

SACHS HARBOUR COMMUNITY CONSERVATION PLAN

Sachs Harbour Angalatchivingit Niryutinik

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



Prepared by

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

2016

“Conservation is ensuring that if we take muskox, there will be muskox the next year and the year after that. The same for anything else. This applies to all users 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.”

-Adapted by Sheila Nasogaluak from a similar quote by Peter Green, Paulatuk, NWT

The Community recognizes that the success of conservation depends on the efforts of each person living in Sachs Harbour, as well as the cooperative support of the other individuals and organizations with an interest in Banksland and adjacent waters.

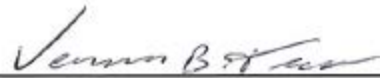
Cover photo credit: Trevor Lucas

The 2015 Sachs Harbour Community Conservation Plan has been prepared in consultation with the Community of Sachs Harbour and Inuvialuit and non-Inuvialuit bodies with an interest in the area. The undersigned hereby adopt this document for the purpose of guiding policy and planning in the area.



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President

Sachs Harbour Hunters and Trappers
Committee



Vernon Amos
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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.

CWS - Canadian Wildlife Service

DFO - Department of Fisheries and Oceans

DoL – Department of Lands, GNWT

DOT - Department of Transportation

EIRB - Environmental Impact Review Board

ENR - Department of Environment and Natural Resources (ENR)

EISC - Environmental Impact Screening Committee

FJMC - Fisheries Joint Management Committee

GNWT - Government of the Northwest Territories

GRRB - Gwich'in Renewable Resource Board

GTC - Gwich'in Tribal Council

HTC - Hunters and Trappers Committee

IFA - Inuvialuit Final Agreement

IGC - Inuvialuit Game Council

ILA - Inuvialuit Land Administration

IRC - Inuvialuit Regional Corporation

ISR - Inuvialuit Settlement Region

ITI – Department of Industry, Tourism and Investment

NWT - Northwest Territories

PWNHC - Prince of Wales Northern Heritage Centre

SHCC - Sachs Harbour Community Corporation

SHHTC - Sachs Harbour Hunters and Trappers Committee

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

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

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EXECUTIVE SUMMARY

The **Sachs Harbour Community Conservation Plan** is a community-based planning document that was originally prepared in 1992 by the Sachs Harbour Hunters and Trappers Committee, Sachs Harbour Community Corporation, and Sachs Harbour 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 fulfillment 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 Sachs Harbour Inuvialuit Community Conservation Plan was updated in 2000, 2008 and 2016 building upon the work of the original document. Working Groups were 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.

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 Sachs Harbour 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 Sachs Harbour 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

1992

The Sachs Harbour Community Conservation Plan (for Banksland) resulted from the efforts of many people. The Sachs Harbour Community Conservation Plan Working Group was established to represent the community in the development of a local conservation plan. Working Group members were Charlie Haogak (HTC), Larry Carpenter (HTC), Geddes Wolki (Elders), Sheila Nasogaluak and Andy Carpenter (Community Corporation), Donna Keogak (Community Education Council), Paul Raddi and Jackie Joe (Hamlet). Development of the plan was facilitated by Randal Glaholt. Comments and guidance were also provided by the many other residents of Sachs Harbour, the Wildlife Management Advisory Council (NWT), Fisheries Joint Management Committee, Environmental Impact Screening Committee, Environmental Impact Review Board, Inuvialuit Land Administration, GNWT Department of Renewable Resources, Inuvialuit Land Administration, GNWT Department of Economic Development and Tourism, Canadian Wildlife Service, Indian and Northern Affairs Canada, Canada Parks Service, Tom Beck (former Mackenzie Delta-Beaufort Sea Regional Land Use Planning Commissioner) and others.

2000

Revisions to the 2000 Sachs Harbour Community Conservation Plan could not have been achieved without the dedicated efforts of: Geddes Wolki, Sr., John Keogak, Sr., John Lucas, Jr., Paul Raddi, Donna Keogak, 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 Sachs Harbour Community Conservation Plan would have not been such a success if it were not for the following: The Sachs Harbour 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.

2016

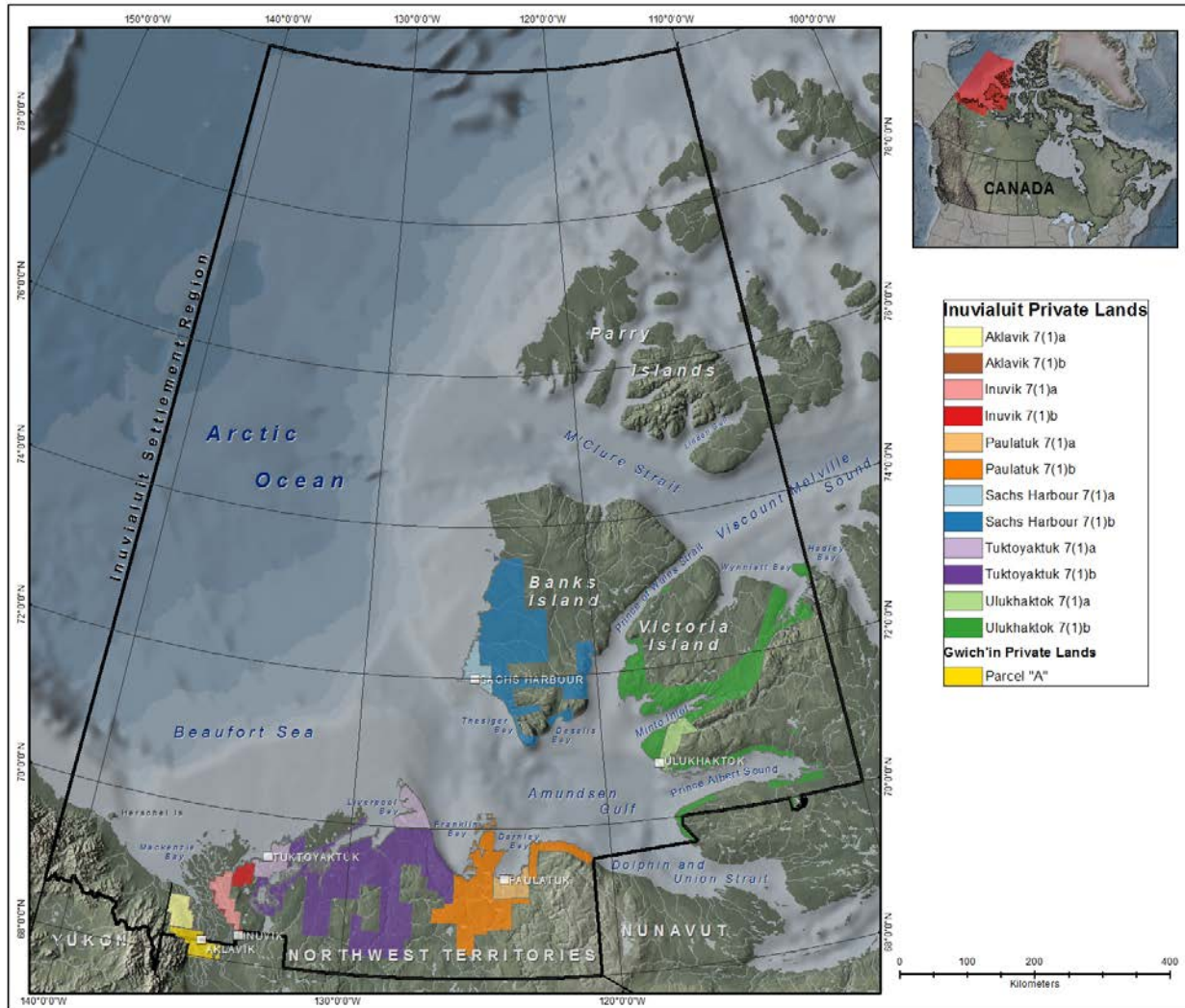
The 2016 Sachs Harbour Community Conservation Plan would have not been such a success if it were not for the following: The Sachs Harbour Working Group (Joseph Carpenter, Joe Kudlak, Issiac Elanik, Kyle Wolki), the Wildlife Management Advisory Council, Fisheries Joint Management Committee and the Joint 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 Sachs Harbour 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

