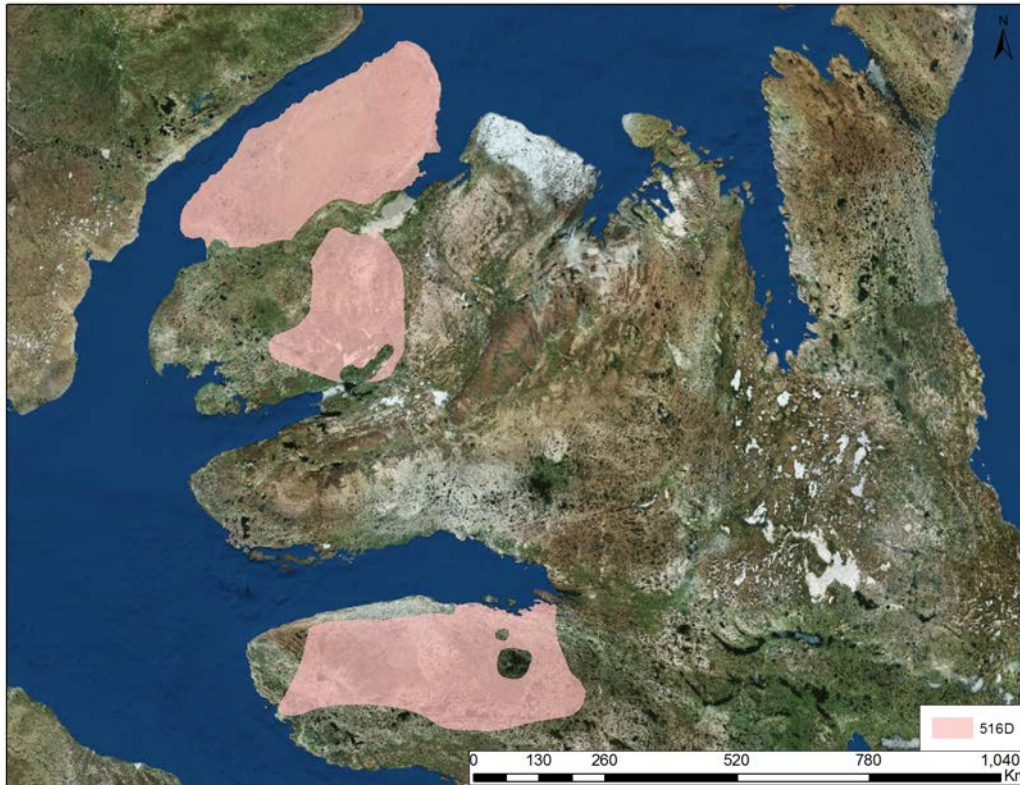
**Overlapping Military, Transportation, and Tourism Interests and Activities**

None

**Community Concerns**

The Ulukhaktok Community Working Group is concerned that any development in this site will have a negative impact on the caribou, muskox, arctic fox and wolf.

## SITE 516D HIKONGIYOITOK LAKE AND KUGALUK RIVER REGION



**Map 19. Site 516D Hikongiyoitok Lake and Kugaluk River region.**

### Identified By

Ulukhaktok Community Working Group

### Management Category

D

### Ownership

Private 7(1)(b) and Public lands within the Inuvialuit Settlement Region; and within Nunavut.

### Description

The site is two large areas: on Wollaston Peninsula, south of Prince Albert Sound, which includes the Kugaluk River, and an inland area on the Prince Albert Peninsula north of Minto Inlet and south of the Engaloak River.

### Importance of the Site to the Community of Ulukhaktok

Important habitat for caribou, specifically calving grounds, and for fish such as char and trout year-round. The people of Ulukhaktok use the area for subsistence hunting and fishing year-round.

There has been testing for the feasibility of commercial fishing.

### Overlap with other Special Designated Areas within the Ulukhaktok Planning Areas

Prince Albert Sound and Minto Inlet and Shoreline (Site no. 509BE)



Kagluk River/ Quunnguq Lake System (Site no. 521E)  
Hadley Bay Wildlife Area of Special Interest (Site no. 523D)  
Prince Albert Peninsula Wildlife Area of Special Interest (Site no. 524C)  
Minto Inlet Wildlife Area of Special Interest (Site no. 525C)  
Colville Mountains Wildlife Area of Special Interest (Site no. 526C)

**Overlapping Nonrenewable Resource Interests and Activities**

Proposed gas pipeline from Melville Island.

**Overlapping Military, Transportation, and Tourism Interests and Activities**

None.

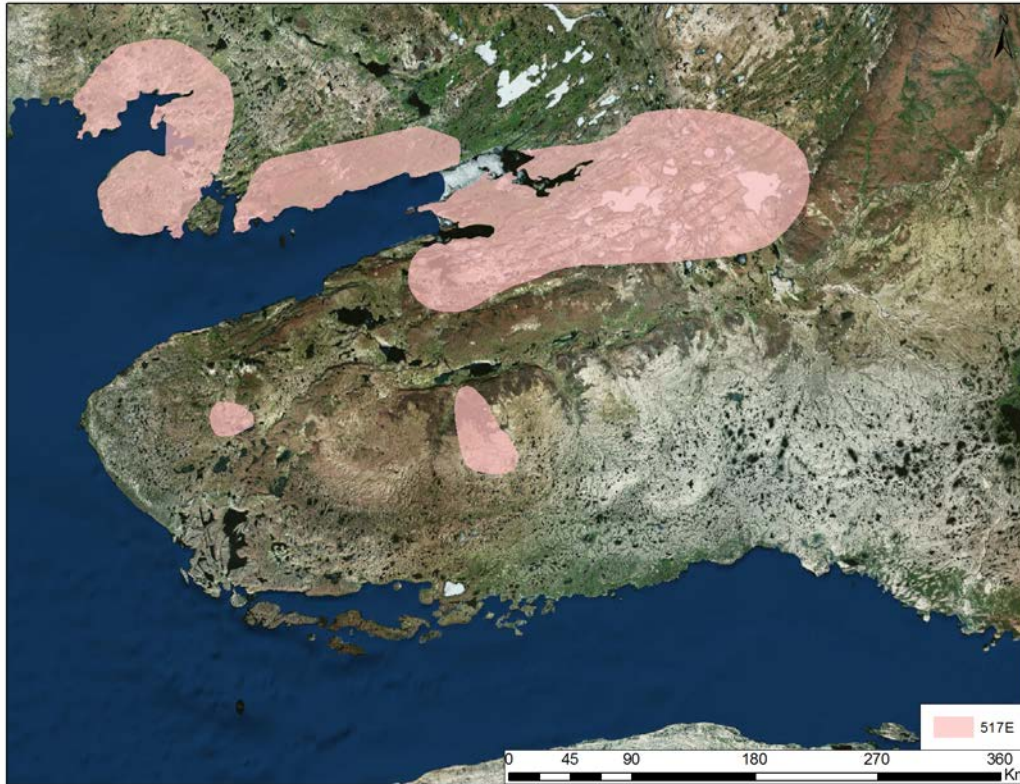
**Community Concerns**

The Ulukhaktok Community Working Group is concerned that development will have a negative impact on the habitat of the caribou, trout and char.

**Community Recommendation for Protection**

Any development proposals should carefully consider impacts to caribou, trout, char and the ecosystems which support them.

## SITE 517E HABITAT / HARVESTING AREAS AROUND MINTO INLET



**Map 20. Site 517E Habitat/harvesting areas around Minto Inlet.**

### Identified By

Ulukhaktok Community Working Group

### Management Category

E

### Ownership

Private 7(1)(b) lands within the Inuvialuit Settlement Region; except Nigiyok Naghak, which is Public lands (Maps 1 & 2)

### Description

The site includes six areas: Kikitalok Island (George Island) at the east end of Prince Albert Sound; Tahikyohok on the north shore of Minto Inlet; the Tahiyok north area at the end of Minto Inlet; Pingokyoak, which is the area surrounding Walker Bay; Nigiyok Naghak on the south side of the Kuukyuak River; and Akolgotak, which is southwest of Tatik Lakes.

### Importance of the Site to the Community of Ulukhaktok

Important habitat for a variety of wildlife including: caribou, muskox, migratory birds, arctic hare, fox and wolf, trout, char and whitefish year-round.

The people of Ulukhaktok use these areas for hunting, fishing and trapping year-round. They hunt caribou and muskox on George Island July to December. Nigiyok Naghak contains a local hunting area that is utilized regularly July to December and a sensitive calving area for Peary

caribou.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

Culturally important sites located throughout the region (Site no. 500E)  
 Kuujjua River and Diamond Jenness Peninsula Coastal Zone (Site no. 512E)  
 Habitat\Harvesting Areas South of Wynniatt Bay (Site no. 514D)  
 Kuukyuak (Kuujjua) River / Minto Inlet System (Site no. 519E)  
 Southwest Victoria Island Coastal zone (Site no. 522C)  
 Prince Albert Peninsula Wildlife Area of Special Interest (Site no. 524C)  
 Minto Inlet Wildlife Area of Special Interest (Site no. 525C)  
 Beluga Management Plan Zone 1B - Prince Albert Sound (Site no. 528E)

**Overlapping Nonrenewable Resource Interests and Activities**

Nearby proposed gas pipeline from Melville Island.

**Overlapping Military, Transportation, and Tourism Interests**

Sport hunting for muskox.

**Community Concerns**

The Ulukhaktok Community Working Group is concerned that development will have a negative impact on the habitat of the caribou, muskox, furbearers, and fish, and a negative impact on raptors and their habitat.

**Community Recommendations**

1. ILA and EISC should ensure that this site is adequately protected.
2. The community of Ulukhaktok should be consulted on any proposed land use activities in Nigiyok Naghak area.
3. Further research is needed for the north Minto Inlet area so that habitat size and range for the wildlife species can be determined. Once research is completed, the HTC may make recommendations for protection which will be incorporated into the Community Conservation Plan.

**SITE 518B****RIVERS, LAKES, AND STREAMS IN CENTRAL WEST  
VICTORIA ISLAND****Identified By**

Department of Fisheries and Oceans

**Management Category**

B

**Ownership**

Private 7(1)(a) and 7(1)(b) lands and Public lands within Inuvialuit Settlement Region (Maps 1 & 2)

**Description**

All fresh water habitat excluding the Kuujjua, Kuuk, Kagluk and Kagloaryuak Rivers.

**Importance of Site to the Community of Ulukhaktok**

Contain anadromous arctic char stocks. Location of some spawning, overwintering, nursery areas are not known. The streams and lakes of Wollaston and Diamond Jenness peninsulas contain anadromous arctic char stocks and may be the migration route and feeding areas of the spawning and other high priority areas.

**Community Recommendations**

1. DFO should provide a more complete site description and justification. This information would then be included in the conservation plan.
2. DFO should put forth recommendations for the protection of this area. These recommendations will be reviewed for inclusion in the conservation plan.

## SITE 519E KUUKYUAK (KUUJJUA) RIVER/MINTO INLET SYSTEM



**Map 21. Site 519E Kuukyuak (Kuujuua) River/Minto Inlet system.**

### Identified By

Department of Fisheries and Oceans

### Management Category

E

### Ownership

Private 7(1)(a) and 7(1)(b) lands and Public lands within Inuvialuit Settlement Region (Maps 1 & 2)

### Description

Five-kilometre buffer around the Kuujuua River and associated drainages.

### Importance of Site

Freshwater rivers and lakes are overwintering, spawning, and rearing habitat for anadromous char. This site includes Tatik (Fish) Lake, for which there is a long-term Arctic char monitoring program led by DFO and the OHTC, as well as annual voluntary harvest levels per household, which are recommended by the Ulukhaktok Char Working Group each year.

### Overlap with other Special Designated Areas within the Ulukhaktok Planning Area

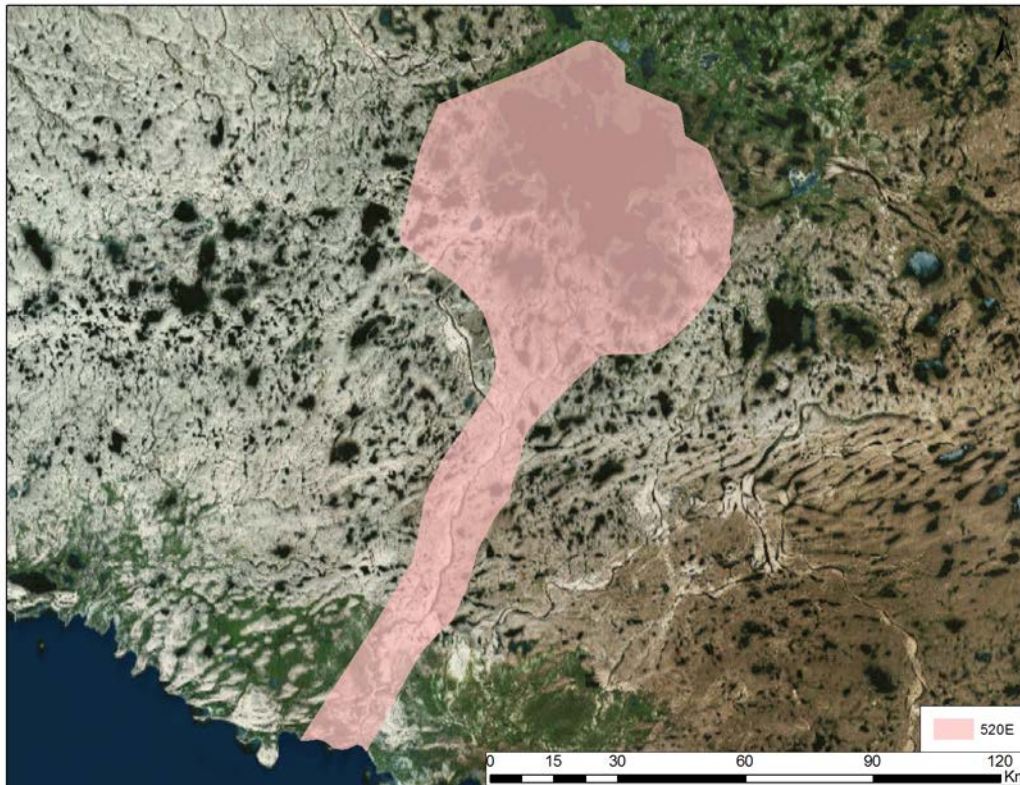
Omingmaktok, Ungirut Bay, Okpilik Lake Areas; Kiyuktugak River, Kiyuktuluak (Site no. 507D)

Prince Albert Sound and Minto Inlet and Shoreline (Site no. 509BE)  
Kuujjua River and Diamond Jenness Peninsula Coastal Zone (Site no. 512E)  
Tahikpalok Lake Region and North Shore of Prince Albert Sound (Site no. 513E)  
Habitat\Harvesting Areas South of Wynniatt Bay (Site no. 514D)  
Hikongiyoitok Lake and Kugaluk River Region (Site no. 516D)  
Habitat\Harvesting Areas around Minto Inlet: Kikiktalok Island; Akolgotak; Tahikyoak North;  
Tahikyoak; Pingokyoak and Nigiyok Naghak (Site no. 517E)  
Southwest Victoria Island Coastal zone (Site no. 522C)  
Prince Albert Peninsula Wildlife Area of Special Interest (Site no. 524C)  
Minto Inlet Wildlife Area of Special Interest (Site no. 525C)  
Beluga Management Plan Zone 1B - Prince Albert Sound (Site no. 528E)

### **Community Recommendations**

1. DFO should provide a more complete site description and justification. This information would then be included in the conservation plan.
2. DFO should put forth recommendations for the protection of this area. These recommendations will be reviewed for inclusion in the conservation plan.
3. The size of the five-kilometre buffer can vary depending on the slope of the land and the type of development. The community recognizes that the potential for impact varies with the location and the development.

**SITE 520E KUUK RIVER / TAHIRYUAK LAKE SYSTEM**



**Map 22. Site 520E Kuuk River/Tahiryuak Lake System.**

**Identified By**

Department of Fisheries and Oceans

**Management Category**

E

**Ownership**

Private 7(1)(b) lands and Public lands within Inuvialuit Settlement Region (Maps 1 & 2)

**Description**

Freshwater rivers and lakes are overwintering, spawning, and rearing habitat for anadromous char.

**Importance of Site**

Anadromous arctic char stock fished for subsistence use by people from Ulukhaktok.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

Tahikyuaq Lakes (South, East), Kangikihnik Lake, Kaglokyuaq and Engaloak River (Site no. 511D)

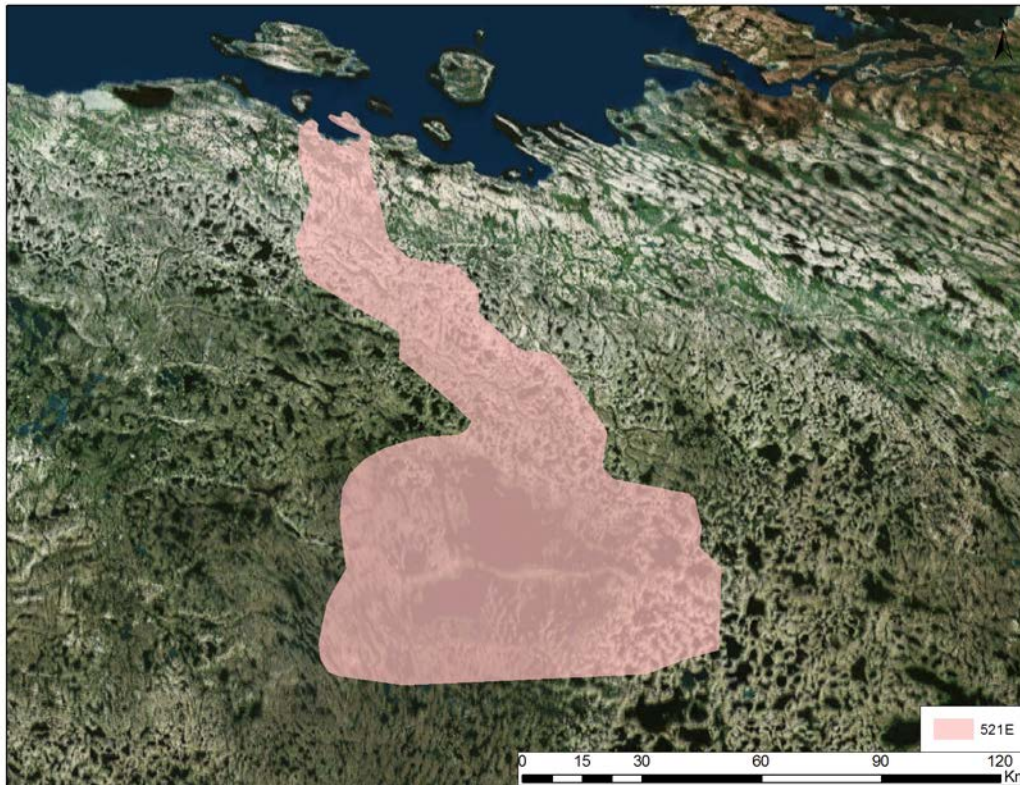
Kuujjua River and Diamond Jenness Peninsula Coastal Zone (Site no. 512E)

**Community Recommendations**

DFO should put forth recommendations for the protection of this area. These recommendations will be reviewed for inclusion in the conservation plan.



## SITE 521E KAGLUK RIVER / KUUNNGUK LAKE SYSTEM



**Map 23. Site 521E Kagluk River/Kuunnguk Lake system.**

### Identified By

Department of Fisheries and Oceans

### Management Category

E

### Ownership

Private 7(1)(b) lands and Public lands within the Inuvialuit Settlement Region (Maps 1 & 2)

### Description

Freshwater rivers and lakes are overwintering, spawning, and rearing habitat for anadromous char.

### Importance of Site

Anadromous arctic char stock. Formerly a small test commercial fishery by Olokhaktomiut Hunters and Trappers Committee.

### Overlap with other Special Designated Areas within the Ulukhaktok Planning Area

Prince Albert Sound and Minto Inlet and Shoreline (Site no. 509BE)

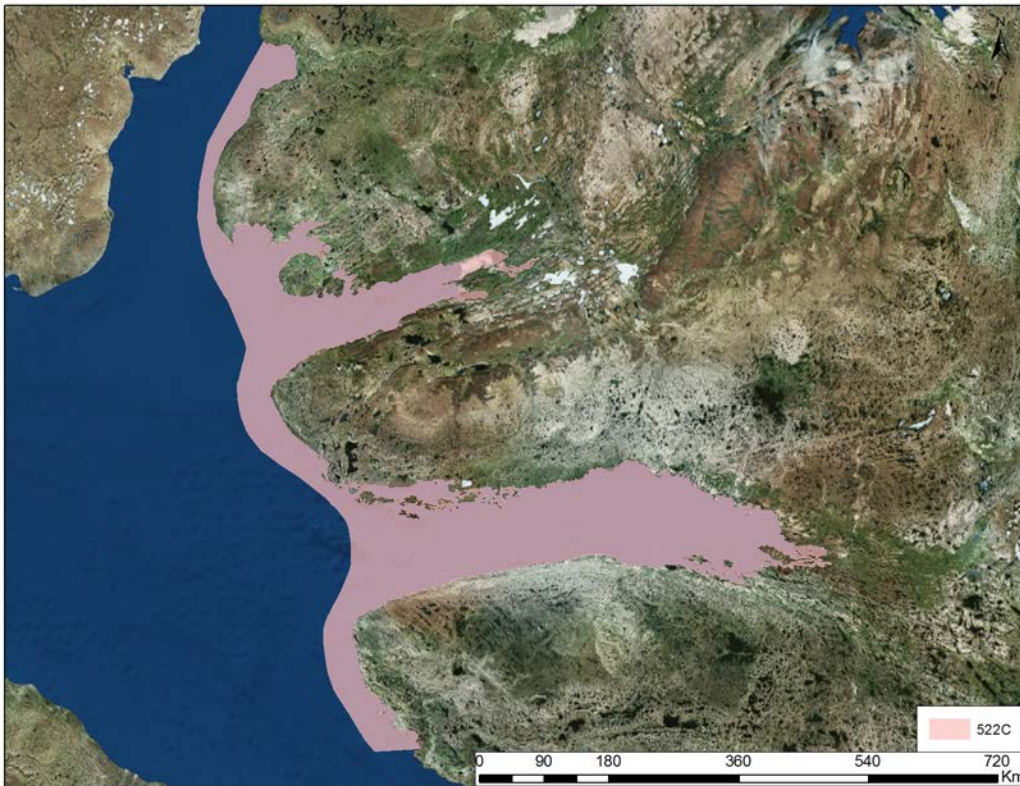
Tahikyuak Lakes (South, East), Kangikihnik Lake, Kaglokyuak and Engaloak River (Site no. 511D)

Hikongiyoitok Lake and Kugluk River Region (Site no. 516D)

**Community Recommendations**

DFO should put forth recommendations for the protection of this area. These recommendations will be reviewed for inclusion in the conservation plan.

## SITE 522C SOUTHWEST VICTORIA ISLAND COASTAL ZONE



**Map 24. Site 522C Southwest Victoria Island coastal zone.**

**Identified By**

Department of Fisheries and Oceans

**Management Category**

C

**Ownership**

Public lands within Inuvialuit Settlement Region (Maps 1 & 2)

**Description**

The waters of Prince Albert sound south to William Point, Minto Inlet, North to Ramsey Island and across to Victoria Island shoreline.

**Importance of Site**

Arctic char frequent the streams and rivers to feed.

Safety Channel supports subsistence fishing.

Ringed seal use good birth-lair habitat.

Moulting seals in the area during May and June.

Throughout ice cover periods where stable fast ice occurs, this is an important breeding and haul-out area for ringed seals.

### **Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

Culturally important sites located throughout the region (Site no. 500E)

Emangyok Sound Coastline (Site no. 502B)

Prince Albert Sound and Minto Inlet and Shoreline (Site no. 509BE)

Tahioyak (Safety Channel) (Site no. 510D)

Kuujjua River and Diamond Jenness Peninsula Coastal Zone (Site no. 512E)

Habitat\Harvesting Areas around Minto Inlet: Kikiktalok Island; Akolgotak; Tahikyoak North; Tahikyoak; Pingokyoak and Nigiyok Naghak (Site no. 517E)

Kuukyuak (Kuujjua) River / Minto Inlet System (Site no. 519E)

Prince Albert Peninsula Wildlife Area of Special Interest (Site no. 524C)

Minto Inlet Wildlife Area of Special Interest (Site no. 525C)

Beluga Management Plan Zone 1B - Prince Albert Sound (Site no. 528E)

Viscount Melville Sound and Adjacent Areas (Site no. 733C)

Prince of Wales Strait (Site no. 734C)

### **Community Recommendations**

DFO should put forth recommendations for the protection of this area. These recommendations will be reviewed for inclusion in the conservation plan.

**SITE 523D HADLEY BAY WILDLIFE AREA OF SPECIAL INTEREST**



**Map 25. Site 523D Hadley Bay wildlife area of special interest.**

**Identified By**  
ENR

**Management Category**  
D

**Ownership**  
Private 7(1)(b) lands and Public lands within the Inuvialuit Settlement Region (Maps 1 & 2)

**Description**  
Encompassing Richard Collinson Inlet, Glenelg Bay and the land between the two bodies of water, to the eastern ISR boundary.

**Importance of Site**  
Coastal areas adjacent to Wynniatt and Hadley Bays and Richard Collinson Inlet are important denning areas for polar bears November to May. Polar bears also concentrate near the coastline in late winter and spring, and may remain there in summer during the open water period. Hadley Bay is an important feeding area for polar bears year-round.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**  
Emangyok Sound Coastline (Site no. 502B)

Richard Collinson Inlet and Glenelg Bay, Wynniatt Bay, and Prince of Wales Strait (Site no. 508C)  
Tahikyuak Lakes (South, East), Kangikihnik Lake, Kaglokyuak and Engaloak River (Site no. 511D)

Habitat\Harvesting Areas South of Wynniatt Bay (Site no. 514D)

Hikongiyoitok Lake and Kugaluk River Region (Site no. 516D)

Prince Albert Peninsula Wildlife Area of Special Interest (Site no. 524C)

Viscount Melville Sound and Adjacent Areas (Site no. 733C)

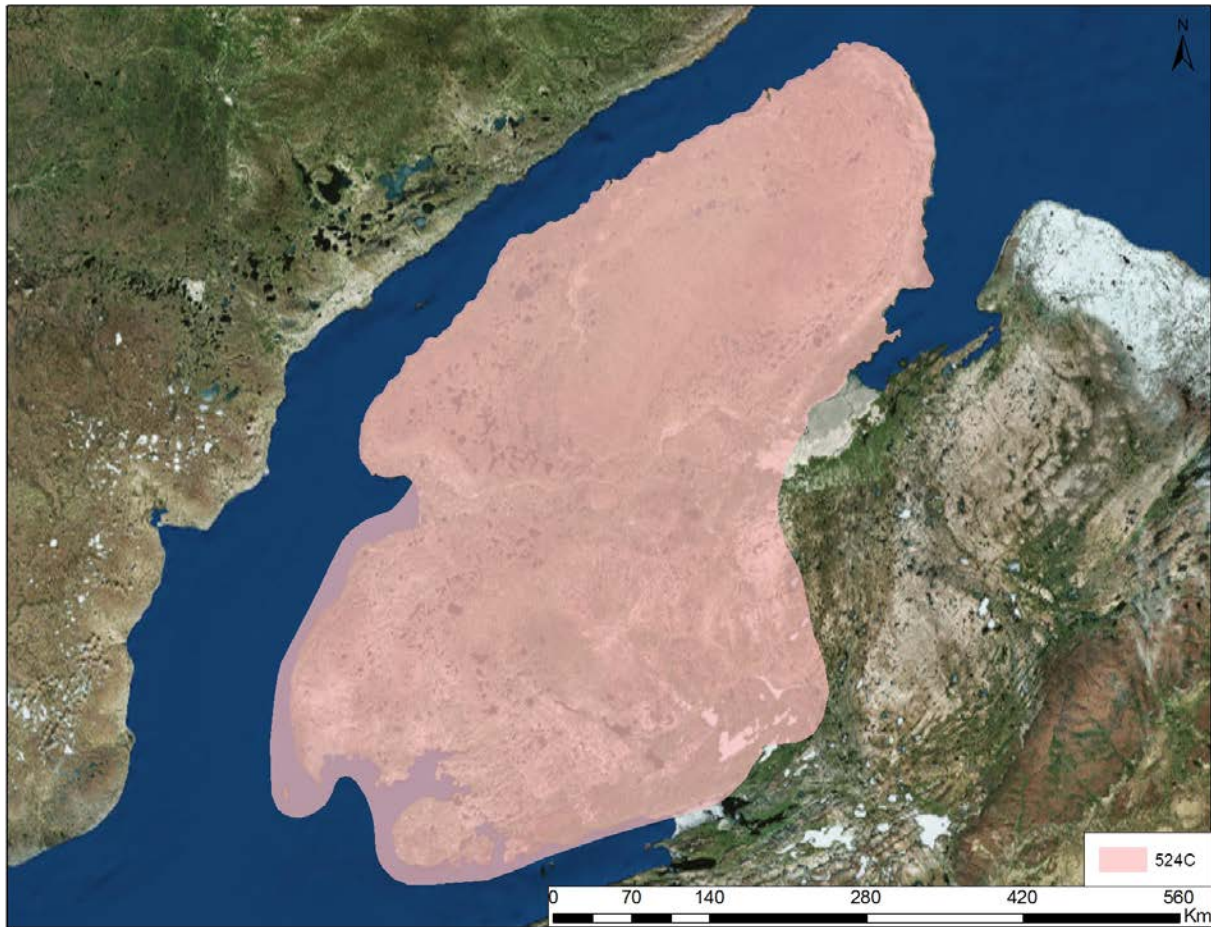
Prince of Wales Strait (Site no. 734C)

### **Community Recommendations**

1. ENR should provide a more complete site description and justification. This information would then be included in the conservation plan.
2. ENR should put forth recommendations for the protection of this area. These recommendations will be reviewed for inclusion in the conservation plan.