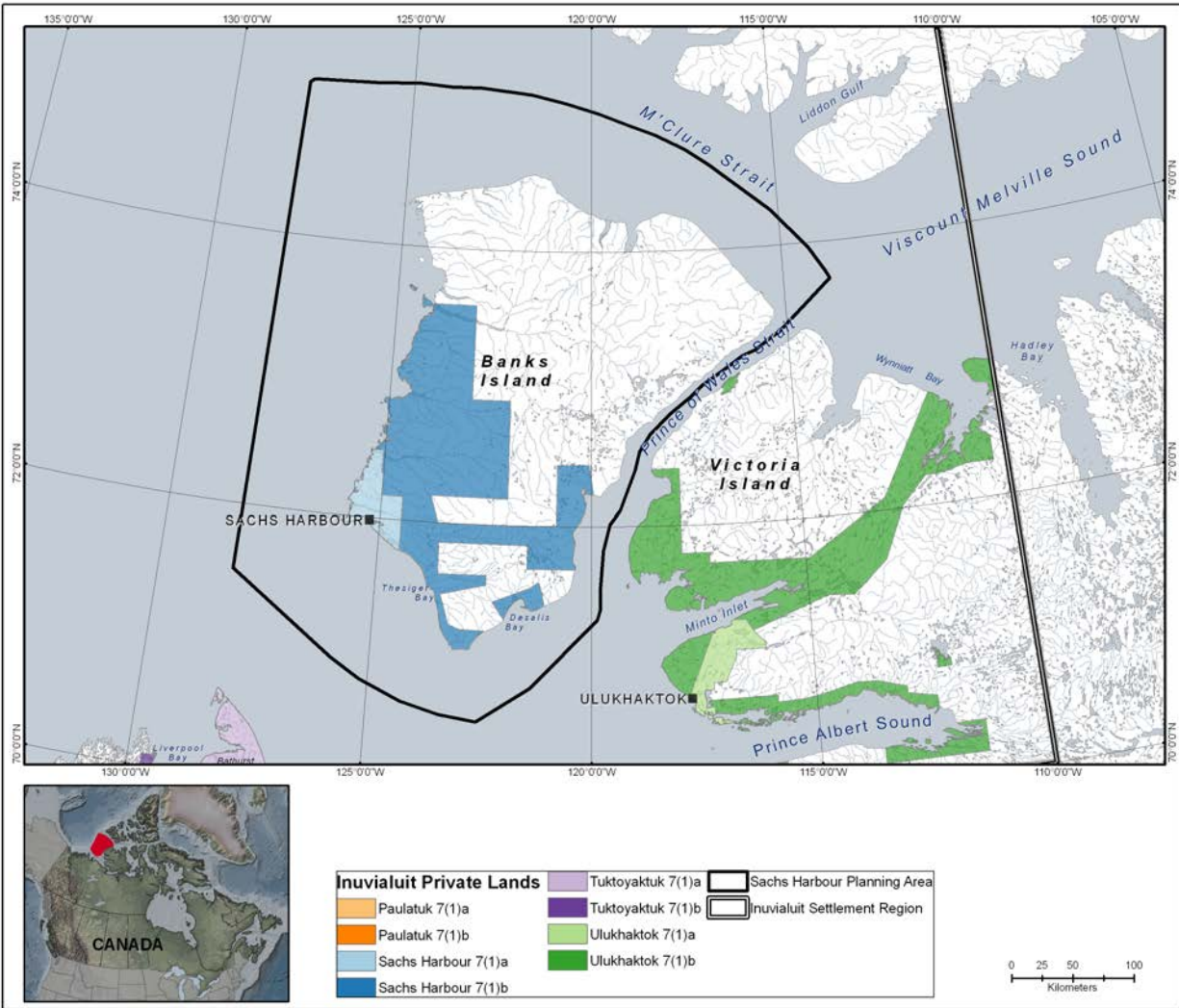
Banks Island, also known as Banksland, is one of Canada's most diverse Arctic environments. Home to many species of wildlife - including the largest muskox herd in the world, the largest nesting population of snow geese in the western Arctic and an abundance of marine life - the area is of international importance. The Inuvialuit of Sachs Harbour have relied upon the region's wildlife for many years. This plan was developed to protect the environment of Banksland 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 Sachs Harbour Hunters and Trappers Committee, the Community Corporation, the Community Education Council, the Elders and Hamlet. To initially prepare this plan, the Sachs Harbour 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 Banksland (Figure 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 Banksland.

The updating exercise of 2015 that has produced the current version of the Plan was spearheaded by the SHHTC and SHCC, 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. Sachs Harbour Conservation Planning Area and Private Lands.

A BRIEF HISTORY OF BANKSLAND

Banksland is the most westerly island of the Canadian Arctic Archipelago. The island is approximately 400 km between its furthest northern and southern points and averages about 200 km east to west. The Community of Sachs Harbour is located near the base of a plateau on silty soil and hummocky ground on the south west coast of the island at approximately 71° 59' north latitude and 125° 15' west longitude. Archaeological remains found on Banksland indicate occupation by Thule people until about 500 years ago. Other sites in the Arctic indicate human occupation extending 3,000 to 5,000 years ago. Banksland appears to have remained unoccupied for several hundred years until the early 1800s when Sir Joseph Banks, President of the Royal Society in Britain encouraged the British Navy to resume exploration of the Northwest Passage. In 1820 Banksland was rediscovered by explorers Frederick Beechey and William Parry who were travelling along the shore of Melville Island. It was at this time the island was named "Banksland". Captain McClure made the first European landing on Banksland on September 7, 1850, in the ship "The Investigator", a vessel later abandoned at Mercy Bay at the north end of the island in 1853. In 1913 an explorer named Vilhjalmur Stefansson, began the first scientific exploration of Banksland aboard the ship "Mary Sachs". The Mary Sachs was run aground about seven miles west of the current town of Sachs Harbour.