**SITE 524C**

**PRINCE ALBERT PENINSULA WILDLIFE AREA OF SPECIAL INTEREST**



**Map 26. Site 524C Prince Albert Peninsula wildlife area of special interest.**

**Identified By**

ENR

**Management Category**

C

**Ownership**

Private 7(1)(b) lands and Public lands within Inuvialuit Settlement Region (Maps 1 & 2)

**Description**

Encompassing the northern and eastern portion of Prince Albert Peninsula, bordering Deans Dundas Bay to the west and Richard Collinson Inlet to the east.

**Importance of Site**

Calving ground for Victoria Island caribou.

Mount Phayre is an important wintering area for these caribou and muskoxen.

Minto Inlet is also important for polar bears and foxes because of the abundance of seals.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

Culturally important sites located throughout the region (Site no. 500E)

Emangyok Sound Coastline (Site no. 502B)

Omingmaktok, Ungirut Bay, Okpilik Lake Areas; Kiyuktugak River, Kiyuktuluak (Site no. 507D)

Prince Albert Sound and Minto Inlet and Shoreline (Site no. 509BE)

Tahikyuak Lakes (South, East), Kangikihnik Lake, Kaglokyuak and Engaloak River (Site no. 511D)

Anmalokitak Lake and Tahok Lake Region (Site no. 515C)

Hikongiyoitok Lake and Kugaluk River Region (Site no. 516D)

Habitat\Harvesting Areas around Minto Inlet: Kikiktalok Island; Akolgotak; Tahikyoak North;

Tahikyoak; Pingokyoak and Nigiyok Naghak (Site no. 517E)

Kuukyuak (Kuujjua) River / Minto Inlet System (Site no. 519E)

Southwest Victoria Island Coastal zone (Site no. 522C)

Hadley Bay Wildlife Area of Special Interest (Site no. 523D)

Minto Inlet Wildlife Area of Special Interest (Site no. 525C)

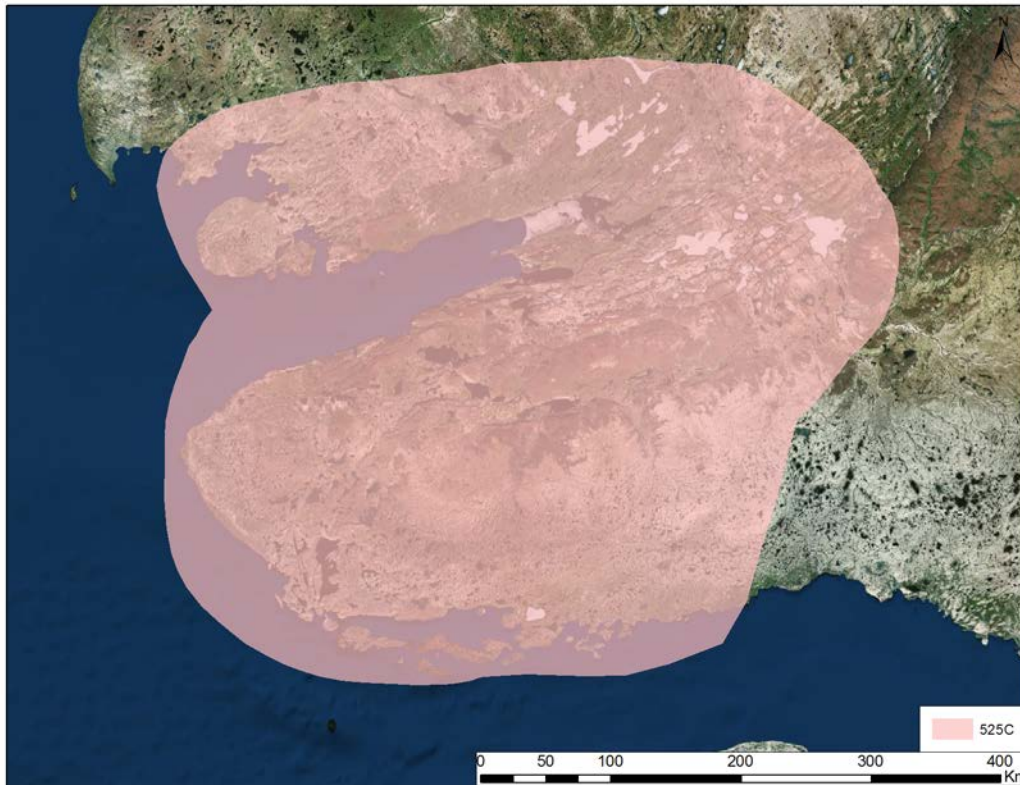
Beluga Management Plan Zone 1B - Prince Albert Sound (Site no. 528E)

Viscount Melville Sound and Adjacent Areas (Site no. 733C)

Prince of Wales Strait (Site no. 734C)



**SITE 525C MINTO INLET WILDLIFE AREA OF SPECIAL INTEREST**



**Map 27. Site 525C Minto Inlet wildlife area of special interest.**

**Identified By**

ENR

**Management Category**

C

**Ownership**

Private 7(1)(a) and 7(1)(b) lands and Public lands within Inuvialuit Settlement Region (Maps 1 & 2)

**Description**

A circular area encompassing Minto Inlet, Ulukhaktok, and the western portion of Diamond Jenness Peninsula.

**Importance of Site**

Important nesting area for threatened subspecies of peregrine falcon, *Falco peregrinus tundrius* from May to September.

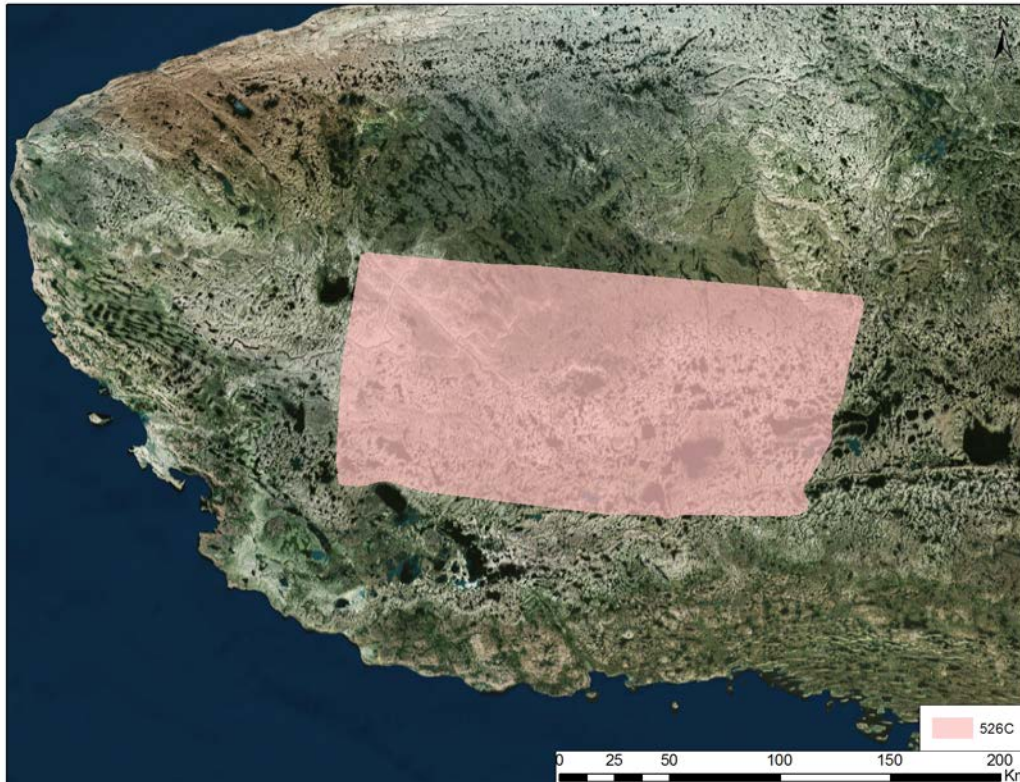
Coastal areas of Minto Inlet are important habitat for polar bears year-round.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

Culturally important sites located throughout the region (Site no. 500E)  
Omingmaktok, Ungirut Bay, Okpilik Lake Areas; Kiyuktugak River, Kiyuktuluak (Site no. 507D)  
Prince Albert Sound and Minto Inlet and Shoreline (Site no. 509BE)  
Tahioyak (Safety Channel) (Site no. 510D)  
Kuujuua River and Diamond Jenness Peninsula Coastal Zone (Site no. 512E)  
Tahikpalok Lake Region and North Shore of Prince Albert Sound (Site no. 513E)  
Habitat\Harvesting Areas South of Wynniatt Bay (Site no. 514D)  
Anmalokitak Lake and Tahok Lake Region (Site no. 515C)  
Hikongiyoitok Lake and Kugaluk River Region (Site no. 516D)  
Habitat\Harvesting Areas around Minto Inlet: Kikiktalok Island; Akolgotak; Tahikyoak North;  
Tahikyoak; Pingokyoak and Nigiyok Naghak (Site no. 517E)  
Kuukyuak (Kuujuua) River / Minto Inlet System (Site no. 519E)  
Southwest Victoria Island Coastal zone (Site no. 522C)  
Prince Albert Peninsula Wildlife Area of Special Interest (Site no. 524C)  
Beluga Management Plan Zone 1B - Prince Albert Sound (Site no. 528E)  
Prince of Wales Strait (Site no. 734C)

**SITE 526C**

**COLVILLE MOUNTAINS WILDLIFE AREA OF SPECIAL  
INTEREST**



**Map 28. Colville Mountains wildlife area of special interest.\**

**Identified By**

ENR

**Management Category**

C

**Ownership**

Private 7(1)(b) and Public lands within the Inuvialuit Settlement Region and within Nunavut.

**Description**

An area, approximately 80 km (50 mi) by 40 km (25 mi) in the middle of Wollaston Peninsula, south of the ISR boundary.

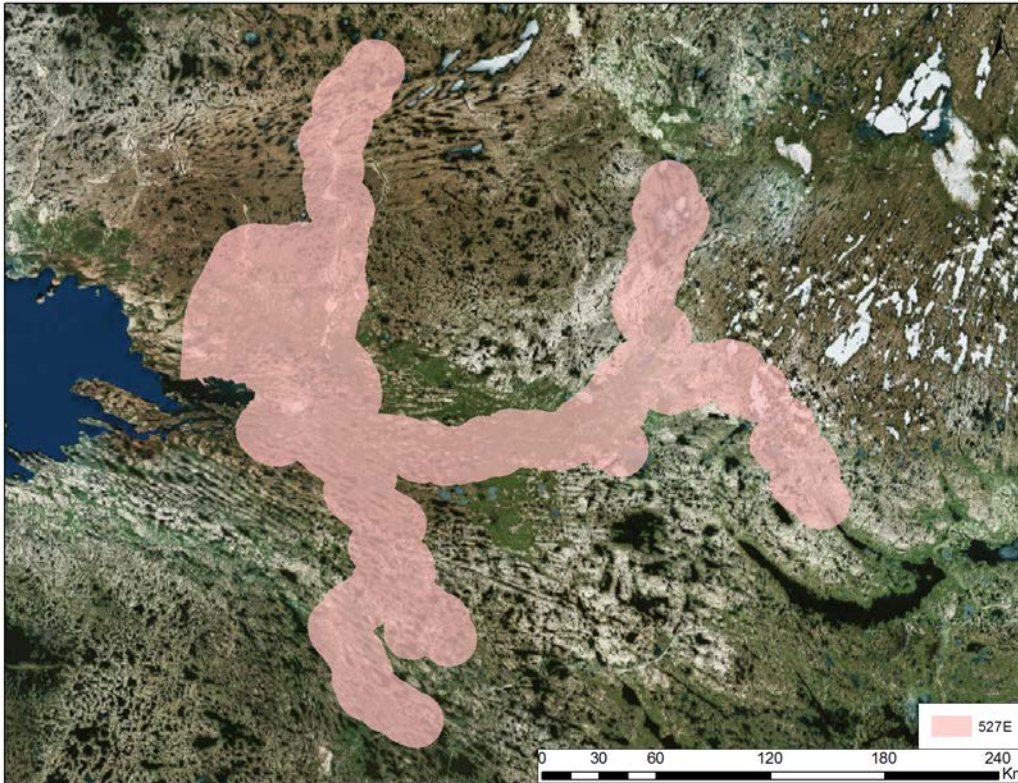
**Importance of Site**

Calving ground for the Dolphin-Union caribou herd (taxonomic status unknown).

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

Hikongiyoitok Lake and Kugaluk River (Site 516D)

## SITE 527E KAGLORYUAK RIVER AND ASSOCIATED TRIBUTARIES



**Map 29. Site 527 Kagloryuak River and associated tributaries.**

### Identified By

Department of Fisheries and Oceans

### Management Category

E

### Ownership

Private 7(1)(b) lands and Public lands within Inuvialuit Settlement Region (Maps 1 & 2)

### Description

Five kilometre buffer around the Kagloryuak river and associated drainages.

### Importance of Site

Freshwater rivers and lakes are overwintering, spawning, and rearing habitat for anadromous char. Anadromous arctic char stock fished for subsistence use by people from Ulukhaktok.

### Overlap with other Special Designated Areas within the Ulukhaktok Planning Area

Prince Albert Sound and Minto Inlet and Shoreline (Site no. 509BE)

Tahikyuak Lakes (South, East), Kangikihnik Lake, Kaglokyuak and Engaloak River (Site no. 511D)

Kuujjua River and Diamond Jenness Peninsula Coastal Zone (Site no. 512E)

Anmalokitak Lake and Tahok Lake Region (Site no. 515C)  
Southwest Victoria Island Coastal zone (Site no. 522C)

**Community Recommendations**

The size of the five kilometre buffer can vary depending on the slope of the land and the type of development. The community recognizes that the potential for impact varies with the location and the development.

**SITE 528E****BELUGA MANAGEMENT PLAN ZONE 1B - PRINCE ALBERT SOUND**

**Map 30. Site 528E Beluga management plan zone 1B - Prince Albert Sound.**

**Identified By**

FJMC and the Community of Ulukhaktok

**Management Category**

E

**Ownership**

Crown waters within the ISR.

**Description**

Includes Walker Bay, Minto Inlet, and the northern half of Prince Albert Sound.

**Importance of the Site to the Community of Ulukhaktok**

This zone includes areas where beluga are occasionally harvested by residents of Ulukhaktok.

Occasional summer habitat for beluga whales.

**Overlapping Waters of Territorial, National, and International Conservation Interest**

Culturally important sites located throughout the region (Site no. 500E)

Emangyok Sound Coastline (Site no. 502B)

Prince Albert Sound and Minto Inlet and Shoreline (Site no. 509BE)

Tahioyak (Safety Channel) (Site no. 510D)

Kuujjua River and Diamond Jenness Peninsula Coastal Zone (Site no. 512E)  
 Habitat/Harvesting Areas around Minto Inlet: Kikiktalok Island; Akolgotak; Tahikyoak North;  
 Tahikyoak; Pingokyoak and Nigiyok Naghak (Site no. 517E)  
 Kuukyuak (Kuujjua) River / Minto Inlet System (Site no. 519E)  
 Southwest Victoria Island Coastal zone (Site no. 522C)  
 Prince Albert Peninsula Wildlife Area of Special Interest (Site no. 524C)  
 Minto Inlet Wildlife Area of Special Interest (Site no. 525C)  
 Viscount Melville Sound and Adjacent Areas (Site no. 733C)  
 Prince of Wales Strait (Site no. 734C)  
 Habitat/Harvesting Areas around Minto Inlet: Kikiktalok Island; Akolgotak; Tahikyoak North;  
 Tahikyoak; Pingokyoak and Nigiyok Naghak (Site 517E)  
 Kuukyuak (Kuujjua) River / Minto Inlet System (Site 519E)  
 Southwest Victoria Island Coastal zone (Site 522C)  
 Prince Albert Peninsula Wildlife Area of Special Interest (Site 524C)  
 Minto Inlet Wildlife Area of Special Interest (Site 525C)  
 Viscount Melville Sound and adjacent areas (Site 733C)  
 Prince of Wales Strait (Site 734C)

#### **Overlapping Nonrenewable Resource Interests and Activities**

None.

#### **Overlapping Military, Transportation, and Tourism Interests and Activities**

Marine shipping.

#### **Community Concerns**

None.

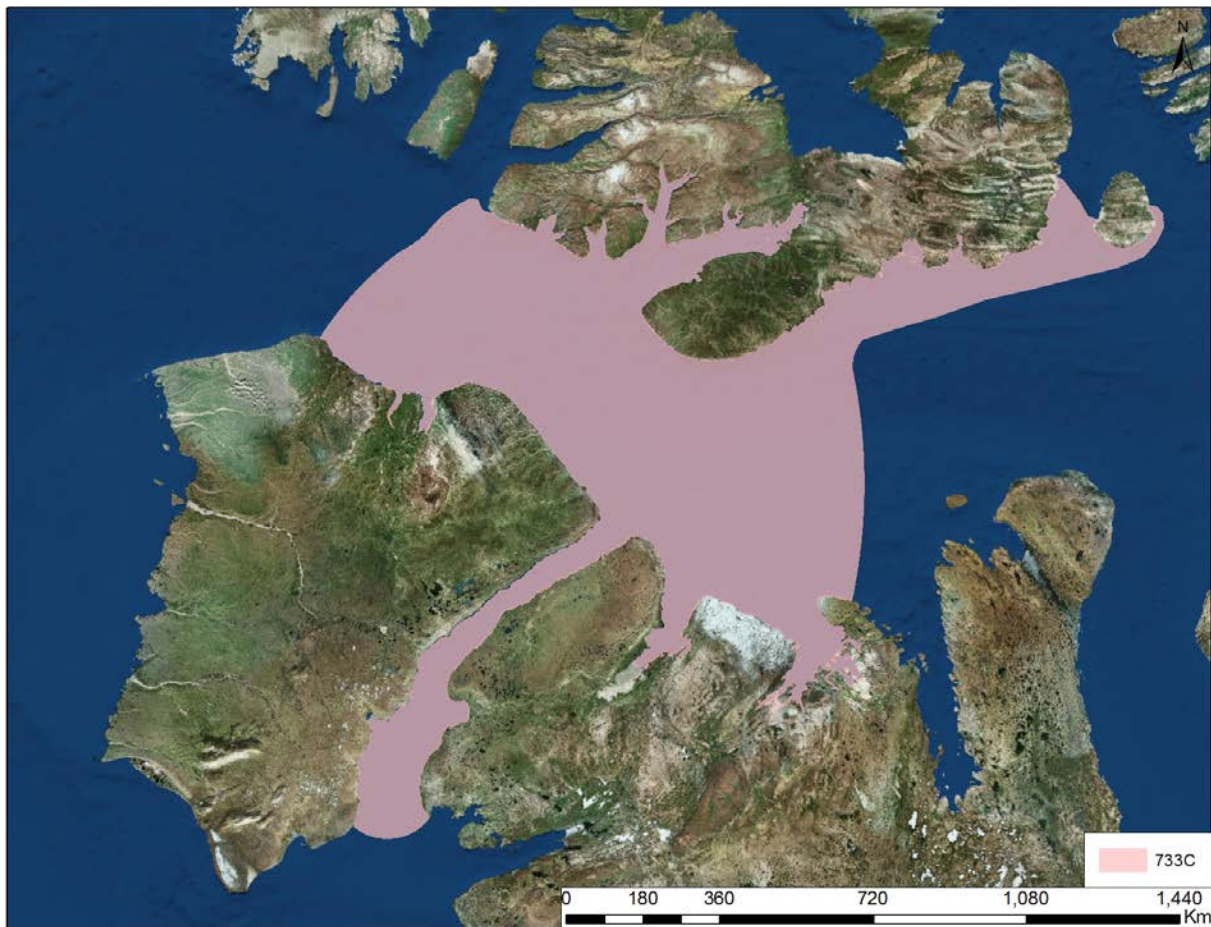
#### **Recommendations**

Guidelines for Zone 1b (as defined in the Beluga Management Plan):

1. In the review of any development proposal Zone 1 is to be considered a Protected Area according to the guidelines described in the Inuvialuit Renewable Resource Conservation and Management Plan.
2. The oil and gas industry should not be permitted to explore for resources within Zone 1 waters nor to produce hydrocarbons or construct/operate any type of facility.
3. No mining activities (e.g. gravel removal) should be permitted from break-up until 15 August.
4. Development activities such as hydro-electric developments, even if located outside of Zone 1 should be evaluated for their potential deleterious effects on water quality and quantity, or on the stability and integrity of ice in Zone 1a waters.
5. All shipping activities (including dredging) should be confined to designated routes and areas. Passage through or close to Zone 1 outside of designated routes, even if it's the shortest route, should be avoided from break-up to 15 August.
6. No port development should be allowed within or on the shores of any Zone 1 waters.
7. It is recommended that parties proposing industrial development and government agencies evaluating development proposals and other parties interested in development within the zone should seek the advice of the HTC's. To ensure the protection of the beluga resource and harvest, HTC's should be consulted regarding any licenses, permits or operating procedures approved for activities within the zones.
8. Commercial fishing proposals for Zone 1 should be evaluated and regulated with regard to beluga food species.

## SITE 733C

## VISCOUNT MELVILLE SOUND AND ADJACENT AREAS



**Map 31. Site 733C Viscount Melville Sound and adjacent areas.**

**Identified By**

Ulukhaktok and Sachs Harbour Community Working Groups

**Management Category**

C

**Ownership**

Private 7(1)(b) lands and Public lands within Inuvialuit Settlement Region (Maps 1 & 2)

**Description**

The site includes the offshore areas of Kangikhokyoak Gulf (Liddon Gulf) and extends 10-15 km (6.2-9.3 mi) offshore into M'Clure Strait and Emangyok Sound over to Byam Martin Island. It also includes the coastline along the entire area and Liddon Gulf, Murray Inlet, Hardy Bay, Warrington Bay, and part of Kellet Strait on Melville Island.

**Importance of the Site to the Communities of Ulukhaktok and Sachs Harbour**

Important to past and present subsistence harvesting of seal, primarily during the period from



March to May, although the hunting season extends from December to May.

Important habitat for polar bear and ringed and bearded seals year-round. Contains denning areas for bears and pupping areas for seals from November to May. The people of Ulukhaktok and Sachs Harbour use Kangikhokyoak Gulf area up to 10-15 km (6.2-9.3 mi) offshore for subsistence hunting from November to May. Important traditional and cultural site since it was used by Inuvialuit ancestors of the people of Ulukhaktok and Sachs Harbour

Important feeding area for beluga.

Concerns toward ship traffic. Fall and spring migration of caribou and polar bears between Banks, Victoria and Melville Islands.

### **Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

Culturally important sites located throughout the region (Site no. 500E)

Kangikhokyoak Gulf (Liddon Gulf) Coastline (Site no. 503B)

Richard Collinson Inlet and Glenelg Bay, Wynniatt Bay, and Prince of Wales Strait (Site no. 508C)

Prince Albert Sound and Minto Inlet and Shoreline (Site no. 509BE)

Southwest Victoria Island Coastal zone (Site no. 522C)

Hadley Bay Wildlife Area of Special Interest (Site no. 523D)

Prince Albert Peninsula Wildlife Area of Special Interest (Site no. 524C)

Beluga Management Plan Zone 1B - Prince Albert Sound (Site no. 528E)

Prince of Wales Strait (Site no. 734C)

### **Overlapping Nonrenewable Resource Interests and Activities**

Proposed Melville Island gas pipeline and related marine tanker traffic.

### **Overlapping Military, Transportation, and Tourism Interests and Activities**

Marine shipping, seismic activity and low level flying.

Sport hunting for polar bear.

### **Community Concerns**

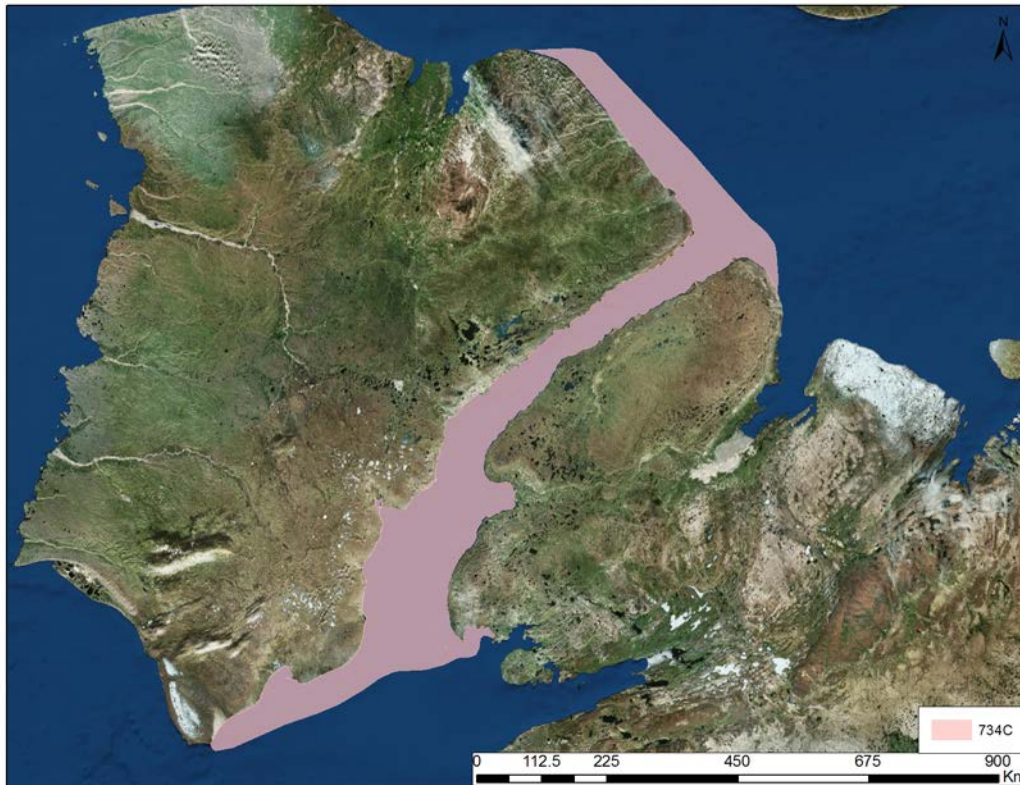
The Ulukhaktok and Sachs Harbour Community Working Groups are concerned that marine traffic through Emangyok Sound will have a negative impact on the wildlife and traditional use in the area. Specific concerns relate to the impact of ship noise on polar bear denning sites, ship track hazards to hunters, and the potential for spills if tanker traffic is allowed. There is also concern about seismic activity and low-level flying that could negatively affect species and habitats.

### **Community Recommendations**

1. HTC and related joint management bodies should protect the habitat and species of this site from December to May.
2. The EIRB should facilitate a meeting between the Canadian Coast Guard and the community to discuss the mutual need for regulatory ship traffic in areas considered environmentally sensitive by the community.
3. The community requests that ship traffic be seasonally regulated to its satisfaction such that sensitive marine ecosystems are not adversely affected.
4. ENR should undertake a population census of polar bears in this area.