The first trappers on Banksland were August Mahik and Adolf Binder in 1916, and a year later Fred Wolki. Adam Inualthuyak was another active trapper at this time. The first trappers to winter at Sachs Harbour were Bennet Ningaqsiq, Raddi Kowitchuk, Jim Wolki, Jim Cockney, and Fred Carpenter who started the first store. The RCMP post was built at Sachs Harbour in 1953. Peter Esau was made Special Constable in 1958. Although the current settlement is at Sachs Harbour, Inuvialuit families have also historically wintered at Siksik Bay, Siksik Point, Storkerson Bay, Sea Otter Harbour, Lennie Harbour, Blue Fox Harbour on the west coast, and De Salis Bay and Jesse Bay on the east coast.

1.1 INUVIALUIT FINAL AGREEMENT AND RENEWABLE RESOURCE MANAGEMENT

1.1.1 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.

1.1.2 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 (North Slope) 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 (North Slope) 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 (North Slope) 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.

1.1.3 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.

1.1.4 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.

1.1.5 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 F). 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 Sachs Harbour 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 Sachs Harbour 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 Sachs Harbour Community Conservation Plan are hunting, fishing, guiding, trapping, tourism and arts and crafts manufacturing.

(e) Cooperative Management of Shared Resources

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

(g) Consistency

The Sachs Harbour 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 the Northern Beaufort Sea Population (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 Sachs Harbour 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 Sachs Harbour 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.

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

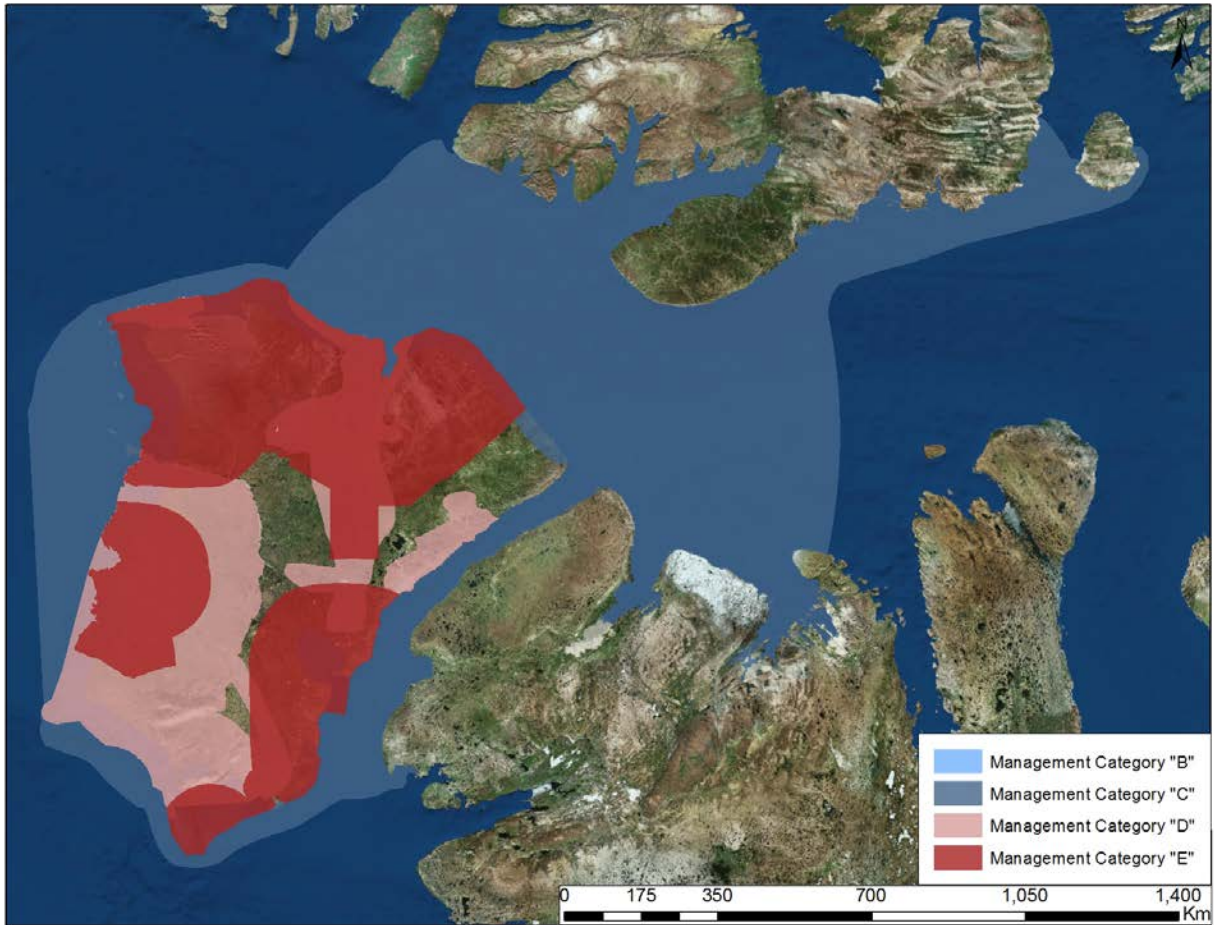
Lands and waters where cultural or renewable resources are of particular significance and sensitivity throughout the year. As with Category C, these areas shall be managed so as to eliminate, to the greatest extent possible, potential damage and disruption.

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.

4.1 SPECIAL DESIGNATED LANDS

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



Map 3. Overlay of all sites in the Sachs Harbour planning area by management category.

SITE 601C OFFSHORE AND ONSHORE BANKSLAND



Map 4. Site 601C Offshore and onshore Banksland.

Identified By

Sachs Harbour Community Working Group

Management Category

C

Ownership

Onshore Private 7(1)(a), 7(1)(b) and public (Crown) waters; offshore public (Crown) waters within the Inuvialuit Settlement Region (Maps 1 and 2).

Description

The site includes offshore and onshore areas of north, west, and south Banksland except along Prince of Wales Strait (see Site 13). It ends at Treadwell Point at the south end of Prince of Wales Strait. The site ranges on average, 10-15 km (6.2-9.3 mi) offshore and 5-10 km (3.1-6.2 mi) onshore (20-25 km (12.4-15.5 mi) inland between De Salis Bay and Nelson Head). It includes the ice cover from October to June with open ice and ice floes for the remainder of the year.

Importance of the Site to the Community of Sachs Harbour

Important to past and present subsistence harvesting of seals (year-round), fish (April-Oct.), waterfowl (May-Sept) and polar bears (Nov.-May). Specifically, subsistence harvesting of ringed

and bearded seal from March to May, and year-round at Thesiger Bay. Sports and subsistence harvest of polar bears occurs from December to May, throughout the area.