5. Canadian Coast Guard should pursue the Public Review Panel on Tanker Safety and Marine Spills Response Capability recommendations to amend the Canada Shipping Act; to use the Arctic Waters Pollution Prevention Act; and, to use overland pipelines to transport Arctic crude oil from the Beaufort Sea. Specifically, the Community Working Group recommends that no winter ship traffic be allowed through the Prince of Wales Strait (November to June inclusive).
6. Site should be consistent with other guidelines described in the Ulukhaktok Community Conservation Plan including those of Sections 6.1.1 through 6.4 and 8.0 through 8.4.
7. DOT should amend the appropriate legislation to support seasonal restriction on ship traffic in sensitive areas.
8. Management plans and agreements for polar bears and muskox should consider the importance of this site.
9. WMAC (NWT) should discuss any changes in polar bear quotas for this area in joint meetings between Ulukhaktok and Sachs Harbour.
10. DFO should have increased the ranking of this habitat to a priority 2.

**SITE 734C M'CLURE STRAIT AND VISCOUNT MELVILLE SOUND, PRINCE OF WALES STRAIT**



**Map 32. Site 734C M'Clure Strait and Viscount Melville Sound, Prince of Wales Strait.**

**Identified By**

Ulukhaktok and Sachs Harbour Community Working Group

**Management Category**

C

**Ownership**

Public (Crown) waters within the Inuvialuit Settlement Region (Maps 1 & 2)

**Description**

The site includes areas of M'Clure Strait and Viscount Melville Sound between Banks, Victoria and Melville islands. Site also includes Prince of Wales Strait

**Importance of the Site to the Community of Ulukhaktok & Sachs Harbour**

Important area for fall and spring migration of caribou and polar bears between Banks, Victoria and Melville islands, Whales, Bearded Seals, Ringed Seals, Walrus, Furbearers, Char, Cod, Migratory birds, Muskox, denning areas, Grizzly Bears.

Important marine environment due to ocean currents and upwellings. Important beluga whale migration area, year-round bearded seal habitat, and polar bear denning area from November to April.

**Overlap with other Special Designated Areas within the Ulukhaktok Planning Area**

Culturally important sites located throughout the region (Site no. 500E)

Kangikhokyoak (Liddon) Gulf Coastline (Site 503B)

Richard Collinson Inlet and Glenelg Bay (Site 508C)

Prince Albert Sound and Minto Inlet and Shoreline (Site 509BE)

Hikongiyoitok Lake and Kugaluk River (Site 516D)

Southwest Victoria Island Coastal zone (Site 522C)

Hadley Bay Wildlife Area of Special Interest (Site 523D)

Prince Albert Peninsula Wildlife Area of Special Interest (Site 524C)

Minto Inlet Wildlife Area of Special Interest (Site 525C)

Beluga Management Plan Zone 1B - Prince Albert Sound (Site 528E)

Southwestern Melville Island & Kangikhokyoak (Liddon) Gulf Coastline (Site 733C)

Prince of Wales Strait (Site 734C)

**Overlapping Nonrenewable Resource Interests and Activities**

None.

**Overlapping Military, Transportation, and Tourism Interests and Activities**

International marine shipping through the Northwest Passage from Amundsen Gulf.

Canada claims this strait as part of its territorial sea, while other countries claim it as an international water way.

International law enables foreign-flag vessels the right of innocent passage in Canada's territorial sea and the right of freedom of navigation seaward of this 12-mile limit.

**Community Concerns**

The Community Working Group is concerned that Prince of Wales Strait, which is part of the Northwest Passage, could be used for year-round shipping by domestic and foreign ships and tankers. They are also concerned about Canada's ability to prevent foreign tankers from using the Passage.

Ship traffic would affect the habitat of marine mammals like seals and polar bears; the noise could disturb the social organization of seals; and, open water shipping channels would be dangerous to people travelling on the ice. If tanker traffic were allowed it could potentially result in environmentally devastating oil spills.

**Community Recommendations**

1. EIRB should recognize the sensitive marine environment of the strait in particular, protect seal lairs during pupping season (January to May), denning polar bears (November to April) and the belugas during migration (June to September).
2. FJMC, DFO and CWS should identify Prince of Wales Strait as a high priority (#1) for future marine ecosystem research.
3. Canadian Coast Guard should pursue the Public Review Panel on Tanker Safety and Marine Spills Response Capability recommendations to amend the Canada Shipping Act; to use the *Arctic Waters Pollution Prevention Act*; and, to use overland pipelines to transport Arctic crude oil from the Beaufort Sea. Specifically, the Community Working Group recommends that no winter ship traffic be allowed through the Prince of Wales Strait (November to June inclusive).

4. Site should be consistent with other guidelines described in the Ulukhaktok Community Conservation Plan including those of Sections 6.1.1 through 6.4.

#### 4.1.1 General Land Use Guidelines

These recommended guidelines relate to all lands in the Inuvialuit Community Planning Area for Ulukhaktok:

1. The Inuvialuit Community, the WMAC (NWT), FJMC, IGC, EISC, EIRB and ILA will rely on their procedures, the Olokhaktomiut Community Conservation Plan and the provisions of the IFA to ensure the protection of the Ulukhaktok community harvesting areas that are within the ISR.
2. All Inuvialuit and non-Inuvialuit bodies with an interest in the planning area acknowledge and actively support the Olokhaktomiut Community Conservation Plan, associated land use designations and recommendations.
3. The Community supports the maintenance of the bird sanctuaries.
4. The protective status of all other candidate areas (areas identified by non-Inuvialuit) for protection be resolved by having the government (e.g. Minister of the Environment, Minister of Fisheries and Oceans and GNWT) demonstrate to the satisfaction of the Community, WMAC (NWT), FJMC and IGC that such areas are necessary.
5. All regulatory agencies support the priority land uses as outlined in the Olokhaktomiut Community Conservation Plan.
6. Individuals wishing to build a camp will abide by any camp-building bylaw specified by the HTC.
7. The permission granting authority for camps on private land is ILA. ILA has adopted a practice to canvass for comments from existing cabin owners within a 8 km (5 mi) radius and will base a decision for a permit on the merits of each case and not on an HTC bylaw. Reasonable concerns or comments will be considered.
8. The Community, HTC, WMAC (NWT) and FJMC will encourage the people of Olokhaktomiut and others using and visiting the area to keep the land clean and to bring back any garbage for disposal at the local dump or other appropriate location (as determined by the community).
9. The Prince of Wales Northern Heritage Centre and DoL should implement protection of heritage resources through a strengthened *Heritage Resources Act*.

## 4.2 INUVIALUIT COMMUNITY PROCESS FOR LAND USE DECISIONS

The community land use decision making process involves a number of steps which are described below and also presented geographically in Appendix H.

1. The Community Corporation (for Private Lands) and Hunters and Trappers Committee (for Crown Lands) receive notification of development proposals from the Inuvialuit Land Administration, DoL and/or the EISC.
2. The Community Corporation and HTC hold separate meetings to discuss the proposal.
3. The Community Corporation and HTC review relevant sections of the Community Conservation Plan with careful consideration of management categories (Section 4) and independently pass on their concerns to the ILA and/or the EISC.
4. The HTC and Community Corporation formally work together to develop a consensus or community- based land use decision in special cases.
5. The HTC and Community Corporation will hold a secret ballot where considered necessary.
6. The Community Corporation and HTC review relevant sections of the Community Conservation Plan with careful consideration of management categories (Section 4).
7. The ILA or EISC (see Section 4.4) review the responses and decide whether to grant approval (where the ILA is involved) or to refer the project to the Environmental Impact Review Board (for further public review) or to DoL for permitting (where the EISC is involved).

## 4.3 CUMULATIVE IMPACTS MANAGEMENT

Cumulative impacts occur when changes to the environment, both good and bad, add to one another over time. Several small impacts may appear unimportant when they occur but, if continued, may result in a large impact over time. Successful management of cumulative impacts involves the following three steps:

- Clearly identify the type of environment and lifestyle you want in the future;
- Monitoring environmental change;
- Appropriate decision making.

In order to better account for gradual losses of wildlife habitat resulting from changes in land use over time, the Community, as represented by the HTC and Ulukhaktok Community Corporation, will re-designate areas of remaining habitat in a given land use category (Category A, B, C, D) to a more protective category (Category B, C, D, E) in proportion to the amount of effective habitat lost or affected by the authorized land use.

For example, if a proposed land use has negative effects on five percent of Category A wildlife habitat, then five percent (or any other amount) of what Category A habitat remains would be re-designated Category B or higher until such time as the impact of the land use has stopped and the land restored to its original ecological productivity.

This process acknowledges the principle that as wildlife habitat is lost, that which remains becomes more valuable and should require greater public support to alter. Re-designation will

be carried out coincident with the four year conservation plan review.

#### **4.4 ENVIRONMENTAL SCREENING & REVIEW**

Review of development proposals within the Inuvialuit Settlement Region is carried out in a cooperative manner and primarily involves the Environmental Impact Screening Committee (EISC), the Environmental Impact Review Board (EIRB) and Inuvialuit Land Administration (ILA) (as described in Section 1.2 and Appendices F and G). These committees routinely seek the advice and comments of the community in reaching their decisions.

At the present time, the ILA is able to specify enforceable conditions for attachment to ILA Land Use Permits on Inuvialuit 7.1(a), 7.1(b) Lands. On Crown lands within the Inuvialuit Settlement Region non- Inuvialuit bodies, such as DoL, are responsible for attaching conditions to land use permits. ENR issues wildlife research permits and tourism licences. The Prince of Wales Northern Heritage Centre issues permits for archaeological research. Within a national park, Parks Canada issues permits.

##### **4.4.1 Recommendations**

1. DoL and ILA work together wherever possible to develop a consistent set of general land use procedures.
2. The Community recommends that the ILA require developers to indicate the extent to which relevant elements of their development are at variance or consistent with Section 19 (Conduct of Operations in ILA Rules and Procedures) (Appendix I of this plan).
3. Environmental Screening Procedures - The HTC, IGC, WMAC (NWT), WMAC (NS) and the FJMC will periodically review the Environmental Impact Screening Committee, Environmental Impact Review Board and Inuvialuit Land Administration operating rules/guidelines and procedures, and offer advice with regard to any changes that may be required to help improve environmental screening and review.
4. Regulatory bodies with jurisdiction over lands within the ISR should work with the Community to ensure that developers are bound to adequately address the Community's environmental concerns. These regulatory bodies should also work with the Community to identify practical state-of-the-art mitigation and reclamation techniques and to involve local people as environmental inspectors (see Section 5.0).
5. Reclamation Plans - As part of land use permits, reclamation plans should be agreed to and a costing mechanism (e.g. bond, promissory note) established to ensure compliance.
6. Consultation - The Community should be consulted on all land use activities in the Ulukhaktok Planning Area.
7. Revoke Permits - Where there is a violation of land use permit conditions deemed serious by the OHTC or Ulukhaktok Community Corporation, the permitting agency (e.g. ILA, DoL) shall investigate immediately and take appropriate action which, with HTC support, may include revoking permits.
8. Education - The Environmental Impact Screening Committee, Environmental Impact Review



Board, and Inuvialuit Land Administration should increase community awareness of their mandates and activities (see also Section 5.0).

9. The Inuvialuit Community in Ulukhaktok will:
  - (a) Carefully review all land use proposals and only give their support to land use activities where it is consistent with the Olokhaktomiut Community Conservation Plan.

Through the HTC, IGC or the IRC, refer any projects on Inuvialuit Land that may be in conflict with the Olokhaktomiut Community Conservation Plan to the environmental screening and review process;

- (a) Through its HTC, consult with developers on projects proposed within the Ulukhaktok Planning Area;
  - (b) With the assistance of the IGC, familiarize itself with the terms and conditions of any relevant Wildlife Compensation Agreements prior to signing off by the IGC, HTC and Developer.
  - (c) Through its HTC, advise the EISC or ILA of community concerns about development projects in the Ulukhaktok Planning area;
  - (d) Develop a monitoring system with industry, transportation companies and local tourist operators to determine the numbers, impacts and rate of increase of activity to provide the data for increased regulations as required.
10. The WMAC (NWT) and FJMC will ensure that community harvest data are kept current in order to facilitate development of practical and fair Wildlife Compensation Agreements.

## **5 EDUCATION, TRAINING AND INFORMATION EXCHANGE**

The successful implementation of the Olokhaktomiut Community Conservation Plan will require ongoing efforts to educate, train and exchange information. The community recommends that the WMAC (NWT) and FJMC work with other Inuvialuit and non-Inuvialuit agencies to obtain funding and expertise to fulfill the following initiatives:

- (a) Prepare an educational audio and video tape or tapes on the local ecosystem, the people, conservation practices and the Inuvialuit Final Agreement.
- (b) Organize training for local Inuvialuit in environmental inspection and monitoring as well as proper harvesting techniques.
- (c) Prepare summaries (written summaries and as translated audio tapes) of the Olokhaktomiut Community Conservation Plan suitable for school use and for elders.
- (d) Prepare home education package (for delivery by parents) to convey cultural values, language and conservation.
- (e) Develop and implement a Community information program to present and

explain the Olokhaktomiut Community Conservation Plan.

- (f) Promote the use of environmentally friendly products and proper handling of hazardous wastes.
- (g) Encourage researchers visiting the area to make presentations to the Community, and to convey the results of their studies.
- (h) Continue to record and convey traditional knowledge of the land, culture, wildlife, and conservation.
- (i) The Community should actively assist with the undertaking of the above initiatives.
- (j) Continue to promote the use of the local language among the young and others with an interest.

## 6 WILDLIFE MANAGEMENT AND RESEARCH

The Community supports the general wildlife management process as described in the **Inuvialuit Renewable Resource Conservation and Management Plan (1988)** and the **IFA**.

Improvements to the system can be made in terms of more use of local knowledge, more community involvement in wildlife research and better communication between the Community, government agencies, researchers and the joint management groups. To that end, the Community has developed preliminary guidelines for wildlife management and conservation, including subsistence and commercial harvesting, tourism and local enjoyment. The Community has incorporated local knowledge and outside expertise in developing a one page conservation summary for each species of concern in the area (Section 6.4).

### 6.1 GENERAL GUIDELINES

To implement the strategy for wildlife management and research the following steps will be taken:

#### 6.1.1 The Olokhaktomiut HTC will:

- (a) Provide advice and information to the IGC and the joint management groups on wildlife management and research programs in the Planning Area.
- (b) Through its membership on the IGC and the joint management groups, inform government agencies of its priorities for wildlife research in the Planning Area.
- (c) Support conservation initiatives for shared migratory species developed by others, where the Inuvialuit bodies with a mandate for wildlife management endorse those initiatives (see Section 6.1.2(f)).
- (d) Participate in wildlife research projects in the Ulukhaktok Planning Area, when they have been consulted and support such projects.

- (e) Discourage the use of aircraft for low level (<610 m) (<2,000 ft.) wildlife spotting at any time unless being done in conjunction with authorized research to avoid unnecessary disturbance or harassment of wildlife (see also Section 6.3(c)).
- (f) Monitor the state of the wildlife and habitats in the Planning Area in cooperation with the biologists employed by the GNWT, FJMC, DFO, and DOE and report any concerns to the WMAC (NWT) and FJMC through the HTC and the IGC.
- (g) Regulate Inuvialuit harvesting using bylaws, resolutions and traditional conservation methods as described in this plan (see Section 6.4), or when this is recommended through community monitoring, by the joint management committees or the IGC.
- (h) Keep the joint management bodies informed, through the Hunters and Trappers Committee, of education programs (see Section 5.0) which are needed to increase community awareness of conservation, wildlife management and research.
- (i) Where appropriate, participate in the development and delivery of education programs (see Section 5.0).
- (j) Encourage active participation in implementing the Olokhaktomiut Community Conservation Plan. Membership and privileges associated with membership in the HTC will only be granted where individuals support the plan to the satisfaction of the HTC membership.
- (k) Manage all harvests on a sustained yield basis.

#### **6.1.2 The WMAC (NWT), FJMC and IGC will:**

- (a) Assist the Community in obtaining periodic monitoring information on the health of the environment.
- (b) Assist the Community in updating its species conservation summaries as required.
- (c) Make more use of the media to publicize their activities in the Ulukhaktok Planning Area (see 5.0 (k)).
- (d) Recommend to the Aurora Research Institute of the Northwest Territories, the CWS, the DFO and the GNWT that they continue to work with both groups to develop a consistent process for community consultation on wildlife research and the distribution of research results to the community (see also Section 5.0). They (FJMC, WMAC(NWT), IGC) will further recommend that as part of their research permit, all researchers in the planning area present, mail or fax a one page summary of the work undertaken to the HTC, within one month of leaving the area.
- (e) Respond to community initiatives for conservation measures and education programs.
- (f) Actively pursue the development of a set of guiding principles for a Convention on the Conservation of Migratory Species with jurisdictions sharing wildlife resources.

- (g) Develop a consistent set of biological criteria for establishment of harvest quotas in cooperation with the HTC.
- (h) Cooperatively review the research on impacts and risks of ship traffic to denning polar bears, seal pupping, migratory birds and hunter activity and determine whether additional research is necessary. Where additional studies are warranted these bodies should pursue funding or other support for such work. Particular attention should be paid to identifying high risk areas and developing appropriate mitigation.

### **6.1.3 Community, the WMAC (NWT), FJMC and IGC will:**

- (a) Support the development of species management plans for species shared with other jurisdictions, when such plans are prepared in consultation with all groups. In the interim, these bodies and the people represented will endorse and follow conservation guidelines provided in the species summaries (Section 6.4).
- (b) Ensure that Inuvialuit are aware that animal numbers typically increase and decrease with the seasons, and over the years, as part of natural cycles. Ensure that harvesting and management programs consider the natural cycles of animal abundance.
- (c) Support proposals for renewable resource development in the Planning Area, when they are consistent with the Principles of the IFA, the Regional Conservation Plan, and with the Community Conservation Plan.
- (d) Revise the species conservation summaries listed in Section 6.4 during plan review conducted every four years.

## **6.2 SUBSISTENCE AND COMMERCIAL HARVESTING - GENERAL GUIDELINES**

Under the Inuvialuit Final Agreement (Section 14(36)(a)) the Wildlife Management Advisory Council (NWT) is required to determine the total allowable harvest for game to ensure long term resource conservation. The effectiveness of this activity is very dependent on the cooperation of local subsistence harvesters in Ulukhaktok and those involved in promotion of commercial wildlife harvesting.

Quota and tag allocation within the Community is done as follows: Tags are allocated on a first come first serve basis. If oversubscribed then unsuccessful hunters return the tag and it is given to the next on the list. Where tags are received, the HTC decides how many will be allocated for sport hunts. The HTC Board of Directors are responsible for allocating tags and regulating the practices of its members.

In addition to recommendations and guidelines described elsewhere in this document, the guidelines below will be followed:

- (a) Subsistence harvest and traditional patterns of land use associated with subsistence harvesting will take precedence over commercial harvesting.
- (b) Subsistence and commercial harvesting will be done in a manner consistent with

the Ulukhaktok Community Conservation Plan, specific population goals and conservation measures stated in the species conservation summaries.

- (c) Commercial harvesting of plants and wildlife will be undertaken in a manner developed cooperatively with and endorsed by the FJMC (for crustaceans, fish, seals, whales), WMAC (NWT) (for all other animals and plants), IGC and the GNWT.
- (d) Where a commercial quota is identified, and considered consistent with conservation for a given species (for example, char, muskox) a percentage of quota will be retained to preserve the opportunity for small scale operations (for example, sport hunting, individual supply to commercial market).
- (e) Harvests will be monitored monthly by the ISR Community-Based Monitoring Program (CBMP) in order to provide information necessary for compensation resource conservation.
- (f) Where fishing areas are closed to allow populations to recover, the HTC will work cooperatively with the FJMC to provide the community with alternate fish resources.
- (g) The community will consider and support the use of alternate harvesting methods (e.g. humane traps) where there is a demonstrated need and benefit. In regard to lead vs. steel shot, the use of lead shot for waterfowl hunting in the Ulukhaktok area is believed to be a better alternative than steel shot. Given the species of waterfowl harvested and location of harvest, ingestion of lead pellets is unlikely. There is also some evidence to suggest that steel pellets, unlike lead pellets in muscle tissue, prevents healing of the wound and may result in a potential lethal infection.

### 6.3 TOURISM GUIDELINES

The Community of Ulukhaktok believes tourism is a valuable economic activity within the area which is compatible with conservation and cultural needs, provided it is properly managed. The Community recognizes the need to maintain the environment and cultural lifestyles in order to promote tourism. To do this the Community recommends the following:

- a) The total number of tourist operators and/or tourists should be restricted in certain areas at certain times of the year (e.g. nesting and moulting areas for migratory birds, calving areas, denning areas.)
- b) The ILA, and the GNWT Department of Resources Wildlife and Economic Development will request that all tourist operators (Inuvialuit and non-Inuvialuit) be licensed, endorse the Ulukhaktok Community Conservation Plan and follow its recommendations as one of the conditions of operator's license or permit. Licences may be revoked where operators contravene the recommendations and guidelines of this Plan and the conditions of their permit.
- c) Aircraft should fly no lower than 1,067 m (3,500 ft) over a migratory bird sanctuary during times when nesting birds are present.

- d) Aircraft will not be permitted to land at sites where concentrations of nesting birds may occur, with the exception of emergencies.
- e) Aircraft will not be used for low level (<610 m) (<2,000 ft.) wildlife spotting at any time unless being done in conjunction with authorized research.
- f) Wolf dens should be approached no closer than 500 m (547 yd.) when suspected to be active.
- g) Tourists and tourist operators should not handle or harass wildlife. Do not approach active nests of snowy owls, peregrine falcon, gyrfalcon or rough-legged hawks closer than 150 m (492 ft.). Avoid frequent visits to nesting areas.
- h) DoL or ILA should establish a Travel Restricted Area to protect heritage resources when necessary. For greater certainty, commercial tourism to culturally significant areas should only be allowed where it has the support of the HTC and Community Corporation.
- i) ITI and ENR should inform tourist operators of concerns regarding protection of heritage resources when issuing tourism operators outfitting licences.
- j) Tourists and tourist operators shall respect any bylaws with respect to tourism passed by the HTC or Community Corporation.

## 6.4 SPECIES CONSERVATION SUMMARIES

The following Species Conservation Summaries have been prepared by the Community in consultation with the WMAC (NWT), FJMC, CWS, ENR and IGC. Both local indigenous knowledge and that of others with expertise has been used. General conservation measures are provided in addition to those to be followed in the event of declining wildlife populations. Additional information on important wildlife habitat is contained in the Land Use Section (4.1).

The WMAC(NWT) commissions ENR and CWS to provide updated Species Status Reports on an annual basis for species in the NWT portion of the ISR.

Species Conservation summaries will be updated every two years by the WMAC (NWT), with input from the appropriate agencies. In most cases, precise population or threshold levels remain to be specified. The WMAC (NWT), FJMC, IGC, CWS, GNWT and DFO are encouraged to move forward with species management plans, with priority to species of importance to the Community and which may be impacted by likely developments.

## **ARCTIC HARE (*Lepus arcticus andersoni*) / UKALIQ**

### **Biology**

Hares breed in April and May and young are born in June. Two to 8 young are born in a litter, with an average of about 5. Adults may weigh from 3.2 kg (7 lb) to 5.4 kg (12 lb). Hares are very important in the food chain for other animals (e.g. fox, owls). There appears to be a 7-year cycle on Victoria Island. Hares feed on berries, willows, sedges, grass and flowering plants and are known to take advantage of areas grazed by muskox when snow conditions are severe.



Trevor Lucas

### **Traditional Use**

Good food, fur used occasionally.

### **Important Habitat**

Throughout Victoria Island

### **Management Plans/Agreements**

No management plan specifically for hare; managed under general hunting and trapping regulations. Information can be found in:

RWED ENR (2000) Co-Management Plan for Caribou, Muskox, Arctic Wolves, Snow Geese, and Small Herbivores on NW Victoria Island, 1998/99 to 2002/2003 (DRAFT).

### **Recent Research**

None.

### **Research Priority**

Low.

### **Population Status**

Cyclical

### **Population Goal**

Unspecified. Adequate supply for community needs at present.

### **Conservation Measures**

- Identify and protect important habitats from disruptive land uses.
- Harvest on sustainable basis.
- Share your harvest with others in community.

## CARIBOU / TUKTU

**Barrenground** (*Rangifer tarandus groenlandicus*)

**Peary** (*Rangifer tarandus pearyi*)

**Barrenground Peary Hybrid** (*Rangifer tarandus groenlandicus x pearyi*)

**Dolphin & Union herd** (*Rangifer tarandus groenlandicus*)



### Biology

Calving occurs in late May early June, with a single calf that is particularly vulnerable in its first week of life. Caribou breed primarily in October and early November and start to migrate north in April and May. In the fall animals move south. There appears to be two herds of caribou on Victoria Island. One is more Peary caribou-like and has typically calved north of Minto Inlet. The other is more barren-ground-like and has typically calved in the Prince Albert Sound area. A third herd may calve in the vicinity of Richard Collinson Inlet. Some animals, considered the Dolphin and Union herd, may move across Coronation Gulf and from adjacent islands to and from Victoria Island. Caribou in good condition can calve every year. Sexual maturity occurs between 2 and 4 years of age and adults may live to 15 years in the wild.

In mid-June caribou show some preference for feeding on moss campion (*Silene acaulis*) or “Ningak” which grows on sandy locations. Toward mid-July after snow has gone feeding is more focused on moist sites. Diet includes sedges, grass and willows. Mountain sorrel (*Oryria digyna*) or “Kongilik” is also important at this time. Lichen “Akeagonak” becomes important in fall and winter. Rain and associated ground icing can be significant cause of starvation in spring and fall.

Muskox tend to feed in different areas from caribou most of the year though there is some overlap during the growing season. Caribou seem to prefer upland areas and slopes but use lowland meadow communities during the growing season. Just after the turn of the century reports suggest there were hardly any caribou around but were believed to become abundant by the 1920s. A heavy spring rain at this time caused extensive mortality. Very few caribou were present from the 1920s and 30s. In 1937 it was necessary to go to Central Prince Alberta Peninsula toward Richard Collinson Inlet to find caribou. Caribou moved south again in the 1950s.

### Traditional Use

Food, clothing, sleeping skins (winter use). Local harvest has usually been in Minto Inlet area where Peary caribou predominate, however, harvest shifts to barren ground caribou, Dolphin & Union from Prince Albert Sound area when northern animals are scarce.

### Important Habitat

Prince Albert Peninsula; North of Minto Inlet that is a calving area; All of Victoria Island; Ice between Victoria island and mainland; And also Prince of Wales Strait.

### Management Plans/Agreements

Peary Caribou were recently reclassified as Threatened by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and are listed under the federal *Species at Risk*



Act as Endangered. Under the *Species at Risk (NWT) Act* Peary caribou are listed as threatened.

A recovery plan is being developed for Peary caribou in Canada to be adopted under both the federal and territorial Species at Risk Acts.

OHTC in 1993 restricted Peary caribou hunting north of Kuukyuak/Kuujua River. In 2015 a small Peary caribou quota (n=10) was implemented with mandatory sample submission and target of a male dominated harvest.

Dolphin and Union caribou were listed as Special Concern under the SAR (NWT) Act and the federal SARA. Management plan development is underway with both Nunavut and NWT partners.

### **Research Priority**

High. Community interest in regular surveys, in knowing more about the location and characteristics of the calving areas, and contaminants monitoring. Surveys should take into account elders' knowledge of seasonal movements of caribou and coincide with periods when visibility is highest (e.g. snow free period). The community is concerned about the accuracy of aerial surveys when populations are at low levels and would like to see them backed up by ground-truthing. Hunters should be interviewed to determine to what extent caribou move across Coronation Gulf. GNWT has proposed to radio collar 20 caribou to monitor movements in Coronation Gulf area. This information should be used to evaluate potential impacts of shipping and offshore ice development.

### **Population Status**

A 2015 spring survey of NW Victoria Island saw so few caribou that abundance could not be estimated. Between 1992 and 2010 abundance estimates were under 200 caribou compared to around 4500 in 1980.

Caribou were considered relatively abundant until about 1988. The Albert Islands were used extensively by caribou at this time. Relatively few young were observed compared to the number of lactating females in 1993. Some people feel the caribou may have moved.

Peary caribou numbers on adjacent Banks Island remain lower than historic numbers but have shown some recover between 2010 and 2014. The 2012 survey of the islands north of Banks Island indicate numbers increased since 1997.

Preliminary estimates from a 2015 survey for the Dolphin Union Caribou herd was about half of the 1997 estimate of about 27,000 caribou.

### **Population Goal**

Peary caribou - recovery, community would like to see more.

Dolphin and Union – unspecified, enough to meet communities needs in both NWT and Nunavut.

### **Conservation Measures**

- Identify and protect important habitats from disruptive land uses.
- Share your harvest with others in the community.