Important habitat for seals' lairs and denning polar bears from November to May, especially along the northwest and southern coasts of the island, particularly at Nelson Head.

The Community Working Group specifically identified De Salis Bay as important nesting habitat for eider ducks and brant geese from May to July.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Areas

Areas Near or on Sachs, Kellet and Lennie Rivers including Siksik and Survey Lakes (Site no. 603D)

Egg River and Big River Junction (Site no. 606E)

Area South of Rufus River (Site no. 607D)

Banks Island Migratory Bird Sanctuary No. 1 (Site no. 611D)

Banks Island Migratory Bird Sanctuary No. 2 (Site no. 612D)

Aulavik National Park (Site no. 613E)

Banksland Rivers (Site no. 614D)

Banksland Coastal Areas Adjacent to Rivers Supporting Arctic Char (Site no. 615C)

Northern Banksland Special Wildlife Area (Polar Bear Denning Area) (Site no. 618C)

Banks Island Caribou Calving Grounds (Site no. 619E)

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

Prince of Wales Strait (Site no. 734C)

Overlapping Nonrenewable Resources Interests and Activities

Scattered granular deposits within the area, including offshore deposits near Rufus Creek.

Overlapping Military, Transportation, and Tourism Interests and Activities

Possible tanker traffic, seismic activity and related low level flying. Shipping and community resupply. Sports harvest of polar bears and tourism boat tours to Masik River and other coastal sites.

Community Concerns

The Community Working Group is concerned that ship traffic, especially tankers, and seismic activity and related low level flying could cause the cumulative destruction of seal lairs and polar bear den sites in multi-year ice, and that noise from ships could affect polar bear and seal communication and social functions. The Community Working Group is concerned that activities like ocean dumping could have a negative impact on the nutrient rich waters from Sea Otter Island to Sachs Harbour.

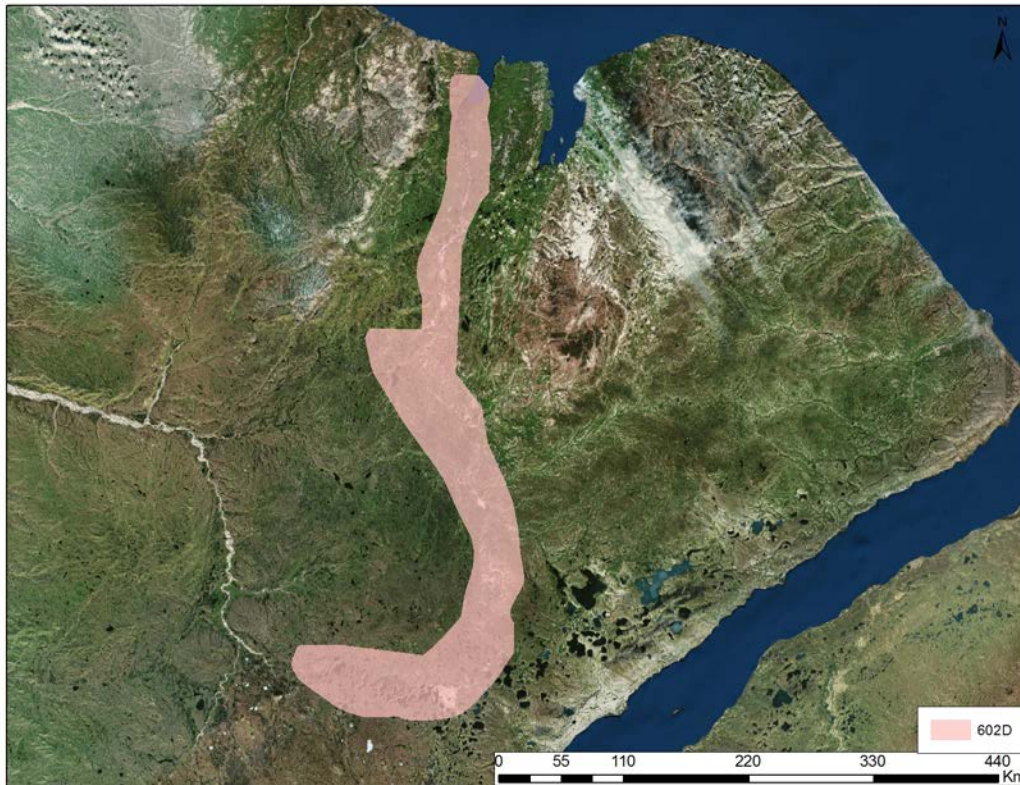
Community Guidelines

1. The DFO, FJMC and HTC should continue to ensure the bowhead whale is protected from the impacts of industrial or other commercial development. The FJMC should continue to ensure that harvests are well managed.
2. The DFO, FJMC and HTC should ensure sensitive offshore areas are protected, including polynyas.
3. DFO and FJMC should ensure careful commercial harvest of shellfish resources if it occurs.
4. HTC should protect the core polar bear denning areas from November to March as pursuant to the International Agreement on the Conservation of Polar Bear and the Polar Bear Management Agreement for the Southern Beaufort Sea and the Inuvialuit-Inuit Polar Bear Agreement (see also Section 8.4, Polar Bear). DOT should designate flight restrictions

over key polar bear denning area.

5. ILA should protect De Salis Bay for its nesting eider duck and brant geese habitat from May to August. The community has designated this as Category E land.
6. Land Use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan, including those of Sections 6.1.1 through 6.4.

SITE 602D THOMSEN RIVER AREA



Map 5. Site 602D Thomsen River area.

Identified By

Sachs Harbour Community Working Group

Management Category

D

Ownership

Public (Crown) lands within the Inuvialuit Settlement Region (Maps 1 and 2).

Description

The site extends along most of the length of the Thomsen River in northern Banksland. It includes a corridor that is approximately 5 to 10 km wide.

Importance of the Site to the Community of Sachs Harbour

Important to past and present subsistence fishing of trout, char and cisco in the summer and fall.
Denning area for arctic wolf.
Numerous archaeological and cultural sites along the river.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Areas

Banks Island Migratory Bird Sanctuary No. 2 (Site 612D)
Aulavik National Park (Site 613E)

Banksland Rivers (Site 614D)

Banks Island Caribou Calving Grounds (Site 619E)

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

Overlapping Nonrenewable Resource interests and Activities

Currently some tourism use in the area; likely to grow with the increase in eco-tourism worldwide.

Community Concerns

Tourists removing artifacts from the cultural sites.

Community Guidelines

Land use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan including those of Sections 6.1.1 through 6.4.

SITE 603D **AREAS NEAR OR ON SACHS, KELLETT, LENNIE, MASIK AND RUFUS RIVERS INCLUDING SIKSIK AND SURVEY LAKES**



Map 6. Site 603D Areas near Sachs, Kellett, Lennie, Masik and Rufus Rivers including Siksik and Survey Lakes.