- Do not harvest more than is needed.
- Harvest on sustainable basis, and in manner consistent with recommendations of the OHTC.
- The OHTC will implement restrictions on caribou hunting where required.
- Management plans for Peary and Dolphin and Union Caribou will be developed.

## FOXES

**ARCTIC FOX** (*Vulpes lagopus*) / **TIRIGANNIAQ**

**RED FOX** (*Vulpes vulpes*) / **KAYUQTUQ**

**WHITE FOX** / **TIRIGANNIAQ**

**BLUE FOX** / **QIANNGAQTUQ**

**CROSS FOX** / **KIAHIRUTILIK**

**SILVER FOX** / **MARRAQ**

### Biology

#### Arctic Fox

Arctic Foxes breed in March and den in April. Females have on average 5 to 8 pups that become active in May, and may stay near den until fall. There appears to be a four-year population cycle (likely coincident with cycle) in lemmings and have been abundant in the past five years. Foxes feed on lemmings, birds and eggs and anything that they could scavenge and are known to move great distances (e.g. Alaska to Banks Island).



#### Red Fox

Red foxes breed in February to April, and have an average of 5 pups (range 1-13 young). Families stay together until fall. Red foxes become sexually mature at approximately 10 months and may live up to 12 years of age. Fur may be various colours (coloured, silver (Marraq), cross (Kiahqotilik)).

### Traditional Use

Fur.

### Important Habitat

Arctic foxes are widespread onshore, offshore and inland.

### Management Plans/Agreements

No management plan specifically for foxes; managed under general hunting and trapping regulations. Information can be found in:  
ENR (2000) Co-Management Plan for Caribou, Muskox, Arctic Wolves, Eider Ducks, and Small Herbivores on NW Victoria Island, 1998/99 to 2002/2003 (DRAFT).

### Recent Research

None in ISR

### Research Priority

Low.

### Population Status

Unspecified. Can be highly variable year to year

### Population Goal

Adequate at present.

### Conservation Measures

- Identify and protect important habitats from disruptive land uses.

- Do not disturb denning foxes.
- Only trap in season.

## MUSKOX (*Ovibos moschatus*) / UMINGMAK

### Biology

Calving generally occurs from about 15 March to 15 June with approximately 90 per cent being born by May 1. Cows normally produce a single calf annually and it is approximately 3 weeks before the calf can keep up with herd. Breeding occurs throughout August and early September. Females are generally sexually mature at 2-3 years of age and males at 5. Muskox can live to at least 24 years of age. Muskox have difficulty travelling on clear ice. In



June muskox are often found near rocky places where snow has melted. In summer, they are found inland along small rivers and creeks where they feed on willow leaves, sedge and grass. In late August - early September there is some movement toward coastal areas then back to inland areas at freeze-up. Both muskox and caribou are found in the same area in the summer but feed on different plants.

### Traditional Use

Food, clothing, carving, hides can be sold.  
Sport hunting is where tags are allocated.

### Important Habitat

Found throughout Victoria Island.

### Management Plans / Agreements

No management plan specifically for muskoxen, managed under OHTC by-laws and general hunting and trapping regulations. Information can be found in:  
ENR (2000) Co-Management Plan for Caribou, Muskox, Arctic Wolves, Eider Ducks, and Small Herbivores on NW Victoria Island, 1998/99 to 2002/2003 (DRAFT).  
Community does have a quota system in place where they issue 2 tags per hunter per month.

### Research Priority

High. Periodic aerial surveys. Caribou-Muskox interaction. Monitor for increase in disease.

### Population Status

2015 estimate for NW Victoria Island (larger area) approximately 14,000.  
Block closest to community has lowest density but 2015 is first time surveyed.  
Decline between 2001 and 2005 but relatively stable in consistent study area since 2005.

### Population Goal

Adequate numbers at present but concern decreasing near community

### Conservation Measures

- Identify and protect important habitats from disruptive land uses.
- Harvest on a sustainable basis and in a manner consistent with OHTC recommendations.
- Share your harvest with others in the community.
- Only harvest what is needed.

- A management plan for Victoria Island muskox will be developed.

## **POLAR BEAR (*Ursus maritimus*) / NANUQ**

### **Biology**

Females den from November to late March, early April and breed late April early May. Average litter size is between 1 and 3 cubs. Females may have young every 3 to 4 years. Females may successfully breed at 4 years of age but most do not breed until 5 years of age. Though bears can live close to 30 years in the wild, most do not survive beyond 20-25 years of age. Ringed seals are eaten more frequently than bearded seals.



### **Traditional Use**

Furbearer, occasionally used for clothing. Historically food; still eaten in some communities.

### **Important Habitat**

Denning areas along North Slope of Yukon, Herschel Island, Kay Point, shear zone offshore from coast. Victoria Island as well, and Melville Island.

### **Management Plans/Agreements**

Inuvialuit Settlement Region Polar Bear Joint Management Plan and the Framework for Action for Management of Polar Bears in the Inuvialuit Settlement Region (2017).

Inuvialuit-Inupiat Polar Bear Management Agreement in the Southern Beaufort Sea (1988, latest revision 2011).

Polar Bear Management Agreement between the Inuvialuit and the Inuit of the western Kitikmeot region (2006).

Hunters and Trappers Bylaw written into Regulations under the NWT Wildlife Act.

### **Research Priority**

Moderate: Community interest in movements. Population estimates provide information to try to ensure sustainable harvest. International interest very high.

### **Population Status (with associated confidence intervals (CI), standard deviation (SD), or standard errors (SE) provided in brackets)**

Southern Beaufort:	1,215	(2006 - based on new boundary)
(Likely declining)	1,526 (95% CI 1211 – 1841)	(2006)
	1,800	Used for management purposes until 2006 estimate
	1,778 (SD 803)	(1983)
Northern Beaufort:	1,711	(2006 – based on new boundary)

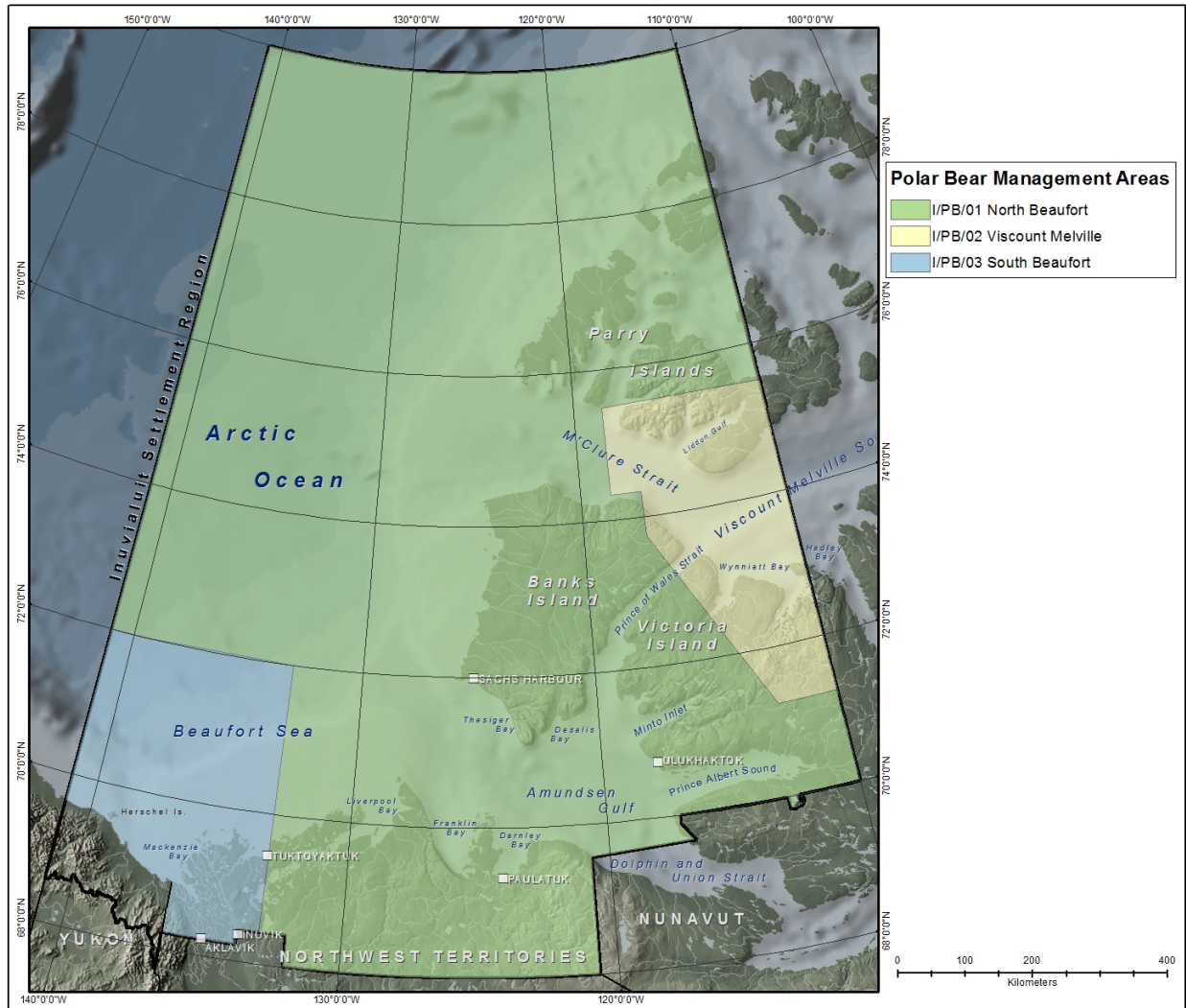
	1,400	(2006 – adjusted for negative sampling bias)
(Stable)	980 (825 – 1135)	(2006)
	867 (726 – 1008)	(1987)
	745 (499 – 991)	(1975)
Viscount Melville Sound	215 (SE 57.4)	(1999- based on RISKMAN modeling of 5-year moratorium)
	161 (SE 34)	(1992)

**Population Goal**

Maintain at level which can produce the maximum sustained yield.

**Conservation Measures**

- Follow regulations agreed to in OHTC bylaws and follow the Inuvialuit and Inupiat Agreement and the Inuvialuit and West Kitikmeot Agreements
- Do not kill females with cubs and restrict female harvest to no more than 33% of total harvest.
- Do not disturb bears in dens or constructing dens.
- Only hunt from December 1 to May 31 (varies depending on community).
- Collect and report all information requested in bylaws after making a kill.
- Identify and protect important habitats from disruptive land uses.
- Only male hunted from October 1 to May 31.
- Both male and Female can be hunted December 1-May 31.



Map 33. Polar Bear Management Areas.



## WOLF (*Canis lupus*) / AMARUQ

### Biology

Wolves are at dens from May to late July, with 2 to 9 pups observed at dens. Average litter size on mainland in ISR is 4.5. Wolves may be sexually mature at about 2 years of age though younger and older ages of maturity are possible. Maximum age of wolves observed in ISR has been 12 years old, however the average age of adult wolves is about 3. Local people report that there were many wolves in the 1930s and 1940s. Wolves appeared to decline due to control programs in 1950s, then began to recover in mid 1970s. There is a high number of wolves today so the season has opened year-round for harvesting.



Trevor Lucas

### Traditional Use

Clothing, crafts, fur can be sold.

### Important Habitat

Widespread throughout Victoria Island.

### Management Plans/Agreements

No management plan specifically for wolves; managed under OHTC by-laws, general hunting and trapping regulations. Information can be found in:  
ENR (2000) Co-Management Plan for Caribou, Muskox, Arctic Wolves, Snow Geese, and Small Herbivores on NW Victoria Island, 1998/99 to 2002/2003 (DRAFT).

### Research Priority

Seasonal movements and ecology.

### Population Status

Healthy population of wolves on Victoria Island.

Arctic wolves (*Canis lupus arctos*) are classified under Appendix II of the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES) as not currently rare or endangered but could become so if trade is not regulated. The number of arctic wolves on Banks Island is not known. However recent harvest information and observations indicate that there is a healthy population on the island. Sixteen adult wolves were seen during the survey of NW Victoria Island conducted in April 2015 compared to 18 adults and 1 pup in July 2010.

### Population Goal

Maintain a healthy population that can sustain an annual harvest by hunters and trappers.

### Conservation Measures

- Identify and protect important habitats from disruptive land uses.
- Hunt by traditional means; do not use aircraft or poison to control wolves.
- Do not disturb wolves or remove pups from den. Keep at least 500 m (547 yd) from active

dens.

- If guiding tourists do not hunt wolves.

## WOLVERINE (*Gulo gulo*) / QALVIK

### Biology

Wolverine breed in March to May and generally have 1-2 young (may have up to 5) which appear in June to July. Young are nursed 8-10 weeks, and leave mother in the fall. Wolverines are sexually mature at 2-3 years of age. In the north wolverine may be active for 3-4 hour intervals between rests and may travel up to 45 km (28 mi) per day. Caves, rock crevices, fallen logs, holes in snow and burrows are used for shelter. Home-range sizes in the central Arctic vary between 126 km<sup>2</sup> (females) and 404 km<sup>2</sup> (males). Dispersal distances by females average 133 km (range 69 - 225 km), and males average 231 km (range 73 - 326 km). Wolverine feed on dead animals, eggs, small and large mammals (lemmings, caribou, sheep); most large mammals are obtained from kills of wolves or bears.



### Traditional Use

Fur very important for local use, also important for maintaining balance in nature.

### Important Habitat

Vicinity of Victoria Island.

### Management Plans/Agreements

No management plans specifically for wolverine; managed under general hunting and trapping regulations. Information can be found in: Draft Co-management Plan for the Fur Industry (2000).

### Recent Research

Carcass collection study of sex, age, diet, and reproductive stats of harvested animals. DNA mark-recapture work is being done in other areas; may be applicable to ISR.

### Research Priority

Low: Some interest in population status, biology, important habitat areas and information from carcass collections.

### Population Status

Rarely seen on Victoria Island.

### Population Goal

Unspecified. Harvest monitored by carcass/sample collections

### Conservation Measures

- Identify and protect important habitats from disruptive land uses.
- Do not disturb dens.
- Do not hunt in summer.
- Do not poison.

## BELUGA WHALE (*Delphinapterus leucas*) / QILALUGAQ

### Biology

The beluga is an odontocete, or toothed whale, having up to 40 teeth that are similar in shape and size. They are dark grey and about 1.5 m (5 ft.) in length when they are born. Calving occurs in spring. With each passing year, the skin lightens in colour, by the time a beluga is about 9 years of age, it is white in colour. Adult males are larger than adult females. Belugas primarily feed on Arctic cod and squid; however, they also feed on a variety of other fish including sand lance and capelin and char that appear to be becoming a more prominent food source in recent years. Belugas harvested in Ulukhaktok in 2014 had been feeding primarily on sand lance based on stomach contents; the stomachs of belugas harvested in the Mackenzie Delta are generally empty. They themselves are preyed upon by polar bears, killer whales and humans, and to a limited extent walrus.



Frank Pokiak

They are a very vocal species, having earned the name of “the sea canary”. They make sounds that are used for echolocation, that is to help them find their way and their food, as well as sounds to communicate, which are those which can be heard by other whales. They have a habit unique among whales, and that is that they concentrate in estuaries during the summer. This has made them well accessible to hunters and well known to the general public.

### Traditional Use

Highly valued food resource.

### Important Habitat

Prince of Wales Strait, Viscount Melville Sound, Amundsen Gulf, Minto Inlet, Prince Albert Sound

Major summer concentrations occur in mid-July in Mackenzie Bay, Kendall Island, and Shallow Bay. Also, smaller summer aggregations occur at the mouth of the Horton River and Liverpool Bay. During the summer, large male beluga travel to feed in offshore areas such as Viscount Melville Sound, while smaller males, females with calves tend to remain in shallower coastal areas.

### Management Plans/Agreements

- Beaufort Sea Beluga Management Plan (FJMC, 2013)
- Olokhaktomiut HTC Beluga Hunting Bylaws and Guidelines
- Inuvialuit Inupiat Beaufort Sea Beluga Whale Agreement (2000)

### Recent Research & Monitoring

FJMC Fish & Marine Mammal Community Monitoring Program (formerly Beluga Monitoring Program):

- Inuvialuit beluga harvest monitoring began in the Mackenzie Delta in the 1970s through the Fisheries and Marine Service of the Government of Canada (1973-1975) and the oil and gas industry (1977-1982). DFO led this program between 1981-1986, and the FJMC took over the program in 1987. This program is the largest and longest database of beluga harvest monitoring in the Arctic.

- Currently monitors are selected by local HTC's to sample belugas harvested at Hendrickson Island, East Whitefish, Kendall Island, and Paulatuk, with on-call monitors in Ulukhaktok. Harvesters from the communities of Aklavik and Sachs Harbour, in addition to the other communities, have the option of sampling their own whales through the Harvester Rewards Program. Where and when a monitor is not present, the harvester may sample their whale by using sampling kits that are available at their HTC office.
- The monitoring information collected through this program includes the date and location of each harvested whale, measurements from each whale (length, fluke width, girth, blubber thickness), sex, colour and whether or not any scars or skin abnormalities were observed. A number of samples (blubber, muscle, blood, milk, skin, eyeball, liver, kidney, lower jaw) are also collected to learn more about the whales.

#### Aerial Surveys:

- 1970s and 1980s by oil and gas industry contractors
- 2007-2009 surveys led by DFO repeated previous work for comparison (used same methods as 1980s surveys)
- 2011-2013 surveys led by DFO focused on how the arrival of beluga in the Mackenzie River estuary and Tuktoyaktuk Peninsula is influenced by ice conditions

#### DNA:

- Beaufort Sea beluga constitute one of the largest stocks of beluga in Canada, and one of four that overwinters in the Bering Sea. Together these four stocks make up the Bering Sea population.
- Genetic studies have shown the stocks are discreet, with the exception of some wanderings by the large males.

#### Local and traditional ecological knowledge:

- A DFO program (2013-2016) has begun to document the local knowledge of beluga from harvesters in Tuktoyaktuk, Inuvik, Paulatuk and Ulukhaktok. The findings will be used to build upon existing long-term beluga monitoring in the ISR.

#### Satellite Telemetry:

- A total of 27 beluga whales were tagged with satellite transmitters in the Mackenzie Delta in 1993 (n=4), 1995 (n=16), 1997 (n=7)
- In two of the study years, when the whales were tagged earlier in the season, the largest males travelled to Viscount Melville Sound where they spent 2-3 weeks diving/feeding, before undertaking their migration back to the Bering Sea where they overwinter
- Females and calves tended to swim counter-clockwise circuits in Amundsen Gulf and fed in shallower waters along the coast.

#### Research Priority

High - Community interest in the following.

1. Improve collection and analysis of information obtained from harvest, process and summarize all existing data, compare data with other data sets, record traditional knowledge.
2. Regular census including survey of summering range.
3. Inshore and Offshore Movement Study.

#### Population Status

- The Eastern Beaufort Sea Beluga population is estimated at almost 40,000 (COSEWIC 2004).
- Growth rate 2.5%
- Stock is stable or increasing (recent surveys show a 3x greater abundance in the surveyed area when compared to 1970 observations (Harwood and Kingsley 2013)).
- Present annual harvests are less than 1% of conservative estimate of stock size

### **Population Goal**

Unspecified, adequate numbers at present.

### **Conservation Measures**

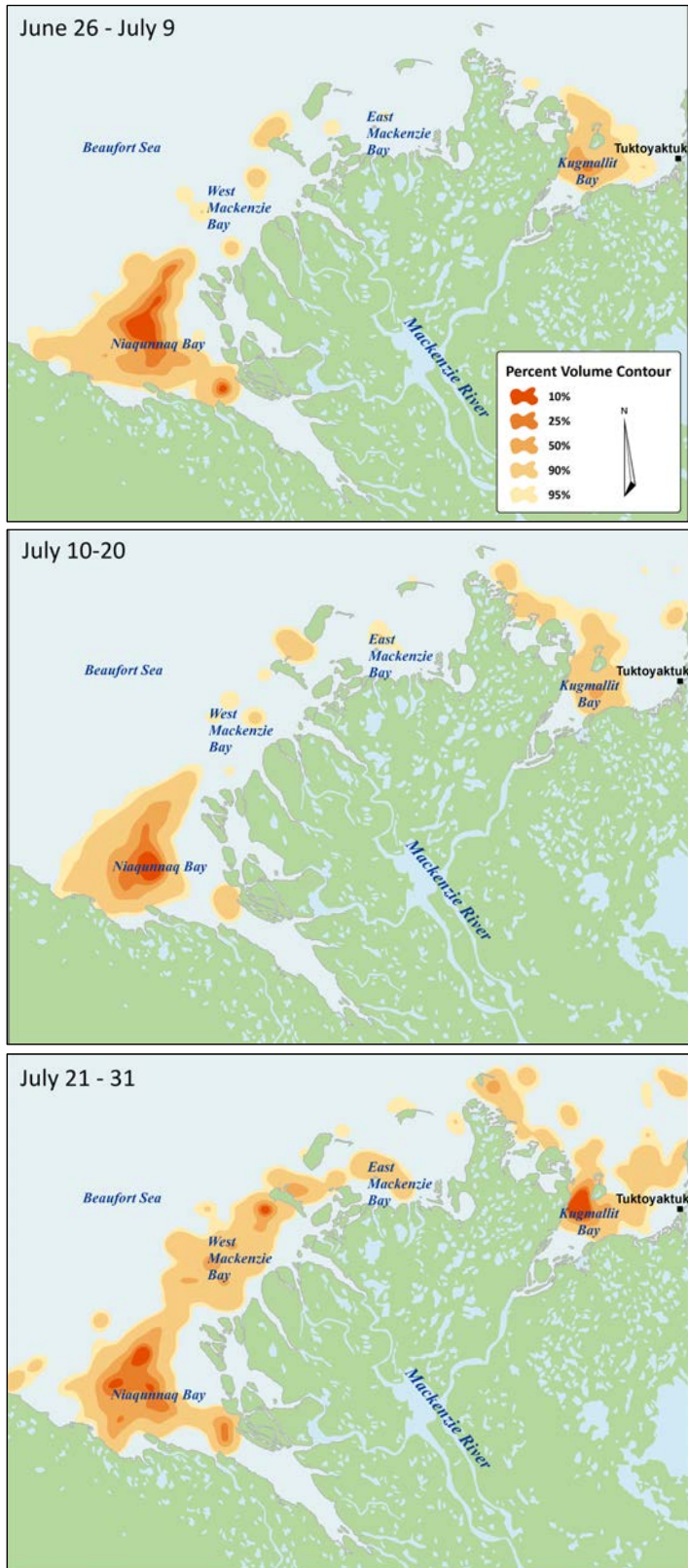
- Support the Beaufort Sea Beluga Management Plan.
- Follow OHTC Beluga Bylaws.
- Identify and protect important habitats from disruptive land uses.

## **OLOKHAKTOMIUT HUNTERS & TRAPPERS COMMITTEE BELUGA HUNTING BYLAWS**

1. Each boat will have the following equipment:
  - a) A rifle of not less than .30-30 calibre;
  - b) Two harpoons equipped with line and float, or one such harpoon and a “seal hook”;
  - c) Two float markers or two 5 gallon jerrycans per harpoon with enough line to reach the ocean bottom in the area being hunted, and equipped with an anchor;
  - d) A towing line.
2. Each hunter must attempt to retrieve sunken or wounded whales before hunting another whale.
3. No person shall, at any time, take more whales on a hunt than can adequately be taken care of considering limitations of the boat, weather, the towing distance, and the number of people in the camp available for processing.
4. Beluga hunters must provide Beluga Harvest Monitors with the requested information and reasonable access to harvested whales for measurements and samples.
5. There shall be no hunting in “No Hunting Zones” if applicable.
6. There shall be no interference during the hunt by tourists or others.

### **Beluga Hunting Guidelines**

1. The recommended method of hunting whales is to first harpoon the whale before shooting. This method reduces losses of sunken or wounded whales.
2. No person shall hunt alone.
3. Each boat should have at least one experienced hunter.
4. These rules may from time to time be changed by the Olokhaktomiut HTC.



Map 34. Percent Volume Contours of beluga sightings made during systematic aerial

surveys in the Mackenzie Estuary during early (top), mid (middle) and late July (lower) time periods, 1977-1975 and 1992 (Harwood et al. 2014).

### References

- Asselin, N.C., Barber, D.G., Stirling, I., Ferguson, S.H., and Richard, P.R. 2011. Beluga (*Delphinapterus leucas*) habitat selection in the eastern Beaufort Sea in spring, 1975–1979. *Polar Biol.* DOI 10.1007/s00300-011-0990-5.
- Asselin, N.C., Barber, D.G., Richard, P.R., and Ferguson, S.H. 2012. Occurrence, Distribution and Behaviour of Beluga (*Delphinapterus leucas*) and Bowhead (*Balaena mysticetus*) Whales at the Franklin Bay Ice Edge in June 2008. *Arctic.* 65-2. P. 121-132.
- Barber, D.G., Saczuk, E., and Richard, P.R. 2001. Examination of beluga-habitat relationships through use of telemetry and a geographic information system. *Arctic* 54: 305-316.
- Brennin, R., Murray, B.W., Friesen, M.K., Maiers, D., Clayton, J.W. and B.N. White. 1997. Population genetic structure of beluga whales (*Delphinapterus leucas*): mitochondrial DNA sequence variation within and among North American populations.
- Brown-Gladden, J.G., Ferguson, M.M. and J.W. Clayton. 1997. Matriarchal genetic population structure of North American beluga whales, *Delphinapterus leucas*, (Cetacea: Monodontidae).
- Byers, T. and L.W. Roberts. 1995. Harpoon and Ulus: Collective wisdom and traditions of Inuvialuit regarding the beluga (qilalugaq) in the Mackenzie River estuary. Unpublished Report. DIAND / FJMC.
- COSEWIC. 2004. COSEWIC assessment and update status report on the Beluga Whale *Delphinapterus leucas* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. ix + 70 p.
- Desforges J.P., Ross P.S., Dangerfield N., Palace V.P., Whitticar M., and Loseto LL. 2013. Vitamin A and E profiles as biomarkers of PCB exposure in beluga whales (*Delphinapterus leucas*) from the western Canadian Arctic. *Aquatic Toxicology* 2013.142-143:p.317-28.
- de March, B.G.E., Maiers, L.D. and M.K. Freisen. 1999. Genetic differences among Canadian and adjacent beluga whale stocks as determined by mitochondrial DNA and 15 nuclear DNA microsatellite loci. NAMMCO Scientific Committee.
- Harwood, L.A., Innes, S., Norton, P. and M.C.S. Kingsley. 1996. Distribution and abundance of beluga whales in the Mackenzie Estuary, Southeast Beaufort Sea, and west Amundsen Gulf during late July 1992. DFO.
- Harwood, L.A., and Smith, T.G. 2002. Whales of the Inuvialuit settlement region in Canada's Western Arctic: An overview and outlook. *Arctic* 55(Suppl. 1):77 – 93.
- Harwood, L.A. and Kingsley, M. 2013. Trends in the Offshore Distribution and Relative Abundance of Beaufort Sea Belugas, 1982 – 85 vs 2007 – 09. *Arctic*: 66-3: 247-256.
- Harwood, L.A., Iacozza, J., Auld, J.C., Norton, P., and Loseto, L. 2014. Belugas in the Mackenzie River estuary, NT, Canada: Habitat use and hot spots in the Tarium Niryuutait Marine Protected Area. *Ocean & Coastal Management* 100: 128-138.
- Harwood, L.A., Smith, T.G., George, J.C., Sandstrom, S.J., Walkusz, W. and Divoky, G.J. 2015. Change in the Beaufort Sea ecosystem: Diverging trends in body condition and/or production in five marine vertebrate species. *Progress in Oceanography* 136: 263-273
- Hornby, C., Hoover, C., Joynt, A., Torontow, V., Hynes K., and Loseto, L. 2014. Arrival of beluga (*Delphinapterus leucas*) to the Mackenzie Estuary in relation to sea ice: report on spring 2011-2013 aerial surveys. *Can. Data Rep. Fish. Aquat. Sci.* 1251: vii + 25 p.
- Loseto, L.L., Richard, P., Stern, G.A., Orr, J., and Ferguson, S.H. 2006. Segregation of Beaufort Sea beluga whales during the open-water season. *Can. J. Zool.* 84, 1743–1751.



- Loseto, L.L., Stern, G.A., and Ferguson, S.H., 2008. Size and biomagnification: how habitat selection explains beluga mercury levels. *Environmental Science and Technology* 42, 3982-3988.
- Loseto, L.L., Stern, G.A., Connelly, T.L., Deibel d, D., Gemmill, B., A. Prokopowicz, A., Fortier, L., and Ferguson, S.H. 2009. Summer diet of beluga whales inferred by fatty acid analysis of the eastern Beaufort Sea food web. *Journal of Experimental Marine Biology and Ecology* 374 (2009) 12–18.
- Luque, S. P. and Ferguson, S.H. 2010. Age structure, growth, mortality, and density of belugas (*Delphinapterus leucas*) in the Canadian Arctic: responses to environment? *Polar Biology* 33:163–178
- Martin, A.W. and T.G. Smith. 1999. Strategy and capability of wild belugas, *Delphinapterus leucas*, during deep benthic diving. *Cdn Jrnl of Zoology* 77: 1783-1793.
- Richard, P.R., Martin, A.R. and J.R. Orr. 2001. Summer and autumn movements of belugas of the Eastern Beaufort Sea. DFO.
- Wagemann, R., Innes, S. and P.R. Richard. 1996. Overview and regional and temporal differences of heavy metals in Arctic whales and ringed seals in the Canadian Arctic. *Science and the Total Evt* 186: 41-66.
- Wong, P.L. 1999. Beluga whale (*Delphinapterus leucas*), bowhead whale (*Balaena mysticetus*) and ringed seal (*Phoca hispida*) in southeastern Beaufort Sea. DFO.

## BOWHEAD WHALE (*Balaena mysticetus*) / ARVIQ

### Biology

The bowhead whale is a baleen whale, black in colour except for white markings on chin and tail that usually come with age. Bowheads may reach a length of up to 20 m (65 ft.), with 12-15 m (40-50 ft) being the usual size. A small adult weighs 13,608 kg (30,000 lb). Blubber can be up to 51 cm (20 in.) thick. They reach adulthood at about 20 years, and have one calf every 3 to 5 years. They feed lower in the food chain than beluga, choosing areas where zooplankton is concentrated. They usually travel alone or in small groups. They make vocalizations that are a lower frequency than beluga.



Bowheads from the Bering-Chukchi-Beaufort population winter (November to April) in the western and central Bering Sea amongst broken pack ice. In spring (April through June) the whales migrate north and east along the northern coast of Alaska to the eastern Beaufort Sea, initially appearing in the Amundsen Gulf in offshore lead areas (>200 m) as break-up is under way. Their summer (June to September) distribution is centred in the southeastern Beaufort Sea, along the southern and western coasts of Banks Island, in Amundsen Gulf, and along the waters offshore of the Tuktoyaktuk Peninsula approximately 20-50 m in depth, Yukon coastal waters, the shelf break, the Mackenzie and Kugmallit Canyon areas. Recent satellite tracking indicates that they also occur around northwestern Banks Island and into M'Clure Strait (Heide-Jørgensen, et al, 2012). Prince Albert Sound, Minto Inlet and along the coast of Ulukahktok.

The Alaskan Inupiat harvest about 60 whales per year. Aklavik took one bowhead in 1991, and another in 1996.

### Important Habitat

De Salis Bay, Franklin Bay usually seen offshore of Ulukhaktok. King Point, Shingle Point, Mackenzie Bay, Herschel Island

### Management Plans/Agreements

Management Plan for the Bering-Chukchi-Beaufort population of Bowhead Whale (*Balaena mysticetus*) in Canada (SARA, 2014).

### Recent Research

Satellite tagging of bowhead in the Alaskan and Canadian Beaufort Sea has been a cooperative effort by DFO, Alaska Department of Fish and Game, Alaska Eskimo Whaling Commission, Aklavik HTC, Tuktoyaktuk HTC, Greenland Institute of Natural Resources, and the BC Center for Animal Health. Between 2006 and 2014, 68 bowhead whales were tagged in Alaska and the ISR (the 23 whales from the ISR were tagged between 2007-2010 and in 2014). This program will continue in 2016, and potentially until 2017 (dependent on funding).

In the 1980s, extensive, multi-year programs were undertaken to monitor distribution of bowheads in both the Canadian and Alaskan Beaufort Sea areas, to study the effects of industry on bowheads, and photogrammetry to identify individuals.

Currently, if a bowhead whale is harvested, a community monitor takes the measurements and samples, with a biologist from DFO.

**Research Priority**

High: Community interested in knowing more about species biology.

**Population Status**

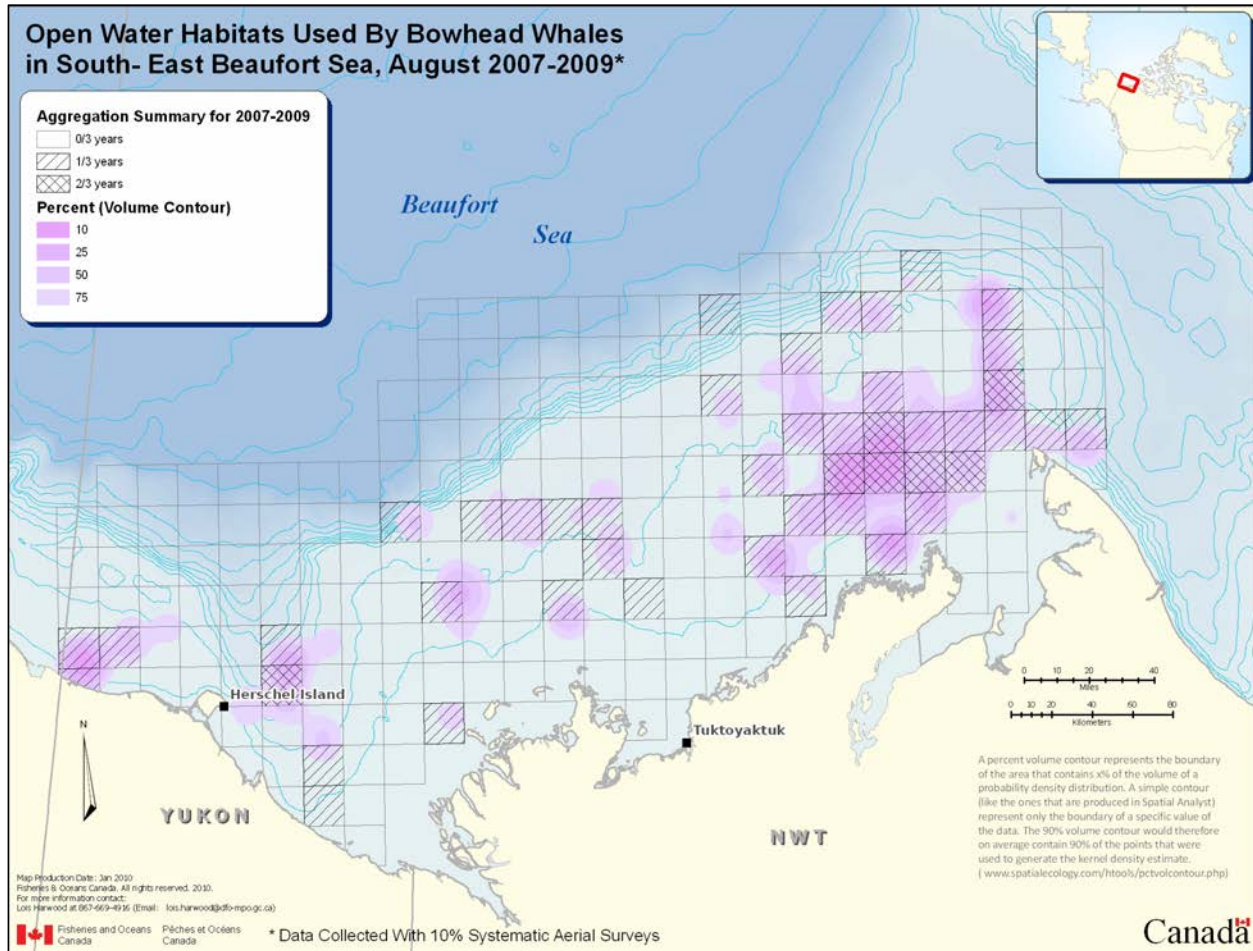
- The 2001 Bering-Chukchi-Beaufort bowhead population estimate is 10,470 (95% confidence intervals 8,100-13,500).
- Population growth rate from 1978-2001 was 3.4%
- Since 2009, the Bering-Chukchi-Beaufort population of bowhead has been designated as a species of 'special concern' under COSEWIC (Committee on the Status of Endangered Wildlife in Canada). The SARA (Species at Risk Act) status of this population is also 'special concern'.

**Population Goal**

Maintain thriving population for subsistence harvest. Unspecified. Currently being managed for population recovery.

**Conservation Measures**

Identify and protect important habitats from disruptive uses.



**Map 35. Bowhead open water habitat use in South-East Beaufort Sea, August 2007-2009.**

## References

- Asselin, N.C., Barber, D.G., Richard, P.R., and Ferguson, S.H. 2012. Occurrence, Distribution and Behaviour of Beluga (*Delphinapterus leucas*) and Bowhead (*Balaena mysticetus*) Whales at the Franklin Bay Ice Edge in June 2008. *Arctic*. 65-2. P. 121-132.
- Braithewaite, L.F., Aley, M.G. and D.L. Slater. 1983. The effects of oil on the feeding mechanism of the bowhead whale.
- COSEWIC. 2009. COSEWIC assessment and update status report on the Bowhead Whale *Balaena mysticetus*, Bering-Chukchi-Beaufort population and Eastern Canada-West Greenland population, in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vii + 49 pp. ([www.sararegistry.gc.ca/status/status\\_e.cfm](http://www.sararegistry.gc.ca/status/status_e.cfm)).
- George, J.C., Bada, J., Zeh, J., Scott, L., Brown, S.E., O'Hara, T. and Suydam, R. 1999. Age and growth estimates of bowhead whales, *Balaena mysticetus*, via aspartic acid racemization.
- Harwood, L.A. and T.G. Smith. 2000. Whales of the Beaufort Sea: an overview and outlook. DFO.
- Harwood, L.A., Auld, J., Joynt, A., and Moore, S.E. 2010. Distribution of Bowhead Whales in the S.E. Beaufort Sea during late summer, 2007-2009. DFO Can. Sci. Advis. Sec. Res. Doc. 2009/111. iv + 22 p.

- Harwood, L.A., Smith, T.G., George, J.C., Sandstrom, S.J., Walkusz, W. and Divoky, G.J. 2015. Change in the Beaufort Sea ecosystem: Diverging trends in body condition and/or production in five marine vertebrate species. *Progress in Oceanography* 136: 263-273
- Heide-Jørgensen, M. P., Laidre, K.L., Quakenbush, L.T. and Citta, J.J. 2012. The Northwest Passage opens for bowhead whales. *Biol. Lett.* 8, 270-273.
- Koski, W.R., Miller, G.W. and R.A. Davis. 1988. The potential effects of tanker traffic on the bowhead whale in the Beaufort Sea. *NOGAP*.
- Richardson, W.J., Greene, C.R., Koski, W.R., Smultea, M.A., Cameron, G., Holdsworth, C., Miller, G., Woodley, T. and Wursig, B. 1991. Acoustic effects of oil production activities on bowhead and white whales visible during spring migration near Pt. Barrow, Alaska, 1989 phase: sound propagation and whale responses to playbacks of continuous drilling noise from an ice platform, as studied in pack ice conditions. *LGL Limited*.
- Treacy, S.D. 1998. Aerial surveys of endangered whales in the Beaufort Sea, fall 1997. *U.S. Minerals Management Service*.
- Wagemann, R., Innes, S. and P.R. Richard. 1996. Overview and regional and temporal differences of heavy metals in Arctic whales and ringed seals in the Canadian Arctic. *Science and the Total Environment* 186: 41-66.
- Walkusz, W., Williams, W.J., Harwood, L.A., Moore, S.E., Stewart, B.E., and Kwasniewski, S. 2012. Composition, biomass and energetic content of biota in the vicinity of feeding bowhead whales (*Balaena mysticetus*) in the Cape Bathurst upwelling region (south eastern Beaufort Sea). *Deep-Sea Research I* 69 25–35.
- Wong, P.L. 1999. Beluga whale (*Delphinapterus leucas*), bowhead whale (*Balaena mysticetus*) and ringed seal (*Phoca hispida*) in southeastern Beaufort Sea. *DFO*.
- Zeh, J.E. 1995. Population size and rate of increase, 1978-1993, of bowhead whales, *Balaena mysticetus*. *International Whaling Commission*.

## SEALS

**RINGED SEAL (*Pusa hispida*) /  
NATTIQ**

**BEARDED SEAL (*Erignathus  
barbatus*) / UGYUK**

### Biology

Ringed seals and bearded seals are important components of the marine ecosystem. Ringed seals are the main prey of polar bears. Ringed Seals are an important traditional food for the Ulukhaktok community.



Trevor Lucas

### Ringed Seals

Ringed seals are the smallest of all pinnipeds (seals, sea lions, and walruses) with adults in the Beaufort Sea rarely exceeding 1.5 m (5 ft.) in length and 68 kg (150 lb) in weight. Ringed Seals weigh the most in the winter and early spring when they have a thick layer of blubber under their skin. The blubber serves as insulation and as an energy source during the breeding and pupping season. The weight of ringed seals declines with the decrease in feeding during the reproductive and moulting season.

The colouration of ringed seals is quite variable, but the basic pattern is a grey back with black spots and a light belly. The seal gets its name from the black spots that are ringed with light marks.

Ringed seals eat a variety of invertebrates and fish. The particular species eaten depends on availability, depth of water, and distance from shore. In the Beaufort Sea. The most important food species is arctic cod, with saffron cod, shrimp, mysids and other large crustaceans being important locally and at certain times of the year. Sand Lance and Caplin.

The ringed seal is an important element of the arctic marine ecosystem, both as the main prey of polar bears and a major consumer of marine fish and invertebrates. It continues to be an important species in the subsistence harvests and economy of Ulukhaktok, and to a lesser extent in Sachs Harbour, Tuktoyaktuk and Paulatuk. Seals are harvested for food, for dog food, and for pelts for handicrafts and clothing. Seal harvests in the ISR between 1988-1996 averaged 1,050 per year, with more than 70% of this coming from Ulukhaktok. Present day harvests are 20-30% of what they were in the 1960s.

### Bearded Seals

The bearded seal is the largest true seal that is normally found in the Beaufort Sea. Bearded seals are heaviest during winter and early spring when they may attain a weight of more than 340 kg (750 lb). From June through September adults usually weigh from 216-239 kg (475-525 lb). This seasonal loss of weight results from decreased feeding during spring and summer and is most obvious in changes of the thick layer of blubber under the skin. Measured from nose to tip of tail (not including hind flippers), adults average about 2.4 m (93 in.). Colour varies from a tawny-brown or silver-grey to dark brown.

Bearded seals have neither spots nor bands. They have comparatively long whiskers, rounded fore-flippers of which the middle one of the five digits is longest, relatively small eyes, and four mammary teats rather than two as in the ringed seal.

Females give birth to a single pup on the moving sea ice, usually during late April or early May. The average weight of pups at birth is around 34 kg (75 lb), and average length is about 1.3 m (52 in.). By the end of a brief nursing period, which lasts only 12 to 18 days, pups have increased their weight almost three times, to around 86 kg (190 lb).

Bearded seals eat a wide variety of invertebrates and some fishes, mainly in benthic habitats in the Beaufort, Chukchi and Bering seas. Their main prey are crabs, shrimp, clams and snails.

### **Traditional Use**

Clothing (boots, mittens), some used for food.

### **Important Habitat**

Amundsen Gulf, Minto Inlet and Prince Albert Sound near Ulukhaktok.

### **Management Plans/Agreements**

None

### **Recent Research & Monitoring**

Ringed Seal:

- A study was conducted to examine the effect of activities related to a drilling program on ringed seals off the Mackenzie Delta area between 2003-2006.
- Paulatuk: seal monitoring program was conducted from 1992-1994 (reproduction and condition), and from 2014-2015 (diet), and a tagging program was conducted in 2001 and 2002.
- Sachs Harbour:
  - Seal monitoring programs (reproduction and condition) were conducted from 1987-1989, in 1992, and again from 2003-2007.
  - Since 2005, ringed seals (4 to 25 animals per year) have been sampled by a community monitor for contaminant analyses (this work is part of the Northern Contaminants Program and is led by Environment Canada). Samples of blubber have been analyzed for persistent organic pollutants such as PCBs, DDT and flame retardants, while liver and muscle have been analyzed for mercury and toxic metals. In addition to contaminants measurements, data is available for the ages and diet (carbon and nitrogen stable isotope ratios) of each seal. Overall, contaminant levels in the seals are similar to other locations in the Canadian arctic.
- Ulukhaktok: have been monitoring reproduction and condition of seals each year from 1992-2014, and in Minto Inlet for five years from 1992-1996. Satellite tagging program for ringed seals was conducted in Ulukhaktok in 1999, 2000 and 2010.

Bearded Seal:

None at the present time. Vocalizations were studied in the 1970s near Ramsay Island, near Ulukhaktok.

### **Research Priority**

Moderate priority: interest in biology and in monitoring health and presence of contaminants.

**Population Status**

Ringed seals generally more abundant than bearded seals; surveys in the 1970s estimated their ratio to be 17:1. Bearded seals are more common in certain localized areas.

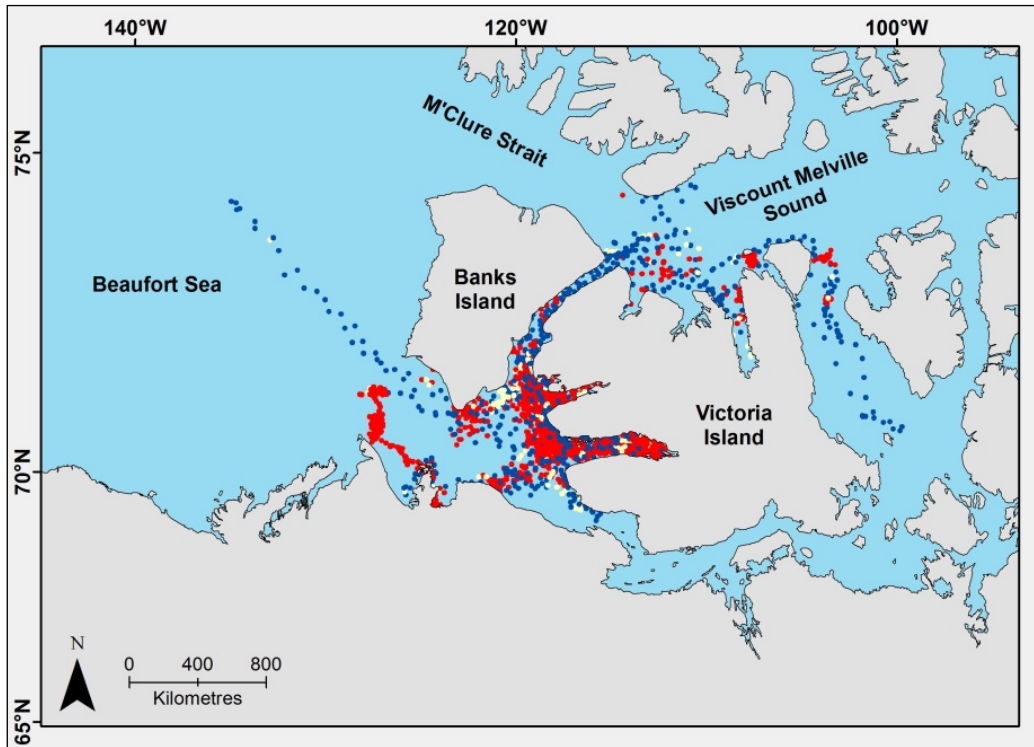
**Population Goal**

Adequate supply at present.

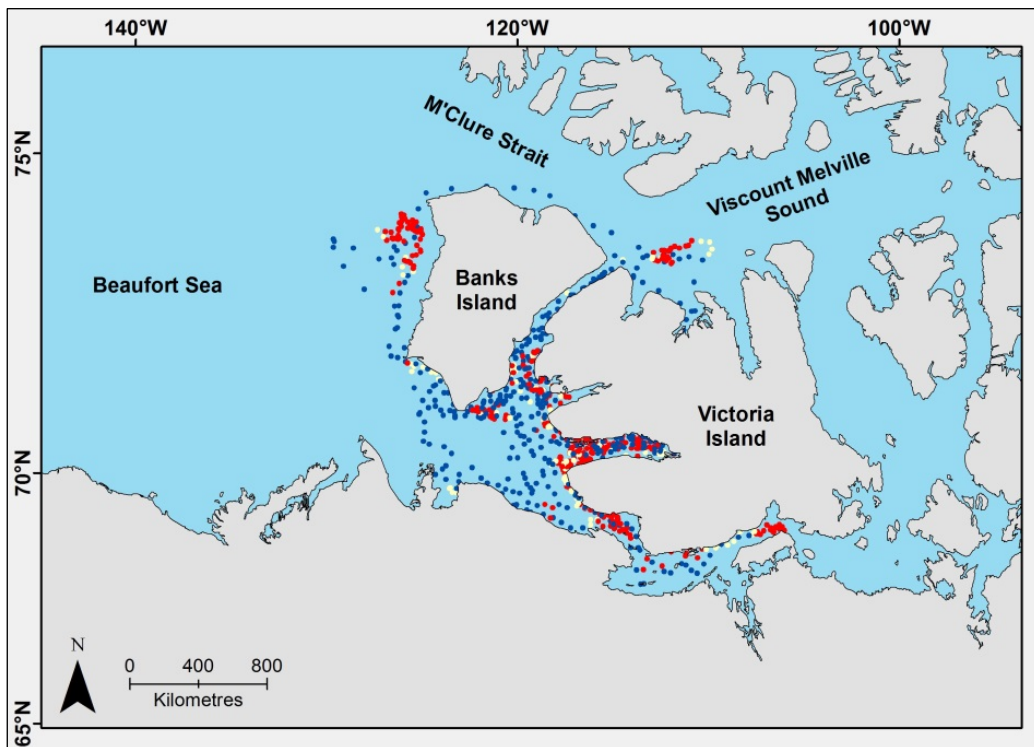
**Conservation Measures**

- Share hunt among elders.
- Identify and protect important habitats from disruptive land uses.
- Only harvest what is needed.

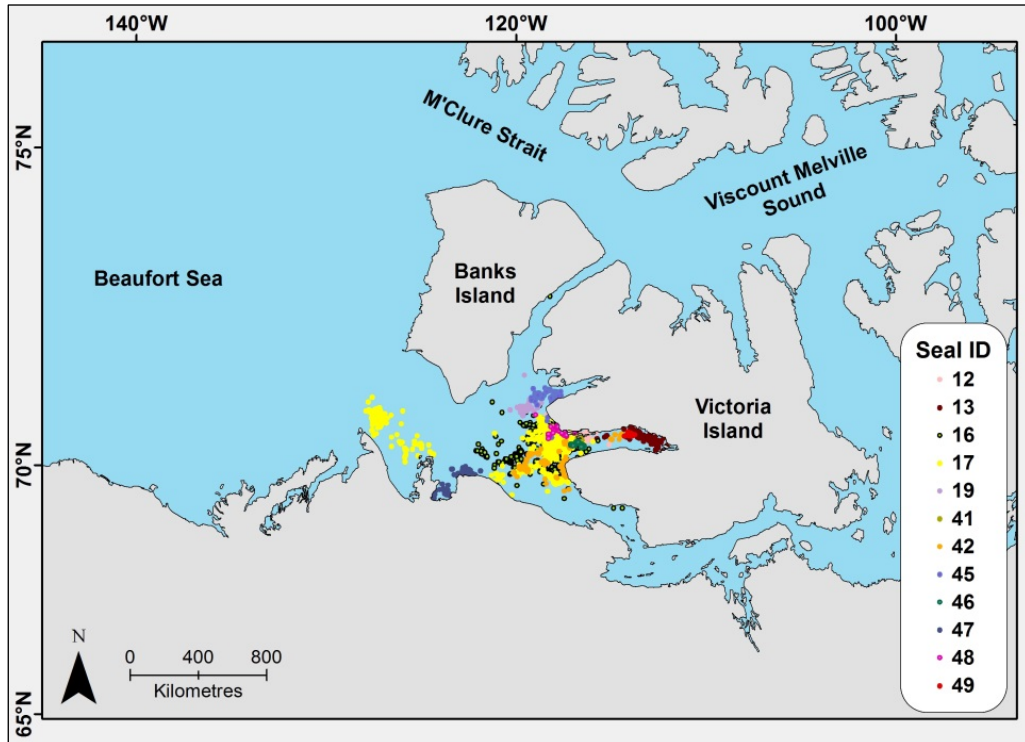




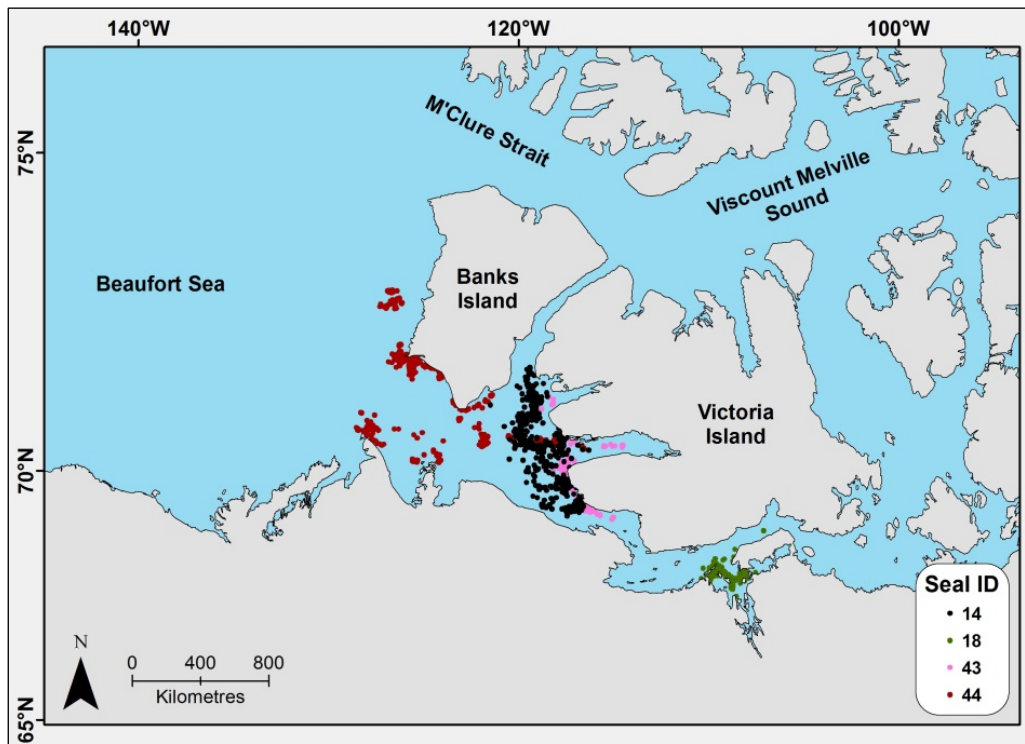
Map 36. *Adult* ringed seal open water habitat use based on tagging studies: red = inferred feeding locations; blue = travelling (Harwood et al. 2015).



Map 37. *Subadult* ringed seal open water habitat use based on tagging studies: red = inferred feeding locations; blue = travelling (Harwood et al. 2015).



Map 38. *Adult* ringed seal winter (1999-2001, 2010-2011) habitat use based on tagging studies (Harwood et al. 2015).



Map 39. *Subadult* ringed seal winter (1999-2001, 2010-2011) habitat use based on tagging studies (Harwood et al. 2015).