Identified By

Sachs Harbour Community Working Group

Management Category

D

Ownership

Kellett, Lennie, Sachs Rivers - Private 7(1)(a) and 7(1)(b) lands; Siksik and Survey Lakes - Private 7(1)(b) lands within the Inuvialuit Settlement Region (Maps 1 and 2).

Description

The site includes the islands in the shallow offshore area located west of the community of Sachs Harbour and extends along the Sachs River to Raddi Lake and Masik River, then north to include part of Kellett River. A separate site just north of this includes part of Lennie River. Siksik Lake along the Big River and Survey Lake along the Kellett River are included in this site. A separate site for the Rufus River is included in the southern tip of Banks Island.

Importance of the Site to the Community of Sachs Harbour

Important to past and present subsistence fishing (trout, lake trout, char and cod) and caribou and

muskox harvest area year-round.

The Community Working Group has identified the Kellet, Lennie River and Masik River areas as important nesting and moulting habitats for brant and snow geese in May and June and as an important subsistence harvest area for geese.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Area

Offshore and Onshore Banksland (Site 601C)

Southern Banksland (Site 604C)

Egg River and Big River Junction (Site 606E)

Banks Island Migratory Bird Sanctuary No.1 (Site 611D)

Banksland Rivers (Site 614D)

Banksland Coastal Areas Adjacent to Rivers Supporting Arctic Char (Site 615C)

Northern Banksland Special Wildlife Area (Polar Be (Site 618C)

Overlapping Nonrenewable Resource Interests and Activities

Some granular deposits along Sachs River.

Overlapping Military, Transportation, Tourism Interests and Activities

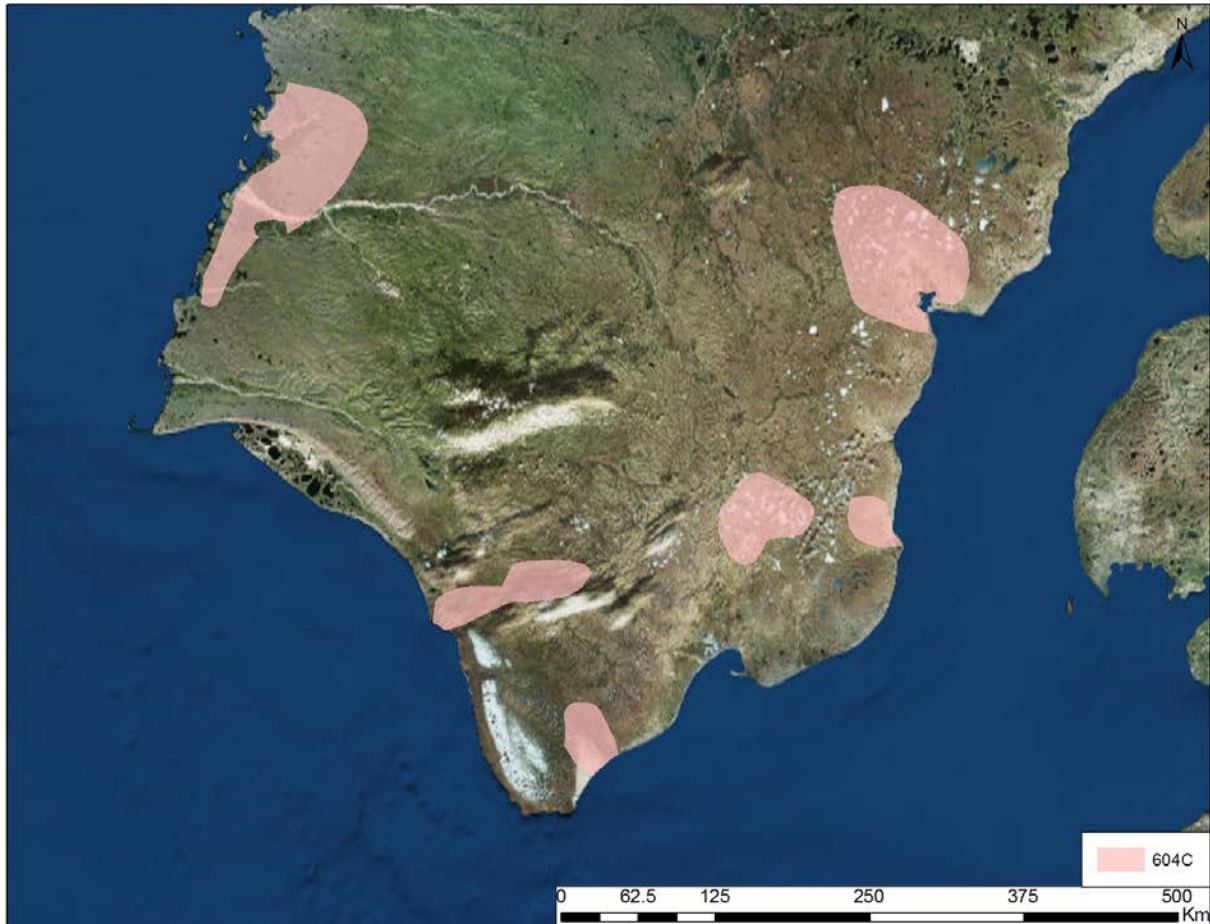
Potential interest in ecotourism and sports hunting.

Community Concerns

Community Working Group feels these are very important sites and should be protected from future development.

Community Guidelines

1. FJMC and HTC should continue to protect the fisheries resources in the area. These sites are on private land so IFA fishing restrictions imposed by the HTC exist.
2. ILA should protect these sites from land use activities which may negatively affect fish habitat, nesting habitats of the birds, (especially from May to June) and subsistence activities in the area.
3. FJMC should identify Survey Lake and Siksik Lake as priority subsistence fishing areas and all lakes within a 50-mile radius, north and northeast of Sachs Harbour.
4. Land use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan including those of Sections 6.1.1 through 6.4.

SITE 604C**SOUTHERN BANKSLAND**

Map 7. Site 604E Southern Banks Island.

Identified By

Sachs Harbour Community Working Group

Management Category

C

Ownership

Private 7(1)(b) and public (Crown) lands within the Inuvialuit Settlement Region (Maps 1 and 2).

Description

The site is made up of six areas along rivers or the coastline. One area is the lakes and the upstream portion of the De Salis River. None of the other areas extend further than 15-20 km (9.3-12.4 mi) inland.

Importance of the Site to the Community of Sachs Harbour

The lakes in the De Salis River area and the upstream portion of the river are important for past and present subsistence fishing of char and trout in the spring.

The other six sites are used for subsistence harvesting of Peary caribou (from July to December),

muskox, and fish.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Area

Areas Near or on Sachs, Kellet and Lennie Rivers including Siksik and Survey Lakes (Site 603D)
Egg River and Big River Junction (Site 606E)
Banks Island Migratory Bird Sanctuary No.1 (Site 611D)
Banksland Rivers (Site 614D)
Northern Banksland Special Wildlife Area (Polar Be (Site 618C)
Banks Island Caribou Calving Grounds (Site 619E)

Overlapping Nonrenewable Resource Interests and Activities

None.