## References

- Addison, R.F. and T.G. Smith. 1998. Trends in organochlorine residue concentrations in blubber of ringed seal (*Phoca hispida*) from Holman, N.W.T., 1972-1989. *Arctic* 51: 253-261
- Harwood, L.A. 1989. Distribution of Ringed Seals in the southeast Beaufort Sea during late summer. Thesis (M.Sc.), University of Alberta, Edmonton, AB.
- Harwood, L.A., and Stirling, I. 1992. Distribution of ringed seals in the southeastern Beaufort Sea during late summer. *Can. J. Zool.* 70: 891-900.
- Harwood, L., Smith, T.G., and Melling, H. 2007. Assessing the Potential Effects of Near Shore Hydrocarbon Exploration on Ringed Seals in the Beaufort Sea Region 2003-2006. Environmental Studies Research Funds Report No. 162. 103 p.
- Harwood, L.A., Thomas G., Smith, T.G., and Auld, J.C. 2012. Fall Migration of Ringed Seals (*Phoca hispida*) through the Beaufort and Chukchi Seas, 2001 - 02. *Arctic* Vol. 65, No. 1 (March 2012) P. 35 - 44.
- Harwood, L.A., Smith, T.G., George, J.C., Sandstrom, S.J., Walkusz, W. and Divoky, G.J. 2015. Change in the Beaufort Sea ecosystem: Diverging trends in body condition and/or production in five marine vertebrate species. *Progress in Oceanography* 136: 263-273
- Kingsley, M.C.S. and Byers, T. 1989. Status of the ringed seal population of Thesiger Bay, N.W.T., 1987-1988. Report prepared for the Fisheries Joint Management Committee, #89-002.36 p.
- Kingsley, M.C.S. and Byers, T. 1990. Status of the ringed seal population of Thesiger Bay, N.W.T., 1987-1989. Report prepared for the Fisheries Joint Management Committee, #89-004.
- Paulatuk, Holman and Tuktoyaktuk Hunters and Trappers, 2007. Tagging and Tracking Ringed Seals in the Western Arctic using Satellite Telemetry - 1999 to 2003.
- Piffold NW, Derocher AE, Stirling I, Richardson E, Andriashek D (2012) Age and Sex Composition of Seals Killed by Polar Bears in the Eastern Beaufort Sea. *PLoS ONE* 7(7): e41429. doi:10.1371/journal.pone.0041429
- Smith, T.G. 1987. The ringed seal, *Phoca hispida*, of the Canadian Western Arctic. *Canadian Bulletin of Fisheries and Aquatic Sciences* 216. 81 p.
- Stirling, I. 2002. Polar bears and seals in the eastern Beaufort Sea and Amundsen Gulf: A synthesis of population trends and ecological relationships over three decades. *Arctic* 55(suppl.1): 59-76.
- Wagemann, R., Innes, S. and P.R. Richard. 1996. Overview and regional and temporal differences of heavy metals in Arctic whales and ringed seals in the Canadian Arctic. *Science and the Total Environment* 186: 41-66.
- Wong, P.L. 1999. Beluga whale (*Delphinapterus leucas*), bowhead whale (*Balaena mysticetus*) and ringed seal (*Phoca hispida*) in southeastern Beaufort Sea. DFO.



Trevor Lucas

## MAMMALS SPECIES LIST

The following is a list of mammal species occurring in the western Arctic. Successful conservation depends on the recognition that all of these species have special habitat requirements and often have significant relationships with all other components of the land and water.

Arctic Fox (*Vulpes lagopus*) / Tiriganniaq  
 Arctic Hare (*Lepus arcticus*) / Ukaliq  
 Arctic Ground Squirrel, *Spermophilus parryii*  
 Arctic Shrew, *Sorex arcticus*  
 Bearded Seal (*Erignathus barbatus*) / Ugyuk  
 Beaver (*Castor canadensis*) / Kigiaq  
 Beluga Whale (*Delphinapterus leucas*) / Qilalugaq  
 Black Bear (*Ursus americanus*) / Akhaq  
 Bowhead Whale (*Balaena mysticetus*) / Arviq  
 Caribou (*Rangifer tarandus*) / Tuktu  
 Cinereus Shrew (Masked Shrew), *Sorex cinereus*  
 Collared Pika, *Ochotona collaris*  
 Dall's Sheep (*Ovis dalli*) / Imnaiq  
 Ermine (Stoat), *Mustela ermine*  
 Grizzly Bear (*Ursus arctos*) / Akhaq  
 Hoary Marmot (*Marmota caligata*)  
 Least Weasel (*Mustela nivalis*)  
 Lynx (*Lynx canadensis*) / Niutuiyiq  
 Marten (*Martes americana*)  
 Meadow Vole (*Microtus pennsylvanicus*)  
 Mink (*Neovison vison*) / Tiriapqak  
 Moose (*Alces americanus*) / Tuktuvak  
 Muskox (*Ovibos moschatus*) / Umingmak  
 Muskrat (*Ondatra zibethicus*) / Kivgaluk  
 Nearctic Brown Lemming (*Lemmus trimucronatus*)  
 Nearctic Collared Lemming, *Dicrostonyx groenlandicus*  
 Northern Flying Squirrel (*Glaucomys sabrinus*)  
 Northern Red-backed Vole (*Myodes rutilus*)  
 Polar Bear (*Ursus maritimus*) / Nanuq  
 Porcupine (*Erethizon dorsata*)  
 Red Fox (*Vulpes vulpes*) / Kayuqtuq  
 Richardson's Collared Lemming, *Dicrostonyx richardsoni*  
 Ringed Seal (*Pusa hispida*) / Nattiq  
 River Otter (*Lontra canadensis*) / Pamiuqtuuq  
 Root Vole (*Microtus oeconomus*)  
 Snowshoe Hare (*Lepus americanus*) / Ukaliq  
 Northern Red-backed Vole (*Microtus oeconomus*)

Wolf (*Canis lupus*) / Amaruq  
Wolverine, *Gulo gulo* / Qalvik

## DUCKS / QAUGAIT

**King Eider** (*Somateria spectabilis*) / **QINGALIK**

**Common Eider** (*Somateria mollissima*) / **AMAULIK**

**Long-tailed Duck (Oldsquaw)** (*Clangula hyemalis*) /  
**AAHAANGIQ**

**Pintail** (*Anas acuta*) / **IHUNGAQ**

### Biology

Arrival and departure of ducks closely tied to breakup and freeze up. Occasional mass die offs of eiders may occur when breakup delayed.

#### Eider (King and Common)

Winter in northern waters in Alaska and Russia, rarely as far south as B.C. and Washington. Leave wintering areas in late April, arrive on breeding grounds early June. Common Eiders often nest in dense colonies on offshore islands or sometimes near tundra ponds distant from coast. King Eiders often nest in low densities, or semicolonally on islands, much farther from the coast. Common Eider clutch size ranges from 1 to 14 eggs, average about 4 to 6. King Eider clutch size ranges from 2 to 6 eggs, average about 5. Common Eiders incubate eggs about 24-26 days, King Eider about 22-24 days. Common Eider have been observed diving to about 10m (33 ft.) depth to feed, while King Eider feed in deeper water between 15 and 40 m. There is a record of a king eider diving about 55 m (181 ft.). Both prefer aquatic organisms for food, e.g. mussels, crabs, aquatic insect larvae and Sea Urchins King Eiders will eat some aquatic plants. Begin fall migration as early as July (e.g. male king eiders) and runs through to late fall (immature birds).

#### Long-tailed duck (Old Squaw)

Nest in greater numbers in Arctic than any other duck. Winter along west coast as far as California. Leave wintering areas in mid-March to mid-April, arrive on breeding grounds late May, early June. Prefer to nest on small islands or on upland areas near tundra ponds. May nest up to 200 m (656 ft.) or more from water but most are quite close, average is less than 10 m (33 ft.). Clutch size may range from 2 to 14 eggs, average about 7. Incubate eggs for about 26 days. Have the most varied diet of all the sea ducks. Prefer aquatic organisms for food, eg. crustaceans, mollusks, aquatic invertebrates, small fish and fish eggs, rarely eat aquatic plants. Begin fall migration late August or early September.

#### Pintail

Largest number of breeding pintails in the western Canadian Arctic occurs in the Mackenzie Delta, large numbers also occur at Anderson River Delta. Winter in southern U.S., Mexico, and Central America. Leave wintering grounds in late January, early February through March, arrive in delta mid-May. Prefer open areas with low vegetation to nest. May nest up to 1.6 km (1 mi) from water but average about 40 m (131 ft.). Clutch size ranges from 3-14 eggs, average about 8. Incubate eggs 22 to 23 days. All eggs tend to hatch within about 8 hours. Eats shoreline vegetation, some aquatic plants, cereal grains (in south) and to some extent aquatic



invertebrates. Fall migration begins late August.

### **Important Habitat**

King Eider: Tahiryuak Lake, Kagloryuak River valley, Quunnguq Lake, Diamond Jenness Peninsula, Prince Albert Peninsula, Horizon Islets, Ramsey Island

Common Eider: islands in Prince Albert Sound, islands in Minto Inlet, Prince of Wales Strait, Horizon Islets, Ramsey Island

Long-tailed Duck: Kagloryuak River valley, Tahiryuak Lake (distribution in the ISR is not well documented)

### **Management Plans/Agreements**

*Migratory Birds Conventions Act, 1994*

North American Waterfowl Management Plan (NAWMP, 2012).

Circumpolar Eider Conservation Strategy and Action Plan (CAFF, 1997)

Sea Duck Joint Venture (formed under the NAWP)

### **Recent Research**

Standardized annual breeding pair survey conducted jointly by CWS and US Fish and Wildlife. Migration and harvest of King Eiders, CWS

Dickson, D.L., Cotter, R.C., Hines, J.E. and M.F. Kay. 1997. Distribution and abundance of King Eiders in the western Canadian Arctic. Canadian Wildlife Service.

Dickson, L. 1993. Sea duck monitoring program at Victoria Island. Canadian Wildlife Service.

Dickson, L. and J. Hines. 1997. Use of satellite telemetry to locate the moulting and wintering areas of King Eiders that nest on Victoria Island.

Westover, S.E., Dickson, D.L. and S.A. Alexander. 1993. Spring migration of waterbirds in the Beaufort Sea, Amundsen Gulf and Lambert Channel Polynya, 1992. Canadian Wildlife Service.

Dickson, D.L. 2012. Seasonal movement of Pacific Common Eiders breeding in arctic Canada. Technical Report Series 521, Canadian Wildlife Service, Edmonton, Alberta. 58 p.

Dickson, D.L. 2012. Seasonal Movement of King Eiders Breeding in Western Arctic Canada and Northern Alaska. Canadian Wildlife Service Technical

### **Research Priority**

High: Local interest in biology, also concern here and elsewhere on impact of changing water levels and water quality.

#### King Eider

- Monitor King Eider numbers as part of multi-species surveys to determine population trends in the ISR.
- Determine the breeding range limits of the western arctic King Eider population using stable isotope analysis.
- Document importance of staging areas in the southeastern Beaufort Sea of King Eiders during moult migration (aerial surveys).
- Document the migration routes and the distribution of King Eiders in moulting and wintering areas in the Chukchi and Bering Sea (satellite telemetry).

#### Common Eider

- Document the migration routes and the distribution of Common Eiders in moulting and wintering areas in the Chukchi and Bering Seas.
- Determine the reproductive success and annual survival of Common Eiders, including

- factors affecting productivity and survival.
- Locate critical habitat for brood-rearing Common Eiders.

All Species of Waterfowl

- Analyze, summarize and map harvest study data to determine the total harvest, spring staging areas, and the biological and management significance of these data.

<b>Population Status</b>		
King Eider:	592,000	(2004)
	371,000	(1996)
	802,000	(1976) (North America)
Pacific Common Eider:	110,500	(2004)
	73,000	(1996)
	153,000	(1976)
Long Tailed Duck:	314,216	(1988-2008 average)
	406,751	(1993-1998 average) (Western Canadian Arctic and Alaska)
Northern Pintail:	3.2 million	2014 (North America)
Continental Goal:	5.6 million	

Population Trends

King Eider: decreasing  
 Common Eider: decreasing  
 Long Tailed Duck: decreasing  
 Pintails: decreasing

**Population Goal**

Maintain thriving population for subsistence harvest.

NAWMP (2012) has a combined goal of 60 million ducks for 29 species of duck in North America. See above continental goals, based on NAWMP (2012).

**Conservation Measures**

- Do not disturb nesting birds.
- Harvest only what is needed.

## GEESE AND TUNDRA SWAN

**Cackling Goose** (*Branta hutchinsii hutchinsii*) / **ULUGULLIK KANNGUT**

**Canada Goose** (*Branta canadensis*) / **ULUAGULLIK**

**Snow Goose** (*Chen caerulescens*) / **KANGUQ**

**White-fronted Goose** (*Anser albifrons frontalis*) / **NIRLIVIK**

**Brant** (*Branta bernicla*) / **NIRLIRNAQ**

**Tundra swan** (*Cygnus columbianus*) / **QUGYUK**

### Biology

Timing of goose, brant and swan arrival and departure is closely associated with availability of open water and freeze up.

**Cackling Geese** – Cackling Geese and Canada Geese were identified as separate species in 2004. Cackling Geese are smaller than Canada Geese, they nest above the tree line and make up the majority of the birds in this area. They are part of "Mid-continent Cackling Geese" population. Winter central U.S. to Colorado and Texas. Arrive in May. Wide variety of nest sites. Average clutch size about 4-5 eggs. Incubate eggs about 26 days. Feed on grasses, sedges, berries, seeds, cereal grains. Leave mid-September.

**Canada Geese** - Slightly larger than Cackling Geese, Canada Geese nest below the tree line and are present in smaller numbers in the Inuvialuit Settlement Region mainly as non-breeders that migrate north to molt.

**Snow Geese** - Local birds part of Western Arctic Population. Winter California and Mexico. Arrive mid-May. Nests made on tussocks built up with mud and grass; depression lined with grass and down. Lay 3-5 eggs first week of June. Incubate approximately 22-33 days, off nest first week of July. Feed on terrestrial and aquatic vegetation. Leave mid-September. Western Arctic Population designated as overabundant by CWS in 2014, in order to hopefully stabilize the population and prevent habitat damage as observed in Midcontinent Snow Goose colonies. The Western Arctic Population of Lesser Snow Geese (*Anser caerulescens caerulescens*) consists of four major colonies, with 98% of the Snow Geese breeding at the Egg River colony on Banks Island.

**White-fronted Geese** - Also known locally as "Yellow legs". Winter in Coastal Texas, Mexico. Leave winter grounds early February through March, arriving Mackenzie Delta mid-May through early June. Nest in coastal and upland areas. Typically less down used in nest than other geese. Lay 2-10 eggs, average about 5. Incubate eggs 23-25 days. Feed on seeds and grass.

**Brant** - Two populations of Brant breed in the ISR, Black Brant and Western High Arctic (Grey-belly) Brant, referred to collectively as Pacific Brant. Winter along Pacific Coast of Baja, Mexico to B.C. Arrive late May, early June. Nest close to water, in depressions amid tussocks. Lay 1-10 eggs, average 3-5 eggs, approximately second week of June. Incubate eggs about 24 days, off nest late July. Some local observation that brant will nest near snowy owls to avoid fox predation.

**Swans** - Local nesting birds are from the Eastern Population. Winter east coast U.S. Arrive mid-May. Lay 2-6 eggs (average 5) in June. Nests on elevated hummocks of grass and moss. Remain on nest until mid-August and remain in vicinity until fall migration. Prefer marshy areas,





aquatic plants. Fall migration in September.

### **Traditional Use**

Very important food source in spring, down from waterfowl also traditionally used in pillows and blankets.

### **Important Habitat**

Cackling Goose: Kagloryuak River Valley, Diamond Jenness Peninsula, Prince Albert

White-fronted Goose: Kagloryuak River Valley, Tahiryuak Lake, SW Victoria Island Peninsula, SW Victoria Island

Lesser Snow Goose: low numbers throughout south-west half of Victoria Island

Brant: small numbers in Kagloryuak River Valley, but sparse throughout western Victoria Island,

Tundra Swan: Kagloryuak River Valley, Wollaston Peninsula

### **Management Plans/Agreements**

*Migratory Birds Conventions Act, 1994*

North American Waterfowl Management Plan (NAWMP 2012).

Arctic Goose Joint Venture (part of NAWMP).

Eastern Tundra Swan Management Plan. White Front Goose Management Plan.

Draft Management Plan for the Western Arctic Population of Lesser Snow Geese (1986). Draft Pacific Coast Brant Management Plan (1991).

Draft Multi-species Management Plan for Northwest Victoria Island (2000)

### **Recent Research**

- Population of Brant on the Mainland of the ISR, CWS
- Productivity of Lesser Snow Geese, Banks Island, CWS Monitoring of Snow Goose Habitat on Banks Island, CWS
- Impact of Harvest on Snow Goose Populations in the ISR, CWS
- Hines, J. 1993. Distribution, abundance, productivity, survival and habitat of White-fronted Geese, Canada Geese, Pacific Brant and Tundra Swans in the Inuvialuit Settlement Region. Canadian Wildlife Service.
- Hines, J.E., P.B. Latour, C.S. Machtans. 2010. The effects on lowland habitat, breeding shorebirds and songbirds in the Banks Island Migratory Bird Sanctuary Number 1 by the growing colony of lesser snow geese (*Chen caerulescens caerulescens*). Occasional Paper no. 118, Canadian Wildlife Service, 42 p.
- Obst, J., J. E. Hines, J.-F. Dufour, P. F. Woodard, and R.G. Bromley. 2013. Habitat Conditions, Grizzly Bear Predation of Nests, and Spring Use of the Anderson River Delta by Lesser Snow Geese and Brant, 2005–2006. Technical Report Series No. 523, Canadian Wildlife Service, Yellowknife, NT.

### **Research Priority**

High - The community is interested in knowing more about the biology and ecology of these species. Improving census methods, and identifying important habitat.

### Snow Goose

- Habitat studies to determine impact of snow geese on the lowland habitat of Banks Island, and to develop a long-term goal for the population.
- Evaluate impacts of increased spring harvest on the different colonies
- Delineate areas where Banks Island geese can be selectively harvested by the mainland

communities without impacting the small colonies

- Monitor continuing eastward shift of migrating and wintering geese.
- Carry out air photo surveys at 5-year intervals to document population trends at the three Western Arctic colonies.

#### Brant

- Complete analysis and write-up of recent studies of the distribution, abundance, survival rates and productivity of brant in the ISR.

#### **Population Status**

<b>Species</b>	<b>Population</b>
Tundra Swan (estimated population)	105,000 (2014 mid-winter count) 84,000 (1993-98) (North America) Continental goal: 80,000
White-fronted goose	891,732 (2012 and 2014 average) (North America) 70,000 (1989-83) (ISR) 797,000 (1992-98 average) (North America) Continental goal: 320,000
Lesser snow goose	420,128 (2013) (ISR) 486,000 (1995) (ISR) 169,600 (1976) (ISR) Western Arctic Goal: 200,000 breeding population
Cackling goose	687,000 (2002-2011) (mid-winter count, North America)
Canada Goose	164,000 (2004-2013) (Waterfowl Breeding Population and Habitat Survey for boreal habitat in AB, SK, MB, NWT)
Brant	163,300 (2013 midwinter index) 137,400 (1993 winter average) (North America) Continental goal: 162,000 (Goal for Black Brant = 150,000; Western High Arctic Brant = 12,000)

#### **Population Trends**

Canada Geese	Increasing
Lesser Snow Geese	Increasing
White-Fronted Geese	Stable
Brant	Stable
Swans	Stable

#### **Population Goal**

See continental goals above, based on the North American Waterfowl Management Plan, 1986 (NAWMP 2012).

#### **Conservation Measures**

- Identify and protect important habitats, including wintering areas and key resting sites, from

- disruptive land uses.
- Do not harvest more than is needed.
  - Support North American Waterfowl Management Plan (1986) and Arctic Goose Joint Venture.
  - Support the "Principles for the Conservation of Migratory Birds in the Inuvialuit Settlement Region" WMAC (NWT).

## GULLS / NAOYAK

**Iceland Gull** (*Larus glaucoides*) / **NAUYAK**

**Glaucous Gull** (*Larus hyperboreus*) / **NAOYAKIK**

**Sabine's Gull** (*Xema sabini*) / **IQILGARIAQ**

### Biology

Iceland gulls winter in southeast Canada and east coast U.S. Iceland gulls generally nest in moss and grass, on coastal cliffs. Nests in colonies which may be pure or mixed. 2-3 eggs.

Glaucous gulls winter on the west coast of Canada and U.S. Glaucous gulls nest in colonies, on large mounds of soft grass and vegetation. Lay 2-4 eggs. Incubation 27-28 days.

Sabine's gull winters along Pacific coast between Panama and Chile, also some on east coast Atlantic. Sabine's gull nests in small colonies or as single pairs, sometimes associated with Arctic terns. Nests on tundra, coastal or inland near water. Lay 2-3 eggs. Incubation 23-26 days.



### Traditional Use

Highly valued food (eggs).

### Important Habitat

Albert Islands, other coastal locations.

### Management Plans/Agreements

*Migratory Birds Convention Act, 1994*

### Recent Research

None.

### Research Priority

Unspecified. Low

### Population Status

Undetermined.

### Population Goal

Unspecified.

### Conservation Measures

- Identify and protect important habitats from disruptive land uses.
- Avoid frequent disturbance of nesting birds.
- Leave at least one or two eggs in nest if collecting eggs.

## LOONS

**Common Loon (*Gavia immer*) / QAQAUK**

**Yellow billed or King Loon (*Gavia adamsii*) /  
DOODLIK**

**Pacific Loon (*Gavia pacifica*) / MALIRIK**

**Red-throated Loon (*Gavia stellata*) / EVITALIK**

### Biology

Arrive in May, 1-2 eggs laid in June, migrate south in September. Feed on small fish. Arctic and Red-throated arrive mid-June, leave late August early September. Different loons will use same habitats. Pacific and Red-throated Loons are more numerous in the ISR and will nest on smaller, shallower tundra ponds than the other 2 species.



### Important Habitat

Common Loon: Ulukhaktok area

Red-throated Loon: Ulukhaktok area

Yellow-billed Loon: Ulukhaktok area

Pacific Loon: Ulukhaktok

### Management Plans/Agreements

*Migratory Bird Convention Act, 1994.*

### Recent Research

Barr, J.F. 1997. Status report on the yellow-billed loon, *Gavia adamsii*, in Canada. COSEWIC.

Dickson, D.L., 1992. The Red-throated loon as an indicator of environmental quality. CWS. Occasional Paper No. 73.

Dickson, D.L, 1993. Breeding biology of red-throated loons in the Canadian Beaufort Sea Region. Vol. 46, No. 1.

Vogel, H. 1997. COSEWIC status report on the common loon (*Gavia immer*) in Canada. COSEWIC.

Dickson, D.L. and J. Beaubier. 2011. Red-throated Loon monitoring in the southeast Beaufort Sea region: 2007–2008 update. Technical Report Series Number 517, Canadian Wildlife Service, Edmonton, Alberta. 38 p.

### Research Priority

Moderate: Community interested in more information on biology.

### Population Status

Local observation suggests that yellow-billed loons are abundant.

### Population Goal

Thriving population.

### Conservation Measures

- Do not disturb nesting birds.
- Identify and protect important habitats from disruptive land uses.

**PTARMIGAN (*Lagopus spp.*) / AQILGIQ**  
**Rock Ptarmigan (*Lagopus mutus*) / AQILGIQ**  
**Willow Ptarmigan (*Lagopus lagopus*) / AQILGIVIK**

### **Biology**

Birds breed in early May, and females lay eggs in June. Willow ptarmigan lay 5-10 eggs; rock ptarmigan lay 6-15 eggs.

### **Traditional Use**

Ptarmigan are a well-liked food source within the community.



### **Important Habitat**

Willow ptarmigan use willow sorsb, muskeg areas, sheltered valleys. Wind-swept coastline in the vicinity of Ulukhaktok.

### **Management Plans/Agreements**

No management plan specifically for ptarmigan; managed under general hunting regulations.

Information can be found in a draft multi-species plan:

RWED (2000) Co-Management Plan for Caribou, Muskox, Arctic Wolves, Snow Geese, and Small Herbivores on NW Victoria Island, 1998/99 to 2002/2003 (DRAFT).

### **Research Priority**

Moderate, due to seeing lower numbers

### **Population Status**

Varies from year to year.

### **Population Goal**

Unspecified though community would be interested in having more around.

### **Conservation Measures**

- Identify and protect important habitats from disruptive land uses.

## SANDHILL CRANE (*Grus canadensis*) / TATILGAQ

### Biology

Winters in southern U.S. to Mexico. Arrive end of April or early May before snow geese. Nest is grass mound in marsh or wet meadow. Lay 2 eggs around middle of May, hatching in mid-June. Feed on insects, lemmings, berries, aquatic plants, grains, amphibians. Fall migration late August early September.

### Important Habitat

Wollaston Peninsula, Kagloryuak River valley, Victoria Island area

### Management Plans/Agreements

*Migratory Bird Convention Act, 1994*

### Recent Research

Austin, J. 1997. Delineation of Sandhill Crane subspecies and their distributions. Canadian Wildlife Service.

Reed, J.R. 1988. Arctic adaptations in the breeding biology of Sandhill Cranes, *Grus canadensis*, on Banks Island, Northwest Territories. Canadian Wildlife Service.

### Research Priority

Unspecified. Low

### Population Status

Appear to be increasing.

### Population Goal

Unspecified.

### Conservation Measures

- Do not disturb nesting birds.
- Identify and protect important habitats from disruptive land uses.



Trevor Lucas

**PEREGRINE FALCON (*Falco peregrinus*) /  
KILGAVIK  
GYRFALCON (*Falco rusticolus*) /  
KILGAVIKPAK  
ROUGH LEGGED HAWK (*Buteo lagopus*) /  
QILRIQ**

**Biology**

Peregrine Falcon nest in cliffs, laying 2-4 eggs and feed on small to medium sized birds.

Gyrfalcon nest in cliffs, laying 3-4 eggs. They feed on ground squirrels, ptarmigan, and occasionally hare as well as ducks and geese. Populations cycle with prey availability.

Rough-legged Hawk nest on cliffs, laying 2-5 eggs. They feed on lemmings, and ground squirrels, as well as small birds.



Trevor Lucas

**Important Habitat**

Cliff edges; Prince Albert Sound, Victoria island

**Management Plans/Agreements**

*Convention on International Trade in Endangered Species (CITES)*; Peregrine Falcon - Appendix 1.

GNWT and Yukon Birds of Prey Regulations.

**Research Priority**

Moderate - Interest in ecological relationships, role in food chain.

**Population Status**

Sparsely distributed throughout Victoria Island.

**Population Goal**

Unspecified, adequate numbers at present.

**Conservation Measures**

- Do not export.
- Do not harass or disturb nesting birds.
- Identify and protect important habitats from disruptive land uses.



## SNOWY OWL (*Nyctea scandiaca*) / UKPIK

### Biology

Most snowy owls migrate to region in spring, however, a few may overwinter. Owls arrive in April, and nest mid to late May, preferably on elevated ground. They typically lay 5-7 eggs, with some reports of 12 and incubation is 32 to 33 days. Birds are off nest in late August. Snowy Owls feed on lemmings, birds, and fishes. Owl numbers are usually low but are variable year to year. Snowy owls have an ecological association with brant geese during the nesting period, where brants nest close to Snowy owls to benefit from Snowy owls defending their nests from predators.

### Traditional Use

Used as a food source for the people of Ulukhaktok.

### Important Habitat

Widespread. Often found along the coast.

### Management Plans/Agreements

None

### Research Priority

Low.

### Population Status

Population is very cyclical.

### Population Goal

Unspecified. Adequate numbers for community needs.

### Conservation Measures

- Hunt only when needed.
- Identify and protect important habitats from disruptive land uses.



Trevor Lucas



Trevor Lucas

## BIRD SPECIES LIST

Approximately 50 species of birds may visit and nest on Victoria Island. Some may only rarely occur and do not routinely breed in the area. A list of birds which may occur in the area is presented below. These species are important components of the ecosystem, contribute to the quality of life in the area and are an attraction for tourists. Many of these species migrate to wintering areas outside of the planning area and Inuvialuit Settlement Region. Their conservation depends on cooperative work with people outside the region. It has been said that when a hunter sees a raven in the distance making noise and swooping down low, that game is nearby.

Species	Wintering Areas
Arctic Tern	Sub-Antarctic seas
Baird's Sandpiper	South America.
Black-bellied Plover	Coastal U.S. to Southern Hemisphere.
Brant / Nirlirnaq	Local concentrations on west coast of Mexico.
Buff-breasted Sandpiper	South America, especially Argentina.
Canada Goose / Uluagullik	North Mexico north to limits of open water.
Common Eider / Amaulik	West coast of Alaska and Aleutians.
Common Loon / Tuutlik	East and west coast North America.
Dunlin	West coast Canada and U.S.
Glaucous Gull / Naoyakik	West coast of Alaska, Canada, U.S. to southern California.
Ross' Gull	
Gyrfalcon / Kilgavikpak	West coast of Alaska and northern B.C.
Horned Lark	Vancouver Island, Mexico, South America.
Iceland Gull / Nauyak	Great Lakes and east coast to Maryland.
King Eider / Qingalik	Aleutians and northern west coast of North America.
Lapland Longspur	Southern Canada to southern U.S.
Lesser Golden Plover	Mainly east of Rockies, southern South America.
Long-tailed Jaeger	Migrant at sea, well off-shore, Southern Hemisphere.
Northern Pintail / Ihungaq	Along Pacific coast, Texas, Mississippi Delta, California, Mexico.
Oldsquaw / Aahaangiq	Aleutians and west coast of North America.
Pacific Loon / Malriq	Along coast S.E. Alaska to N.W. Mexico.
Parasitic Jaeger	At sea from southern U.S. to Tierra del Fuego.
Pectoral Sandpiper	South America.
Peregrine Falcon / Kilgavik	Sparingly along west coast of Canada and throughout U.S.
Pomarine Jaeger	At sea from southern U.S. to southern hemisphere.
Raven	Year round in North America - widespread.
Red Knot	Coast of southern U.S., Mexico, also S. Hemisphere.
Red Phalarope	At sea, mainly South America, West Africa.
Red-necked Phalarope	Coast of California south, range at sea poorly known.
Red-throated Loon / Qaqhauq	Along coast to northern Mexico and Florida.
Rock Ptarmigan / Aqilgiq	Some withdrawal from higher to lower elevations.
Rough-legged Hawk / Qilriq	Southern Canada to southern U.S. but rarely to Mexico.
Ruddy Turnstone	Coastal U.S., Hawaii.
Sabine's Gull / Iqilgariaq	In Pacific to Chile, local in Atlantic.
Sanderling	West coast of North America.

Sandhill Crane / Tatilgaq	Mexico, locally in southern U.S.
Semi-palmated Sandpiper	Mainly east of Rockies to South America.
Semipalmated Plover	West coast of southern North America to South America.
Short-eared Owl	Southern U.S. to central Mexico.
Snow Bunting	West coast and central North America, in open country.
Snow Goose / Kanguq	California, New Mexico, northern Mexico.
Snowy Owl / Ukpik	Cyclic winters to central U.S., Canada except Arctic.
Stilt Sandpiper	South America.
Tundra Swan / Qugquk	Seaboards of eastern North America, end of Alaskan peninsula and locally throughout U.S.
Water Pipit (American)	West coast of U.S., southern U.S. south to El Salvador.
White-fronted Goose / Nirlivik	Mexico, Gulf states and occasionally north to Dakotas.
White-rumped Sandpiper	South America.
Willow Ptarmigan / Aqilgivik	Resident year-round.
Yellow-billed Loon / Malriq	Along coast of northwestern North America.

Note: Species in brackets have been reported or are otherwise suspected to occasionally occur on Victoria Island.

## ARCTIC CHAR (*Salvelinus alpinus*) / IQALUKPIK

### Biology

The Arctic char is present as both a sea-run and landlocked form. There are some external characteristics which can be used to differentiate between Arctic char and Dolly Varden. Arctic char generally have a shorter head and snout, a trait particularly evident in spawning males. The tail of an Arctic char has a slightly deeper fork than that of a Dolly Varden, and the base of the Arctic char's tail is narrower.



Spawning occurs in freshwater during late September and early October, at about the same time that the winter ice forms. At spawning time the adults take on their characteristic spawning features and colours. Spawners are easily recognized because they change from silver to orange, red, and often to deep vermilion. Also, the leading edges of the lower fins turn white, and males develop a protruding hook called a 'kype' on their lower jaw.

Adult char do not spawn each year, taking one or two resting years in between spawning years. They first start to make trips to sea at about age 3-5, depending on the system. Adult char are thought to spawn every second year, although this is likely variable depending on individual condition, environmental condition and age of this fish. Arctic char feed mainly on small fishes and benthic organisms.

### Traditional Use

Very important food source.

### Important Habitat

Kuukyuak (Kuujuua) River (overwintering/spawning), Kuuk River/Tahiryuak Lake, Kagluk River, Tatik (Fish) Lake, Red Belly Lake, Mayoklihok Lake, Naloakyok, Kuunguk, Aligulik, Anialik, Halavikvik Lake, Kijjivik River, Kaglokyok River, Reed Island (south of ISR).

### Management Plans/Agreements

Ulukhaktok Char Fishing Plan 2004-2006 (currently being updated)

Ulukhaktok Char Working Group (UCWG): formed by members of the OHTC, FJMC and DFO; meet each year to discuss research, harvest monitoring and voluntary harvest levels for the Ulukhaktok area.

### Recent Research

- Ongoing winter harvest monitoring program (DFO, OHTC) at Tatik (Fish) Lake (Kuujuua River) (since 1992)
- Ulukhaktok summer coastal char harvest monitoring program (DFO, OHTC) (2012-present).
- Mayoklihok Lake Fisheries Survey in November 2013 (FJMC, OHTC, DFO, ISR CBMP)
- Radio-tagging and tracking of silver char in Kuuk River and over-wintering in Tahiryuak Lake in 1998 and 1999.

### Research Priority

High: The community is very interested in knowing more about the biology and movement of Arctic Char.

**Population Status**

Stable.

**Population Goal**

Unspecified. Maintain adequate numbers to sustain (current / increased) harvest. Would generally like more.

**Conservation Measures**

- Ensure harvest is sustainable.
- Do not take more than needed.
- Identify and protect important habitats from disruptive land uses.

**References**

- Harwood, L.A., Sandstrom, S.J., Papst, M. H., and Melling, H. 2013. Kuujjua River Arctic Char: Monitoring Stock Trends Using Catches from an Under-Ice Subsistence Fishery, Victoria Island, Northwest Territories, Canada, 1991 – 2009. *Arctic*. 66:3: 291-300.
- Harwood, L.A., Smith, T.G., George, J.C., Sandstrom, S.J., Walkusz, W. and Divoky, G.J. 2015. Change in the Beaufort Sea ecosystem: Diverging trends in body condition and/or production in five marine vertebrate species. *Progress in Oceanography* 136: 263-273
- Lewis, P.N.B., Kristofferson, A.H., and Dowler, D.H. 1989. Data from fisheries for Arctic char, Kuujjua River and Holman areas, Victoria Island, Northwest Territories, 1966 – 87. *Canadian Data Report of Fisheries and Aquatic Sciences* 769.17 p.
- Reist, J.D., Johnson, J.D and T.J. Carmichael, 1992. Variation and specific identity of char from northwestern Arctic Canada. *Special Proceedings of the American Fisheries Society Conference on "Fish Ecology of Arctic North America"*. Fairbanks.
- Sawatsky, C. D. and Reist, J.D. 2008. The State of Char in the Arctic. *Arctic Report Card*, 2008. *Convention on Arctic Flora and Fauna*.

**BROAD WHITEFISH**  
*(Coregonus nasus)* /  
AANAAKHIQ

**Biology**

Distributed in fresh and brackish waters of arctic drainages of northwestern North America and



northern Eurasia, south to approximately the 60th parallel. Spawning mainly occurs over gravel areas in rivers in October or November. Downstream migration of post-spawning fish may occur gradually over the winter. Maturation occurs at approximately seven years of age. Broad whitefish are more frequently encountered in rivers than lakes, although distinct anadromous and non-migratory lake dwelling stocks (e.g., Wolf Lake) are known from the Mackenzie River basin. Additionally, broad whitefish are often found in coastal areas of the Beaufort Sea (e.g., Shingle Point). Diet includes aquatic insects, small molluscs and crustaceans. They contain a strong organ similar to a bird gizzard that aides in the digestion and breakdown of shelled organisms. It is a deep-bodied fish with a blunt snout and short head. Average length is near 45 cm (18 in.).

**Important Habitat**

Tahikyoak Lake (south), Tahikgoak Lake (east), Tahikyoak Kivalik Kaglokyuak River, Kuukyuak River.

**Management Plans/Agreements**

None

**Recent Research**

None.

**Research Priority**

Unspecified. Low

**Population Status**

Uncommon.

**Population Goal**

Unspecified.

**Conservation Measures**

- Only harvest what is needed.
- Identify and protect important habitats from disruptive land uses.

**References**

- Freeman, M.M.R. and Stevenson, M.G. 1995. "They knew how much they needed": Inuvialuit traditional knowledge and the Broad Whitefish. Canadian Circumpolar Institute, University of Alberta, Edmonton, AB.

## LAKE TROUT (*Salvelinus namaycush*) / IHUUHUK

### Biology

Lake trout are most common in large, deep lakes, but are occasionally captured in rivers, brackish (salty) water, and the ocean. Lake trout are slow growing, fall spawning fish (early July) that, unlike salmon and other char, do not build redds



for their eggs. Spawning typically occurs over windswept shoals of lakes at depth greater than 2 m to avoid ice scouring and is rarely observed in rivers. Spawning takes place over clean, rocky lake bottoms, most often at night. Eggs hatch before ice breakup and the young live off a yolk sack until they are able to feed on zooplankton. Lake trout are long-lived (50+ years) and the largest of the local chars, potentially weighing over 20 kg (44 lb.). Sexual maturity is reached at different ages in different areas, but in many Arctic populations, spawning may not take place until fish reach 13-16 years. Mature lake trout have been observed to skip spawning between years to save up energy reserves. In most areas, lake trout feed on cisco, smelt, sticklebacks, sculpins, plankton and crustaceans and food preferences can shift throughout life and vary between lakes. Lake trout are distinguished from other char and salmon by their deeply forked tail, light-coloured spots, and worm-like pattern on their backs. During spawning some lake trout fins can become dark red in colour with a white stripe on the edge. Their bellies also can change to dark red, orange or yellow similar to other char. Because of the lake trout's slow growth, late maturation, skipped spawning events and selectivity of spawning habitat, they can be very sensitive to ecological disturbances.

### Important Habitat

Omingmakyok Bay, Ugirut Lake, Okpilik Lake, Kiyuktugak River, Kiyuktaluak River, Mayoklihok Lake; common in most deep freshwater lakes on Victoria Island.

### Management Plans/Agreements

None.

### Recent Research

None.

### Research Priority

High: Community is interested in fishery information about local lakes which will allow management of subsistence harvests. Fish population appears to have declined in Tatik (Fish) Lake and some other lakes near Ulukhaktok.

### Population Status

Community would like to see fish population increased in Fish Lake and other local lakes.

### Population Goal

Unspecified. Maintain adequate population to support current harvest.

### Conservation Measures

- Where commercial fishing is undertaken mesh size should be no smaller than 14 cm (5.5 in.).

- Ensure harvest is sustainable.
- Do not take more than is needed.
- Identify and protect important habitats from disruptive land uses.



**LAKE WHITEFISH /  
CROOKED BACKS  
(*Coregonus clupeaformis*) /  
ANAAKHIQ**

**Biology**

Lake whitefish are also called “crooked back” or “humpback whitefish” in this area. They are widely distributed across Canada as far south as the Great Lakes in large rivers and lakes. Lake whitefish in the Mackenzie Delta tend to have softer flesh and more parasites than broad whitefish and are thus less sought after by local fishermen. Lake whitefish spawn in late September or early October in this area and individual fish may spawn only every second or third year. Lake dwelling and anadromous fish can often be distinguished by differences in colour and physical characters. Lake whitefish feed on aquatic insects, molluscs, amphipods and a variety of small fish and fish eggs. They possess a strong organ similar to a bird gizzard that aides in the digestion and breakdown of shelled organisms. They reach a maximum weight of approximately 13kg (29 lb) and can live for at least 16 years. Most lake whitefish captured in area fisheries range from 6-10 years.



**Important Habitat**

Tahikyoak Lake (south), Tahikgoak Lake (east), Tahikyoak Kivalik Kaglokyuak River, Kuukyuak River.

**Management Plans/Agreements**

None.

**Recent Research**

None.

**Research Priority**

Unspecified. Low

**Population Status**

Uncommon.

**Population Goal**

Unspecified.

**Conservation Measures**

- Only harvest what is needed.
- Identify and protect important habitats from disruptive land uses.



## FISH SPECIES LIST

Many species of fish occur within the freshwater and marine environments of the western Arctic. Most lakes and rivers support fish populations. A partial list of those species that reside in the Victoria Island region is presented below. It is recognized that these species may be important components of the food chain on which other species (e.g. Arctic char, seals, polar bear) depend. As with other species, protection should be given to important habitats or ecological relationship where these become known.

### Marine Species

Arctic Cod (*Boreogadus saida*)  
 Blue Herring (*Clupea pallasii*)  
 Capelin (*Mallotus villosus*)  
 Fourhorn Sculpin, Deepwater Sculpin or Devil Fish (*Myoxocephalus quadricornis*)  
 Greenland Cod (*Gadus ogac*)  
 Saffron Cod ((*Elegiums navaga*)  
 Sand Lance (*Amodytes sp.*)  
 Starry Flounder (*Platichthys stellatus*) / Site Number - 34  
 Tom Cod (*Microgadus proximus*)

### Freshwater

Arctic Char (land locked) (*Salvelinus alpinus*) / **Aqalukpik**  
 Arctic Cisco (*Coregonus autumnalis*) / **Iqalukpik**  
 Broad Whitefish (*Coregonus nasus*) / **Aanaakhiq**  
 Lake Trout (*Salvelinus namaycush*) / **Ihuuhuk**  
 Lake Whitefish (*Coregonus clupeaformis*) / **Anaakhiq**  
 Least Cisco or Big-eyed Herring (*Coregonus sardinella*)<sup>1</sup>  
 Nine-spine Stickleback (*Pungitius pungitius*)

1. These fish spend part of their life in salt water and part in fresh water. This lifestyle is called "anadromous".

Note: Capelin or "Angmagiak" harvesting has been a traditional activity in Ulukhaktok for many years. They are a valued food fish.

## MARINE INVERTEBRATES

The coastal waters of Victoria Island around Ulukhaktok support a great variety of marine invertebrates that are viewed as very important components of the environment. These include sea urchins ("Itkoyak"), spider crabs ("Pudjogiak"), Shrimp, Krill ("Kinguk"), Starfish ("Ublugioyak"), jellyfish ("Novalhik"), clams ("Ovilok") and mussels. Site Numbers 31 and 32 (see Section 4.1) have been identified as having particularly high diversity of marine invertebrates.

### Conservation Measures

- Identify and protect important habitat from disruptive land uses (including offshore activities).
- Ensure any future harvesting does not significantly interfere with other components of marine ecosystem.
- Management of resources should be done on the basis of a community endorsed management plan.
- Priority should be given to shellfish in Walker Bay.

## INSECTS / KUPILGUT

A number of terrestrial and aquatic insects and other invertebrates occur on Victoria Island. It is recognized that these species may form an important part of the food chain on which other animals depend and may perform important functions, such as flower pollination and the breakdown of organic matter. Some species such as bees (Egotak), mosquitoes also have a significant effect on the behaviour and habitat use patterns of by other animals (e.g. caribou) while others, such as butterflies may be a potential tourist attraction. Certain species of insect are only found in northern regions, for example, four species of pardosid wolf spider have ranges largely restricted to the Arctic Coast and Archipelago. The community recognizes that the unregulated collection of certain rare insects can be a problem.

### Key Habitats

None identified.

### Conservation Measures

- Protect important habitats and ecological relationships (as appropriate) where these become known.
- Become more familiar with the insect life of the region.

A story has been told of how, many years ago, a spider saved a person who was being chased by bad people. Having no trees or rocks to hide behind, the person took shelter in a shallow hole in the ground. A spider, seeing the person was sure to be discovered, hid the person with a silken spider web. From that day on spiders were never harmed.

A local legend also exists with respect to bees. It has been said that bees have a special life force or healing power which they will sometimes share with humans. Morris Nigiyok of Ulukhaktok recalls being told this story by his parents and also seeing his sister apparently made healthy when a bee came into their tent and suddenly died. Prior to that event, Morris's sister had had long-term heart problems but apparently was healthy from that day on.

## PLANTS OF VICTORIA ISLAND

A large number of plant (**nauriat**) species occur on Victoria Island. The flora of the area may include over 248 species of vascular plants, at least 63 mosses, 68 lichen, 6 species of liverwort and 3 species of fern. Plants provide an essential component of the ecosystem on which all animals depend. They provide wildlife with food such as the lichen or "Akeagonak" eaten by caribou in fall, and shelter for wildlife, influence water quality, provide food for humans and make a valued contribution to the overall appearance of the land. The picking of berries (**ahiat**) is an important summer activity.

### Recent Research

Aiken, S. 2000. Flora of the Canadian Archipelago. Canadian Museum of Nature.

O'Brien, D. 2000. Measuring Tundra Productivity and Vegetation Structuring Using Satellite Imagery. University of Manitoba.

### Research Priority

Community would like to know more about dietary value and medical composition of locally harvested plants.

### Conservation Measures

- Protect important habitats and ecological relationships when these become known.
- Commercial harvesting of plants would only be acceptable when the ecological importance of the plant was known and the HTC and WMAC had provided approval.

A partial list of plants which have been or may be found in the area is provided below. Not included are the many species of moss, lichen and liverwort referred to above. Plants used for food or other purposes by the Inuit are marked with an asterisk (\*). Those which are considered rare are marked with a "+" sign. Where an asterisk is in brackets, there is uncertainty about the plant's identification.

*C. lugens*

## PLANT SPECIES LIST

- Agropyron boreale* subsp. *Boreale*  
*A. b.* subsp. *hyperarcticum*  
*Alopecurus alpinus* subsp. *alpinus*  
*Androsace chamaejasme* subsp. *lehmanniana*  
*A. septentrionalis*  
*Anemone parviflora*  
*A. richardsonii*  
*Antennaria friesiana* subsp. *compacta*  
*Arabis arenicola*  
*Arctagrostis latifolia* var. *latifolia*  
*Arctophila fulva*  
*Arctostaphylos alpina* (Black bearberry / **Kablak** - food)\*  
*A. rubra* (Bearberry / **Kablak** - food)\*  
*Armeria maritima* subsp. *arctica*  
*Armeria maritima* subsp. *arctica*  
*Arnica alpina* subsp. *angustifolia*  
*A. a.* subsp. *attenuata*  
*Artemesic borealis*  
*A. furcata*  
*A. tilesii* subsp. *tilesii* (Wormwood -medicine)\*  
*Aster yukonensis*  
*Astragalus aboriginum*  
*A. alpinus* subsp. *alpinus*  
*A. alpinus* subsp. *arcticus*  
*Betula glandulosa*  
*B. nana* subsp. *exilis* (Dwarf Arctic Birch - food)\*  
*Braya humilis* subsp. *arctica*  
*B. purpurascens*  
*Bromus pumpellianus* var. *arcticus*  
*Calamagrostis neglecta*  
*C. purpurascens* subsp. *purpurascens*  
*Caltha palustris* subsp. *arctica* (Marsh marigold - food)\*  
*Campanula uniflora*  
*Cardamine bellidifolia*  
*C. hyperborea*  
*C. pratensis* subsp. *angustifolia*  
*Carex amblyorhyncha*  
*C. aquatilis* subsp. *stans*  
*C. atrofusca*  
*C. bicolor*  
*C. bigelowii*  
*C. capillaris*  
*C. chordorrhiza*  
*C. glacialis*  
*C. glareosa* subsp. *glareosa*  
*C. maritima*  
*C. membranacea*  
*C. misandra*  
*C. nardina*  
*C. oederi* subsp. *viridula*  
*C. petricosa*  
*C. rariflora* (var. *androgyra* considered rare) +  
*C. rupestris*  
*C. saxatilis* subsp. *laxa*  
*C. scirpoidea*  
*C. subspathacea*  
*C. ursina*  
*C. vaginata*  
*C. williamsii*  
*Cassiope tetragona* subsp. *tetragona* (White Arctic Heather / **Eghotik** or **Keghok** - fire)\*  
*Castilleja elegans*  
*Cerastium beeringianum* var. *grandiflorum*  
*C. regelii*  
*Chrysanthemum arcticum* subsp. *polare*  
*C. integrifolium*  
*Chrysosplenium tetrandrum*  
*Cochlearia officinalis* subsp. *arctica*  
*Colpodium vahlium*  
*Crepis nana* var. *nana*  
*Cystopteris fragilis* subsp. *dickieana*  
*C. f.* subsp. *fragilis*  
*Deschampsia brevifolia*  
*D. c.* subsp. *orientalis*  
*D. pumila*  
*Draba alpina*  
*D. cinerea*  
*D. hirta*  
*D. lactea*  
*D. macrocarpa*  
*D. micropetala*  
*D. nivalis*  
*D. subcapitata*  
*Descurainia sophioides*  
*Diapensia lapponica*  
*Draba alpina*  
*D. caesia*  
*D. cinerea*  
*D. hirta*  
*D. macrocarpa*  
*Dryas integrifolia* subsp. *integrifolia*

- Dryopteris fragrans*  
*Dupontia fischeri* subsp. *fischeri*  
*D. F.* subsp. *psilosantha*  
*Elymus arenarius* subsp. *mollis* var. *mollis* / **Evik**  
*E. a.* subsp. *mollis* var. *villosissimus*  
*Empetrum nigrum* subsp. *hermaphroditum*  
 (Crowberry/**Paungat** - food, fuel)(\*)  
*Epilobium davuricum*  
*E. latifolium* (River beauty, willowherd - food)\*  
*Equisetum arvense* (Horsetail - food, medicine)\*  
*E. scirpoides*  
*E. variegatum* subsp. *variegatum*  
*Erigeron compositus*  
*E. eriocephalus*  
*E. grandiflorus* subsp. *grandiflorus*  
*E. humilis*  
*Eriophorum angustifolium* subsp. *triste* (Lettergrass /  
**Kangoyak** - food, weaving)\*  
*E. callitrix* / **Kangoyak**  
*E. Scheuchzeri* var. *Scheuchzeri* / **Kangoyak**  
*E. russeolum* var. *albidum* / **Kangoyak**  
*E. vaginatum* subsp. *spissum* / **Kangoyak**  
*Erysimum pallasii*  
*Eutrema edwardsii*  
*Festuca baffinensis*  
*F. brachyphylla*  
*F. rubra*  
*Gentiana propinqua* subsp. *arctophila*  
*G. p.* subsp. *propinqua*  
*Geum rossii*  
*Halimolobus mollis*  
*Hedysarum alpinum* subsp. *americanum* (Licorice  
 root, Eskimo potato, **Masu** - food)\*  
*H. mackenzii*  
*Hierchloe alpina*  
*H. odorata*  
*H. pauciflora*  
*Hippuris tetraphylla*  
*H. vulgaris* (Mare's tail - food)\*  
*Honckenya peploides* (Seabeach sandwort - food)\*  
*Juncus biglumis*  
*J. castaneus* subsp. *castaneus*  
*J. triglumis* subsp. *albescens*  
*J. triglumis* subsp. *triglumis*  
*Kobresia myosuroides*  
*K. sibirica*  
*K. simpliciuscula*  
*Lathyrus maritimus* subsp. *pubescens*  
*Ledum palustre* subsp. *decumbens*  
*Lesquerella arctica*  
*Linum perenne* subsp. *lewisii*  
*Loiseleuria procumbens*  
*Lomatogonium rotatum*  
*Lupinus arcticus*  
*Luzula arctica*  
*L. confusa*  
*L. wahlenbergii* subsp. *wahlenbergii*  
*Lycopodium selago* subsp. *appressum*  
*L. s.* subsp. *selago*  
*Melandrium affine*  
*M. apetalum* subsp. *articum*  
*M. taimyrense*  
*M. triflorum*  
*Mertensia Dromondii*  
*M. maritima* subsp. *maritima*  
*Minuartia biflora*  
*M. rossii*  
*M. rubella*  
*Montia fontana* subsp. *fontana*  
*Oxyria digyna* (Mountain sorrel / **Kongolik** - food,  
 medicine)\*  
*Oxytropis arctica*  
*O. campestris* subsp. *gracilis*  
*O. maydelliana*  
*O. nigrescens* subsp. *arctobia*  
*Papaver lapponicum* subsp. *occidentale*  
*Parrya nudicaulis* subsp. *nudicaulis*  
*Pedicularis capitata*  
*P. kanei* subsp. *kanei* (Woolly Lousewort - food)\*  
*P. langsdorffii* subsp. *arctica* (Lousewort - food)(\*)  
*P. sudetica* subsp. *albolabiata*  
*Petasites frigidus* (Sweet Coltsfoot - food)\*  
*Phippsia algida*  
*Phlox sibirica* subsp. *richardsonii*  
*Platanthera hyperborea*  
*P. obtusata*  
*Poa abbreviata*  
*P. alpigena*  
*P. arctica* subsp. *arctica*  
*P. a.* subsp. *caespitans*  
*P. glauca*  
*Polemonium acutiflorum*  
*P. boreale* subsp. *boreale*  
*Pleuropogon sabinei*  
*Polygonum viviparum* (Eskimo rhubarb/**Qauga** - food)\*  
*Potentilla egedii* subsp. *egedii*  
*P. Hookeriana* subsp. *chamissonis*  
*P. H.* subsp. *hookeriana* var. *hookeriana*  
*P. hyparctica*  
*P. pulchella*  
*P. rubricaulis*  
*P. vahliana*  
*Primula stricta*  
*Puccinellia andersonii*+  
*P. angustata*  
*P. langeana*  
*P. phryganodes*  
*P. vaginata*  
*Pyrola grandiflora*  
*P. secunda* subsp. *obtusata*  
*Ranunculus confervoides*  
*R. cymbalaria*  
*R. gmelini* subsp. *gmelini*  
*R. hyperboreus*  
*R. nivalis*  
*R. pedatifidus* subsp. *affinis*  
*R. pygmaeus* subsp. *pygmaeus*  
*R. p.* subsp. *sabinei*  
*R. sulphureus* var. *sulphureus*  
*Rhododendron lapponicum*

*Rumex arcticus* (Arctic Dock - food)\*

*Sagina intermedia*

*Salix alaxensis* subsp. *alaxensis* (Alaska willow - food, additive to chewing tobacco)\* (all willows referred to as "**Olaoyak**")

*S. arctica* subsp. *arctica*

*S. arctophila*

+ Listed as rare vascular plants in: Argus, G.W. and K.M. Pryer 1990 Rare Vascular Plants in Canada. Canadian Museum of Nature.

\* Locally used food or medicine plant.

Source: Hulten, E., 1968. Flora of Alaska and Neighboring Territories. A Manual of the Vascular Plants. Stanford University Press. Stanford, California.

Argus G.W. and K. Pryer, 1990. Rare Vascular Plants in Canada. Canadian Museum of Nature. Ottawa.

## 6.5 PRIORITIES FOR BIOLOGICAL MONITORING AND RESEARCH

The tasks which follow describe Ulukhaktok's current priorities for biological monitoring and research. These tasks are felt to be important for local resource management and will assist with the successful implementation of the Inuvialuit Final Agreement. Research on other topics of interest described in this plan or brought forward by others is also seen to potentially be of value. These additional projects will also be welcomed depending on the nature and perceived value of the project, progress in priority areas, requirements for project funding, and overall Inuvialuit benefit.

### Wildlife

#### **Caribou**

Systematic surveys and population estimates; identification of calving areas; identification of important forage species and feeding areas; information on what factors govern local caribou movements.

#### **Muskoxen**

Systematic surveys and population estimates; disease monitoring and related ecology.

#### **Eider Duck**

Systematic surveys and population estimates; information on factors governing the seasonal distribution and abundance of eiders.

### Fisheries

#### **Arctic Char**

Identification and assessment of other char stocks, with first priority on Boot Inlet and Walker Bay areas; ongoing studies and management of Kuukyuak (Kuujjua) River stock.

#### **Deepwater Fisheries**

Identification and assessment of other marine fishery resources, e.g. shrimp, crabs, arctic cod, etc.

### Ecosystem

#### **Ecological Land Classification**



Focus on inland and coastal zone (including aquatic and terrestrial components). Priority coastal zone areas are Deans Dundas Bay and Safety Channel areas.

**Contaminants Monitoring**

Community supports the ongoing monitoring of contaminants in the ecosystem.





## **APPENDIX A: PRINCIPLES OF WILDLIFE HARVESTING AND MANAGEMENT FROM THE INUVIALUIT FINAL AGREEMENT**

1. A basic goal of the Inuvialuit Land Rights Settlement is to protect and preserve the Arctic wildlife, environment and biological productivity through the application of conservation principles and practices.
2. In order to achieve effective protection of the ecosystems in the Inuvialuit Settlement Region, there should be an integrated wildlife and land management regime, to be attained through various means, including the coordination of legislative authorities.
3. It is recognized that in the future it may be desirable to apply special protective measures under laws, from time to time in force, to lands determined to be important from the standpoint of wildlife, research or harvesting. The appropriate ministers shall consult with the Inuvialuit Game Council from time to time on the application of such legislation.
4. It is recognized that one of the means of protecting and preserving the Arctic wildlife, environment and biological productivity is to ensure the effective integration of the Inuvialuit into all bodies, functions and decisions pertaining to wildlife management and land management in the Inuvialuit Settlement Region.
5. The relevant knowledge and experience of both the Inuvialuit and the scientific communities should be employed in order to achieve conservation.