Overlapping Military, Transportation, Tourism Interests and Activities

Existing or potential tourism areas and commercial fly-in fishing destinations.

Community Concerns

The Community Working Group considers this a very important subsistence harvest area and would like to see no land use that conflicts with these activities.

The Community Working Group is concerned with commercial fly-in fishing at De Salis River and lakes area.

The Community Working Group would like to see Peary caribou protected from disturbance because of the small size of the herd.

Community Guidelines

Land use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan including those of Sections 6.1.1 through 6.4.

SITE 605E LAND AREA AROUND DE SALIS BAY



Map 8. Site 605E Land area around De Salis Bay.

Identified By

Sachs Harbour Community Working Group

Management Category

E

Ownership

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

Description

Land area covered by IFA De Salis Bay land selection.

Importance of the Site to the Community of Sachs Harbour

Important area for nesting brant geese and other species from June to September.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Area

Banksland Rivers (Site 614D)

Banks Island Caribou Calving Grounds (Site 619E)

Overlapping Nonrenewable Resource Interests and Activities

None.

Overlapping Military, Transportation, and Tourism Interests and Activities

Potential tourism area and commercial fly-in fishing destination.

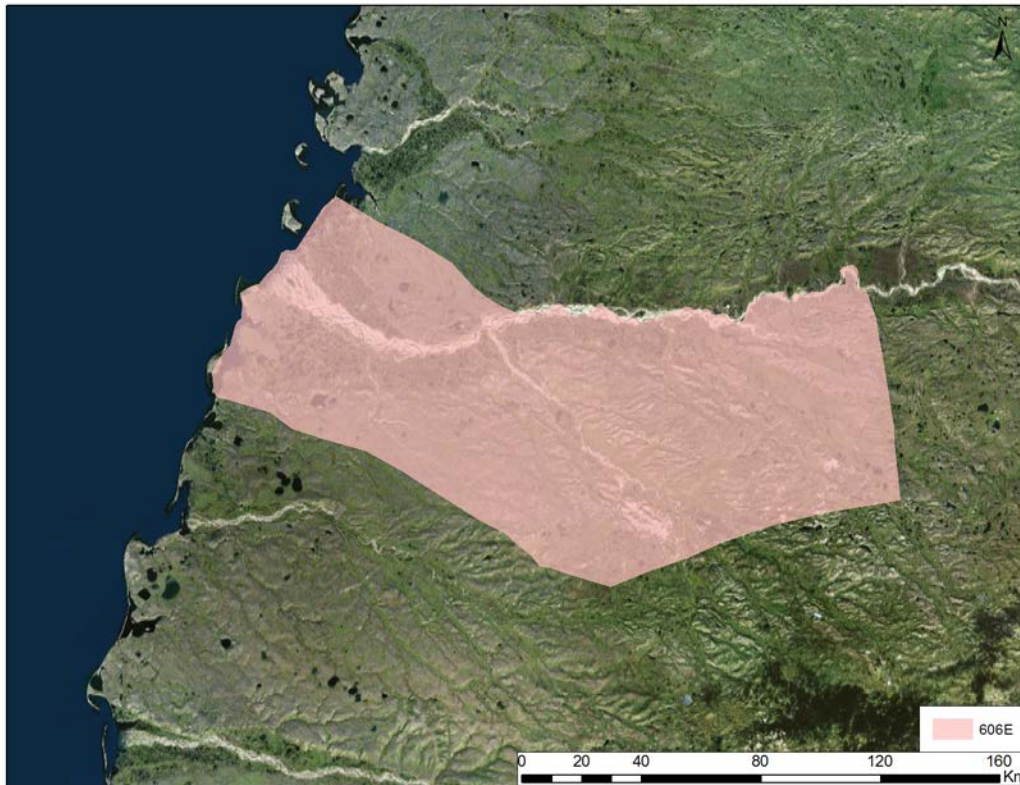
Community Concerns

The Community Working Group feels the area represents a particularly sensitive site for waterfowl and other animals, both onshore and offshore.

Community Guidelines

1. No development or other disruptive land use activity should be allowed in this area.
2. Land use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan including those of Sections 6.1.1 through 6.4.

SITE 606E EGG RIVER AND BIG RIVER JUNCTION



Map 9. Site 606E Egg River and Big River junction.

Identified By

Sachs Harbour Community Working Group

Management Category

E

Ownership

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

Description

Area of elevated ground in vicinity of Egg River and Big River junction.

Importance of the Site to the Community of Sachs Harbour

Very important nesting and moulting area for geese and other birds from May to September.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Area

Offshore and Onshore Banksland (Site 601C)

Areas Near or on Sachs, Kellet and Lennie Rivers including Siksik and Survey Lakes (Site 603D)

Southern Banksland (Site 604C)

Banks Island Migratory Bird Sanctuary No. 1 (Site 611D)

Banksland Rivers (Site 614D)

Banksland Coastal Areas Adjacent to Rivers Supporting Arctic Char (Site 615C)

Northern Banksland Special Wildlife Area (Polar Be (Site 618C)
Banks Island Caribou Calving Grounds (Site 619E)

Overlapping Nonrenewable Resource Interests and Activities

None.

Overlapping Military, Transportation, and Tourism Interests and Activities

Potential tourism area outside of nesting period.

Community Concerns

The Community Working Group feels the area represents a particularly sensitive site for waterfowl and other animals.

Community Guidelines

1. No development or other disruptive land use should be allowed in this area.
2. Land use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan including those of Sections 6.1.1 through 6.4.

SITE 607D**AREA SOUTH OF RUFUS RIVER**

Map 10. Site 607D Area south of Rufus River.

Identified By

Sachs Harbour Community Working Group

Management Category

D

Ownership

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

Description

The site is south of the mouth of Rufus River, along the southwest shore of Banksland.

Importance of the Site to the Community of Sachs Harbour

Archaeological significance and past and current subsistence harvesting of Peary caribou (July to December); and muskox from October to April.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Area

Offshore and Onshore Banksland (Site 601C)

Northern Banksland Special Wildlife Area (Polar Bear Denning Area) (Site no. 618C)

Banks Island Caribou Calving Grounds (Site 619E)

Overlapping Nonrenewable Resource Interests and Activities

Offshore deposits of gravel near Rufus River.

Overlapping Military, Transportation, and Tourism Interests and Activities

Potential tourism value.

Community Concerns

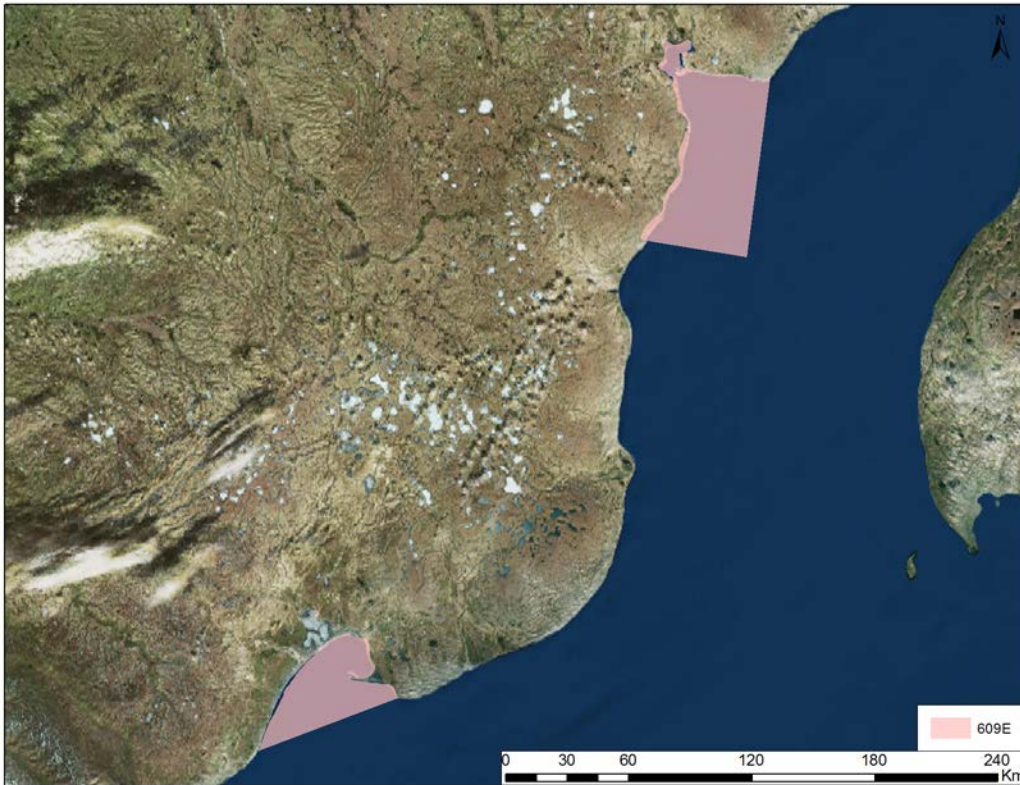
The Community Working Group is concerned about the protection of archaeological sites found in the area. They feel land use activities like seismic could destroy the sites and tourism activities could lead to vandalism. The Community Working Group is concerned that existing legislation is not adequate to protect these areas.

The Community Working Group also considers the area important for subsistence harvest and would like Peary caribou to be protected from disturbance.

Community Guidelines

1. ILA shall recognize the cultural and historic importance of this site and must consult with the people of Sachs Harbour before issuing land use permits.
2. If the removal of artifacts from the sites in this area continues to be a problem in the future, a Travel Restricted Area should be established.
3. Land use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan including those of Sections 6.1.1 through 6.4.

SITE 609E BELUGA MANAGEMENT ZONE 1B SITES - DE SALIS BAY AND JESSE BAY



Map 11. Site 609E Beluga management zone 1B sites – De Salis Bay and Jesse Bay.

Identified By

Fisheries Joint Management Committee

Management Category

E

Ownership

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

Description

Includes the waters of De Salis Bay and Jesse Bay, situated on the Prince of Wales Strait.

Importance of Site to the Community Sachs Harbour

Appears to be important beluga habitat from August to September. Residents of Sachs Harbour harvest beluga as subsistence food when available. No systematic data on beluga distribution or abundance available for area. Beluga have been sighted in the area in the past.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Area

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

Prince of Wales Strait (Site no. 734C)

FJMC and Community Guidelines

1. In the review of any development proposal these areas are 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 these 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 August 15th.
4. Development activities such as hydro-electric developments, even if located outside of these areas should be evaluated for potential deleterious effects on water quality and quantity, or on the stability and integrity of ice in these waters.
5. All shipping activities (including dredging) should be confined to designated routes and areas. Passage through or close to these waters outside of designated routes, even if it is 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 these 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, seek the advice of the HTC's. To ensure the protection of the beluga resource and harvest, HTCs should be consulted regarding any licenses, permits or operating procedures approved for activities within the zones.
8. Commercial fishing proposals for these waters should be evaluated and regulated with regard to beluga food species (see also Section 8.4).
9. Land use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan including those of Sections 6.1.1 through 6.4 and 8.0 through 8.4.

SITE 610B BELUGA MANAGEMENT PLAN ZONE 3 - WATERS IN BEAUFORT SEA, AMUNDSEN GULF

Identified By

Fisheries Joint Management Committee

Management Category

B

Ownership

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

Description

Includes the remaining geographic range of beluga in the Canadian Beaufort Sea and Amundsen Gulf (waters greater than 20 m (66 ft.) deep).

Importance of Site

Migrating beluga, summer feeding. (See also Zone 2 - Site 83). Deep water and distance preclude hunting in Zone 3.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Area

Offshore Amundsen Gulf and Beaufort Sea (Site 616D)

FJMC and Community Guidelines

1. Industrial activities or other projects may be permitted if they do not adversely affect the conservation of beluga and the protection of beluga habitat and beluga hunting, and they are conducted in a controlled and responsible manner.
2. Assessment of proposed activities must consider the direct effects on beluga (e.g. contamination, disruption, displacement) as well as indirect effects (e.g. stability and integrity of ice, timing of breakup, food availability).
3. Commercial fishing proposals should be evaluated and regulated with regard to beluga food species.
4. Assessments must consider the potential for cumulative impact and long-term effects.
5. It is recommended that parties proposing industrial development and government agencies evaluating development proposals and other parties interested in development within the zone, seek the advice of the HTC's. To ensure that 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.
6. Land use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan including those of Sections 6.1.1 through 6.4.

SITE 611D BANKS ISLAND MIGRATORY BIRD SANCTUARY NO. 1

Map 12. Site 611D Banks Island migratory bird sanctuary no. 1.

Identified By

Canadian Wildlife Service

Management Category

D

Protected under *Migratory Birds Convention Act*.

Ownership

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

Description

Encompasses a total of 20,523 km² (7,922 mi²), including the Adam, Storkerson, Big, Egg, Lennie, Kellett and Sachs Rivers.

Importance of Site to the Community of Sachs Harbour

Largest breeding colony of lesser snow goose in western Arctic. Thousands of nesting pacific brant, king eider, long-tailed duck. Birds are present during part of the year - breeding season is May through June. Wetland habitat is sensitive year-round.

The Egg River/Big River Key Migratory Bird Terrestrial Habitat Site is within the bird sanctuary.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Area

Offshore and Onshore Banksland (Site no. 601C)

Areas Near or on Sachs, Kellet and Lennie Rivers including Siksik and Survey Lakes (Site no. 603D)

Southern Banksland (Site no. 604C)

Egg River and Big River Junction (Site no. 606E)

Banksland Rivers (Site no. 614D)

Banksland Coastal Areas Adjacent to Rivers Supporting Arctic Char (Site no. 615C)

Northern Banksland Special Wildlife Area (Polar Bear Denning Area) (Site no. 618C)

Banks Island Caribou Calving Grounds (Site no. 619E)

Community Guidelines

Land use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan.