## APPENDIX B: GOALS AND PRINCIPLES OF THE INUVIALUIT RENEWABLE RESOURCE CONSERVATION AND MANAGEMENT PLAN

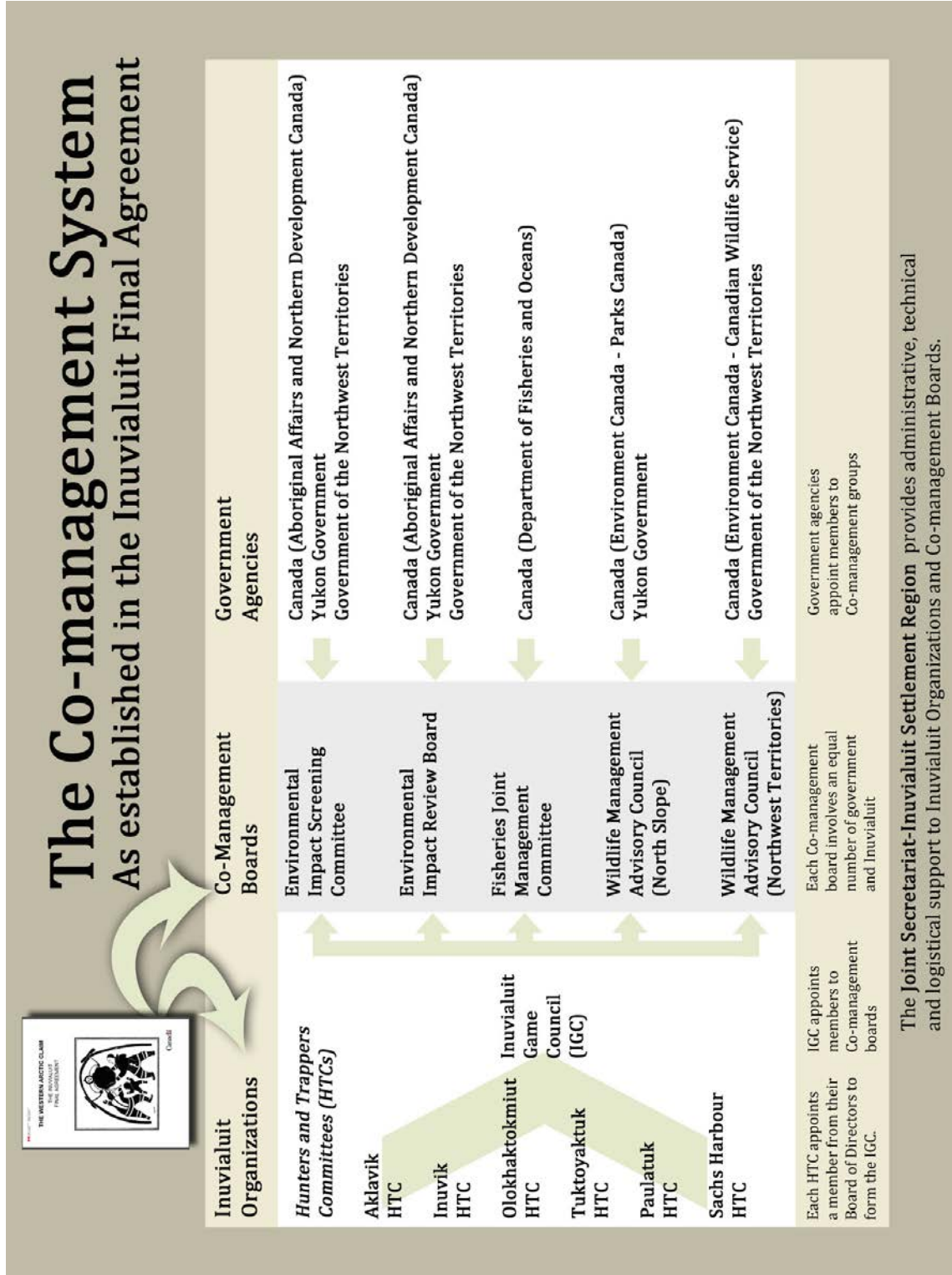
### GOALS

1. **Conserve Resource Base.** To conserve arctic animals and plants and their associated ecosystems within the Inuvialuit Settlement Region.
2. **Integrated Management.** To provide for integrated renewable resource and land management.
3. **Co-operation.** To co-operatively manage shared resources.
4. **Enhance Understanding.** To enhance understanding and appreciation of arctic ecosystems.

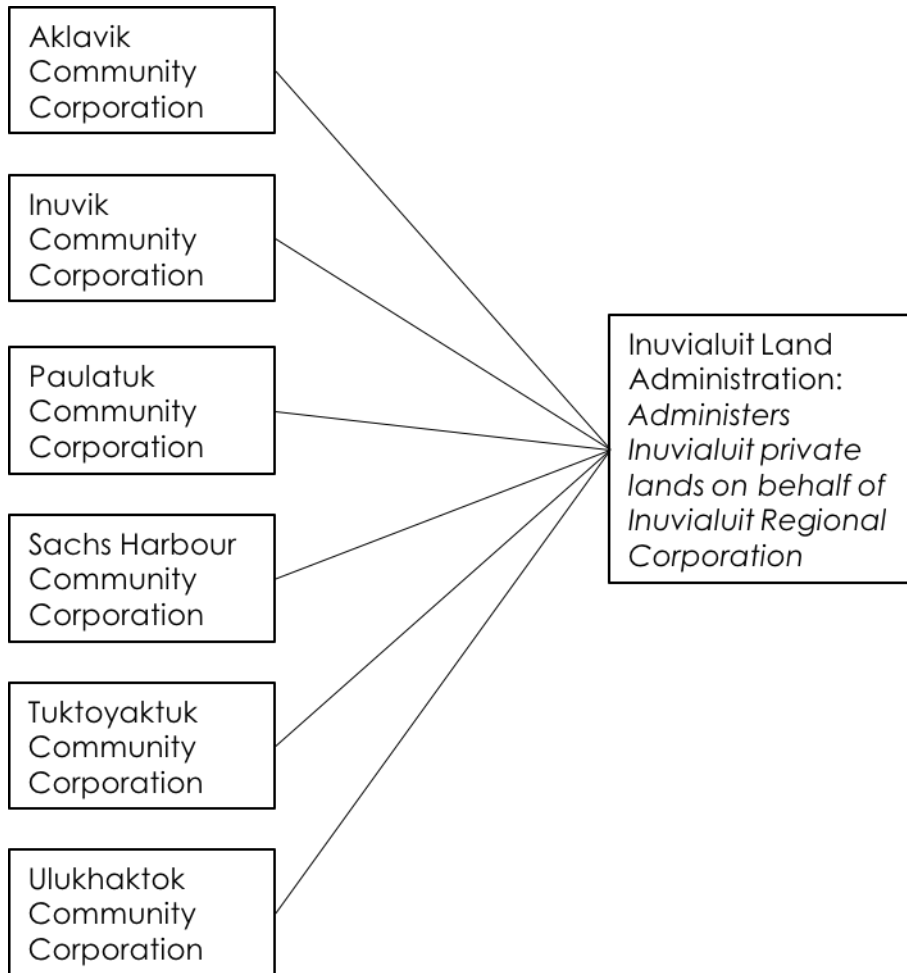
### PRINCIPLES

1. **Diversity.** Maintaining the great variety of animals and plants will help ensure the stability and productivity of the arctic ecosystem.
2. **Productivity & Culture.** Maintenance of productive arctic ecosystems is essential for the survival of Inuvialuit cultural values, social systems, local economy and sense of well being.
3. **Communication and Co-operation.** Long term protection of ecosystems can best be achieved through active communication and co-operation of all parties concerned, including the combination of renewable resource and land management activities.
4. **Future Options.** Maintenance of the renewable resource base and its enhancement, where appropriate, will maximize Inuvialuit future options.
5. **Protection.** Special conservation measures, including new legislation, may be necessary from time to time, to protect the renewable resource base.
6. **Population Management.** Management of fish and wildlife resources as discrete populations, where these can be identified is essential to their conservation.
7. **Habitat.** Careful management of habitat is vital to the maintenance of abundant fish and wildlife populations.
8. **Resource Use.** Subsistence and recreational use of well managed renewable resources is desirable and consistent with their conservation.
9. **Participation.** Participation of the Inuvialuit in renewable resource and land management is essential for the conservation of Arctic plants and animals and the habitats on which they depend.
10. **Indigenous Knowledge.** Inuvialuit knowledge and experience are essential elements in the proper management of renewable resources in the Settlement Region.

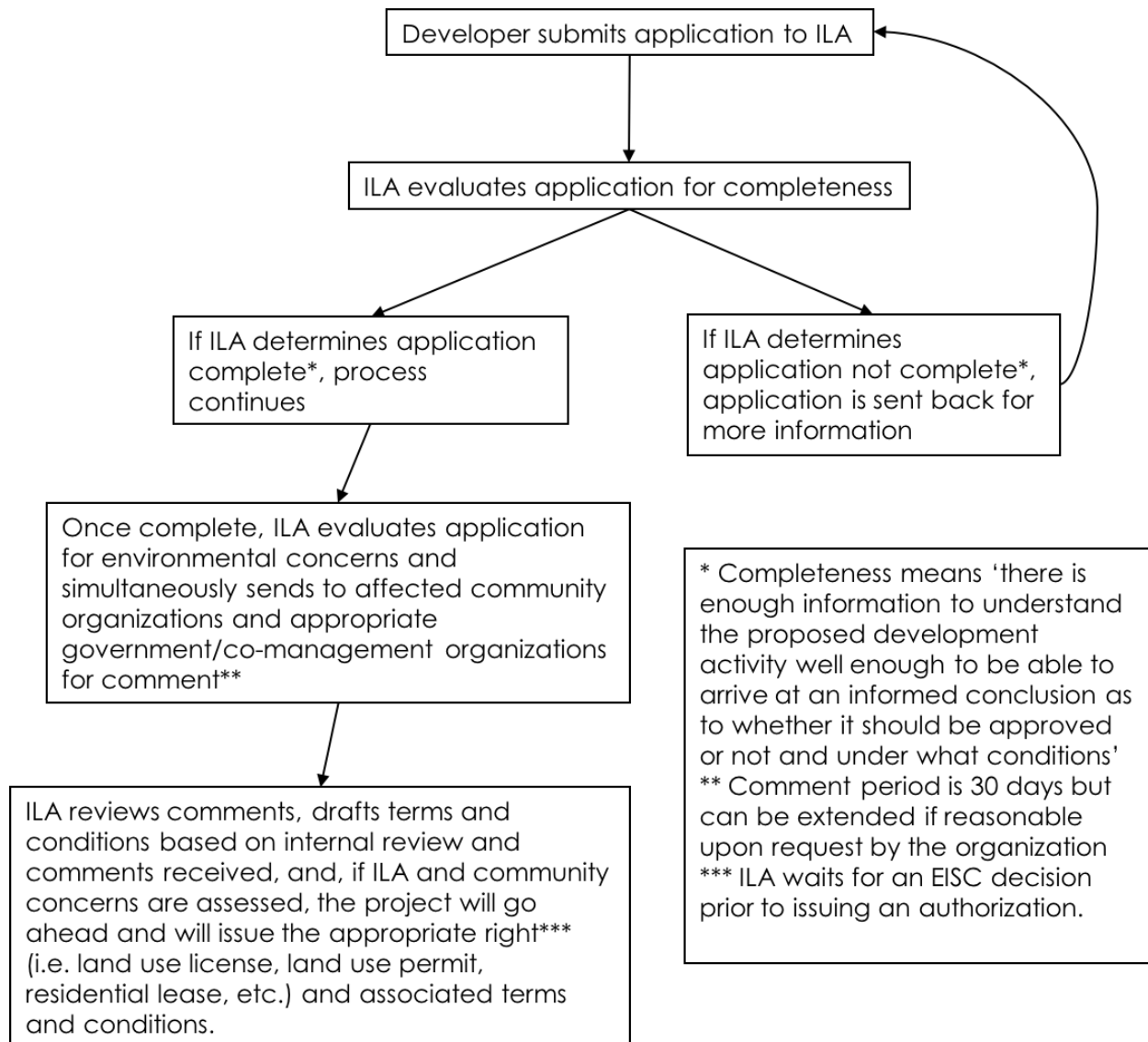
# APPENDIX C: ORGANIZATION CHART FOR RENEWABLE RESOURCE MANAGEMENT UNDER THE INUVIALUIT FINAL AGREEMENT



## APPENDIX D: ORGANIZATION CHART FOR PRIVATE LAND MANAGEMENT UNDER THE INUVIALUIT FINAL AGREEMENT

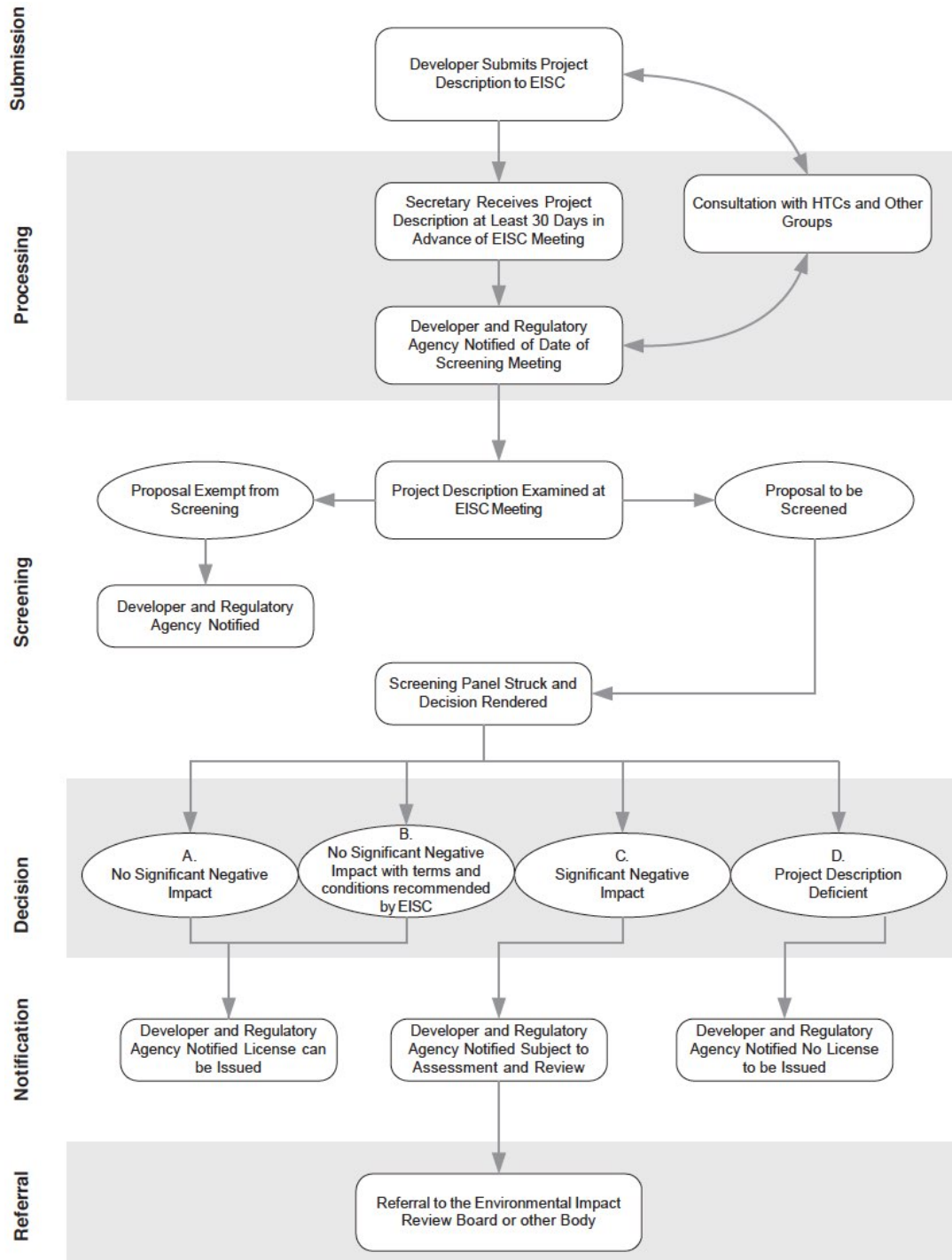


## APPENDIX E: INUVIALUIT LAND ADMINISTRATION APPLICATION REVIEW PROCESS

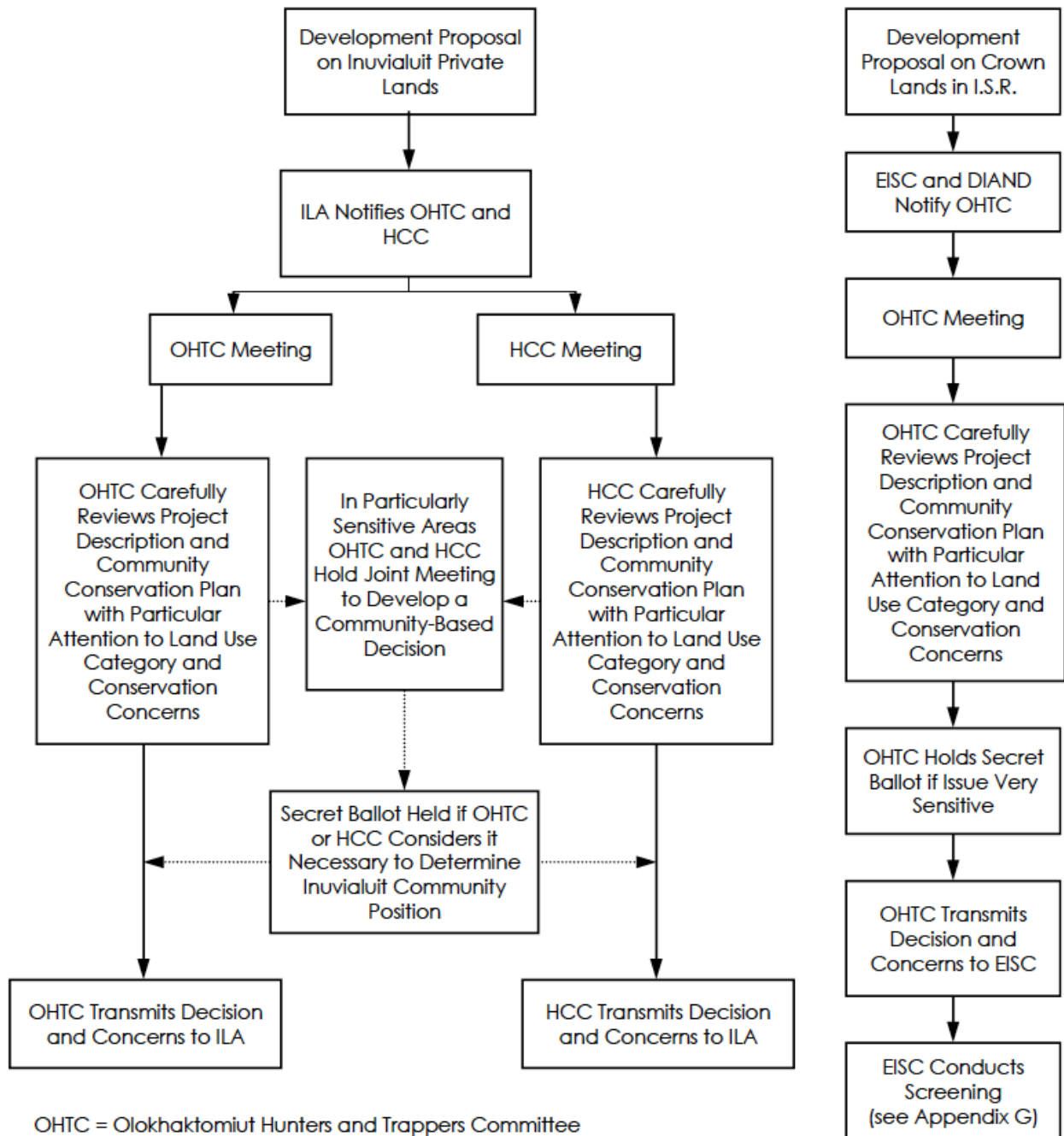




## APPENDIX F: INUVIALUIT SETTLEMENT REGION ENVIRONMENTAL IMPACT SCREENING AND REVIEW PROCESS



## APPENDIX G: ULUKHAKTOK LAND USE DECISION PROCESS



OHTC = Olokhtaktomiut Hunters and Trappers Committee

HCC = Olokhtaktomiut Community Corporation

ISR = Inuvialuit Settlement Region

EISC = Environmental Impact Screening Committee

DIAND = Department of Indian Affairs and Northern Development

## APPENDIX H: CONDUCT OF OPERATIONS

### Section 19. From Inuvialuit Land Administration Manual of Rules and Procedures

- 19(1) Activities Prohibited on Inuvialuit Land
- 19(2) Excavation
- 19(3) Water Crossings
- 19(4) Clearing of Lines, Trails or Rights of Way
- 19(5) Survey Monuments
- 19(7) Contingency Plans
- 19(8) Pingos
- 19(9) Archaeological Sites
- 19(10) Campsites
- 19(11) Sewage
- 19(12) Restoration of an Area
- 19(13) Removal of Buildings and Equipment
- 19(16) Emergencies
- 19(17) Display of Rights
- 19(18) Staking
- 19(19) Cutting of Trees
- 19(20) Availability of Rules and Procedures

### CONDUCT OF OPERATIONS

#### ACTIVITIES PROHIBITED ON INUVIALUIT LAND

- 19(1) No Holder shall, unless expressly authorized in his Right or in writing by the Administrator or Inspector:
  - (a) conduct an operation within 30 m (98 ft.) of a known monument or a known or suspected archaeological site or burial ground;
  - (b) when excavating Inuvialuit Land within 100 m (328 ft.) of any stream excavate at a point that is below the normal high water mark of that stream, except for buried pipelines;
  - (c) deposit on the bed or on the ice of any waterbody any excavated material; or
  - (d) when placing a fuel or supply cache within 100 m (328 ft.) of any stream or waterbody, place the fuel or supply cache below the normal high water mark of that stream or waterbody;

#### EXCAVATION

- 19(2) Subject to the terms and conditions of his Right or the express written authority of an Inspector, every Holder, other than the Holder of a Quarry Licence, Quarry Concession or Concession, shall replace all materials removed by him in the course of excavating, other than rock trenching, and shall level and compact the area of excavation, except for backfill over buried pipelines and sumps.

#### WATER CROSSINGS

- 19(3) Subject to the terms and conditions of his Right or the express written authority of an Inspector, every Holder shall:
- (a) remove any material or debris deposited in any stream or waterbody in the course of an operation, whether for the purpose of constructing a crossing or otherwise, and
  - (b) restore the channel and bed of the stream or waterbody to their original alignment and cross- section, prior to the completion of the operations or prior to the commencement of spring break-up, whichever occurs first.

#### **CLEARING OF LINES, TRAILS OR RIGHTS OF WAY**

- 19(4) Unless expressly authorized in a Right, no Holder shall:
- (a) clear a new line, trail or right-of-way where there is an existing line, trail or right-of-way that can be used;
  - (b) clear a line, trail, or right-of-way wider than 10 m (33 ft.); or,
  - (c) while clearing a line, trail or right-of-way, leave leaners or debris in standing timber.
- 19(5) Where, in the opinion of an Inspector, serious erosion may result from an operation, the Holder shall adopt such measures to control erosion as may be required by the Inspector.

#### **SURVEY MONUMENTS**

- 19(6) Where a boundary, geodetic or topographic monument is damaged, destroyed, moved or altered in the course of an operation, the Holder shall, in accordance with these Rules and laws generally applicable:
- (a) report the fact immediately to the Administrator and respective authorities, and pay the costs of:
    - (i) investigating such damage, destruction, movement or alteration, and
    - (ii) restoring or re-establishing the monument to its original condition or its original place; or
  - (b) cause the monument to be restored or re-established at his own expense.

#### **CONTINGENCY PLANS**

- 19(7) Holders of a Land Use Permit Class A, Commercial Lease Class 1, Well-Site Lease, Public Lease, Quarry Concession, Concession, Reconnaissance Permit, or Right of Way shall submit to the Administrator and, from time to time, update comprehensive contingency plans to cope with possible major accidents, disasters or catastrophic events during the operations.

#### **PINGOS**

- 19(8) No vehicle shall have access to any Pingo, including a zone of 100 meters (328 ft.) surrounding such Pingo.

#### **ARCHAEOLOGICAL SITES**

- 19(9) Where in the course of an operation, a suspected archaeological site or burial ground

is unearthed or otherwise discovered, the Holder shall immediately:

- (a) suspend the operation on the site; and
- (b) notify the Administrator or an Inspector of the location of the site and the nature of any unearthed materials, structures or artifacts.

### **CAMPSITES**

19(10) Subject to the terms and conditions of the Right, every Holder shall dispose of all garbage, waste and debris from any campsite used in connection with an operation by removal, burning or burial or by such other method as may be directed by an Inspector.

### **SEWAGE**

19(11) Sanitary sewage produced in connection with operations, shall be disposed of in accordance with the Public Health Ordinance of the Northwest Territories and any regulations made under the applicable Ordinance, or as stipulated by the Administrator.

### **RESTORATION OF AN AREA**

19(12) Subject to the terms and conditions of the Right, every Holder shall, after completion of the operations, restore the area as nearly as possible to the same conditions as it was prior to the commencement of the operations.

### **REMOVAL OF BUILDINGS AND EQUIPMENT**

19(13) Subject to subsections 19(14) and 19(15) hereof, every Holder shall, on completion of the operation, remove all buildings, machinery, equipment, materials and fuel drums or other storage containers used in connection with the operations.

19(14) A Holder may, with the prior written approval of the Administrator, leave on Inuvialuit Lands such buildings, equipment, machinery and materials as the permittee deems may be required for future operations or other operations in the area, but any equipment, machinery or materials so left shall be stored in a manner, at a location and for a duration approved by the Administrator, and apply for the reduction of the Land Occupancy Rent as provided for in subsection 17(14) hereof. Where applicable, the Holder may also make an Application for the reclassification of his Right.

19(15) Subject to any applicable mining legislation on 7(1)(b) Lands, a Holder may, without the prior approval of the Administrator, leave diamond drill cores at a drill site on Inuvialuit Lands.

### **EMERGENCIES**

19(16) Any person may, in an emergency that threatens life, property or the natural environment, carry out such operations as he deems necessary to cope with the emergency, whether or not the operation is carried out in accordance with these Rules or any Right that he may have and such person shall immediately thereafter send a written report to the Administrator describing the duration, nature and extent of the emergency operation.

### **DISPLAY OF RIGHTS**

19(17) Every Holder engaged in a work or undertaking authorized by a Right shall display:

- (a) an exact copy of the Right, including the conditions thereof, in a prominent place of the operations; and
- (b) the ILA number assigned to the Right on such articles and equipment, in such a manner and at such places as the Administrator may require.

### **STAKING**

19(18) A person who desires to obtain a Quarry Concession, Coal Concession or Mineral Concession, shall stake such lands in the following manner:

- (a) the area shall not exceed the maximum area permitted by these Rules and the length of any areas shall not exceed twice its width;
- (b) the area shall be rectangular in form except where a boundary of a previously staked tract is adopted as common to both areas;
- (c) the land shall be marked by the applicant with posts firmly fixed in the ground, one at each corner; alternatively, rock cairns may be used in lieu of posts;
- (d) each post shall be at least 25 sq. cm (4 sq. in.) and when firmly planted shall not be less than 1.25 m (4 ft.) above the ground;
- (a) each post shall bear markings showing the number of the post, the name of the applicant, the date of the staking and the kind of materials which it is desired to remove;
- (b) when rock cairns are used they shall be well constructed and shall not be less than two feet high and two feet in diameter at the base and a metal container shall be built into the cairn, and a notice bearing the number of the cairn, name of the applicant, the date of the staking and the kind of material which it is desired to remove shall be placed therein;
- (c) in a timbered area the lines between the posts shall be clearly marked; and in treeless areas mounds of earth or rock not less than 6 m (2 ft.) high and 6 m (2 ft.) in diameter at the base may be used to mark the lines between the cairns;
- (d) the applicant shall post a written or printed notice on a post or in a cairn setting out his intention to apply for a Quarry Concession within the time prescribed by these Rules; or
- (e) if two or more persons apply for the same area, the person who first staked the area in accordance with these Rules shall be entitled to priority in respect to the issuance of a Quarry Concession.

### **CUTTING OF TREES**

19(19) Holders shall only cut trees where there is no reasonable alternative than cutting trees for the creation of seismic lines, Right-of-Ways, or areas necessary for work camps or buildings. Otherwise, Holders shall under no circumstances cut trees unless specifically authorized in writing by the Administrator.