SITE 612D BANKS ISLAND MIGRATORY BIRD SANCTUARY NO. 2

Map 13. Site 612D Banks Island Migratory Bird Sanctuary no. 2.

Identified By

Canadian Wildlife Service

Management Category

D

Protected under Migratory Birds Convention Act.

Ownership

Public (Crown) lands within the Inuvialuit Settlement Region (Maps 1 and 2).

Description

The sanctuary encompasses approximately 142 km² (35,200 acres) of the Thomsen River valley, from M'Clure Strait, southward about 30 km (19 mi) past Muskox River.

Importance of Site

Moulting area for lesser snow goose, Pacific brant. Birds are present during part of the year from May to September. Wetland habitat is sensitive year-round.

The Thomsen River Key Migratory Bird Terrestrial Habitat Site is within the bird sanctuary and within Aulavik National Park.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Area

Offshore and Onshore Banksland (Site no. 601C)

Thomsen River Area (Site no. 602D)

Aulavik National Park (Site no. 613E)

Banksland Rivers (Site no. 614D)

Banks Island Caribou Calving Grounds (Site no. 619E)

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

Overlapping Military, Transportation, and Tourism Interests and Activities

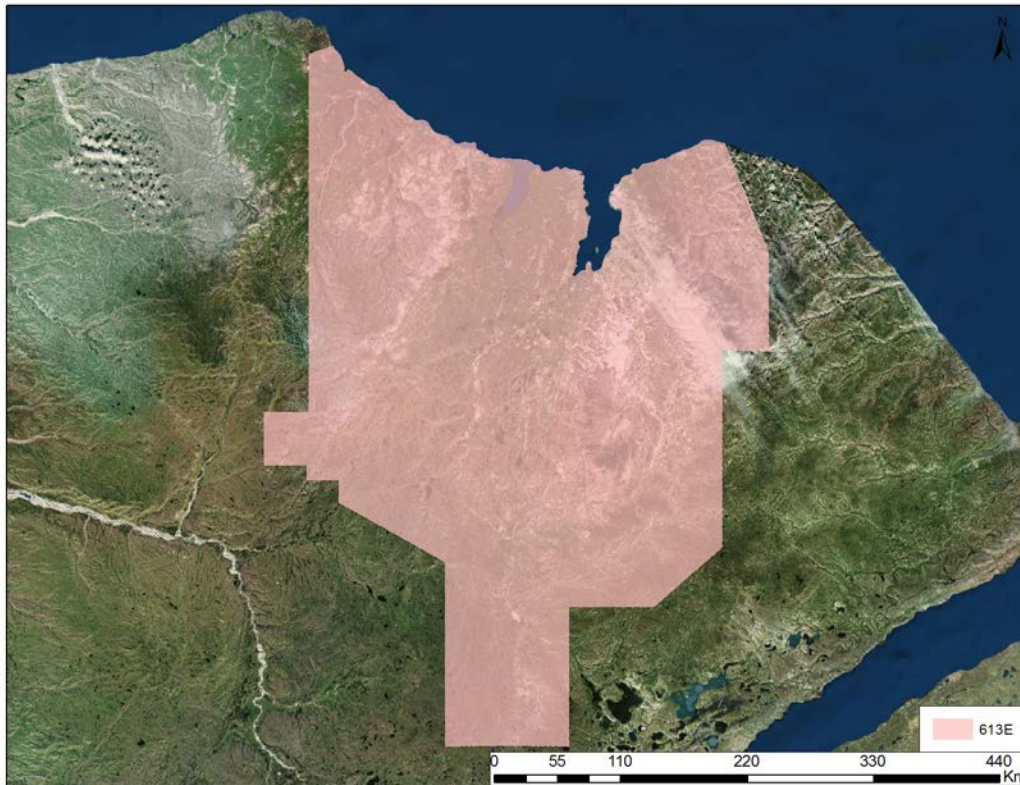
Tourist activity related to Aulavik National Park.

Community Guidelines

Land use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan including those of Sections 6.1.1 through 6.4.

Note: More detailed guidelines covering this area are included in the Aulavik National Park Management Plan.

SITE 613E AULAVIK NATIONAL PARK



Map 14. Site 613E Aulavik National Park.

Identified By

Parks Canada

Management Category

Includes current category A and E lands, and intermediate categories. Legislatively protected under *National Parks Act*.

Ownership

Public (Crown) lands within the Inuvialuit Settlement Region (Maps 1 and 2).

Description

The park encompasses 12,275 km² (4,738 mi²) of the Western Arctic Lowlands natural region of Banks Island, straddling the Thomsen River.

Importance of Site

Moulting area for lesser snow goose from June to July. Muskoxen concentration areas year-round. Significant archaeological & historic sites.

Overlapping Military, Transportation, and Tourism Interests and Activities

Thomsen River, within the bird sanctuary.

Community Guidelines

Management Plan developed by Parks Canada and the Community of Sachs Harbour outlines the guidelines that apply. The plan is in the process of being approved by the Minister of Canadian Heritage.

Note: More detailed guidelines covering this area are included in the Aulavik National Park Management Plan.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Area

Offshore and Onshore Banksland (Site 601C)

Thomsen River Area (Site 602D)

Banks Island Migratory Bird Sanctuary No.2 (Site 612D)

Banksland Rivers (Site 614D)

Banks Island Caribou Calving Grounds (Site 619E)

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

Overlapping Military, Transportation, and Tourism Interests and Activities

Tourist activity through park visitation.

SITE 614D BANKSLAND RIVERS

Map 15. Site 614D Banksland Rivers.

Identified By

Department of Fisheries and Oceans

Management Category

D

Ownership

Private 7(1)(a) 7(1)(b) lands and public (Crown) waters within the Inuvialuit Settlement Region (Maps 1 and 2).

Description

Includes the following rivers: Big, Lennie, Kellett, Sachs, Thomsen, Sandhill, De Salis, Mercy Bay West, Bar Harbour Creek, River and Bow Lake.

Importance of Site

Arctic char stocks which are both anadromous and non-anadromous forms.

Sachs River/Raddi Lake - small anadromous Arctic char stock harvested by residents of Sachs Harbour from April to October.

Thomsen River/Muskox River - migration route, spawning, nursery, overwintering habitat for anadromous Arctic char and cisco.

Johnson Point/Headwater Lake - lake trout and/or Arctic char present year-round residents or seasonal migrants.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Area

Offshore and Onshore Banksland (Site no. 601C)

Thomsen River Area (Site no. 602D)

Areas Near or on Sachs, Kellet and Lennie Rivers including Siksik and Survey Lakes (Site no. 603D)

Southern Banksland (Site no. 604C)

Land Area Around De Salis Bay (Site no. 605E)

Egg River and Big River Junction (Site no. 606E)

Banks Island Migratory Bird Sanctuary No. 1 (Site no. 611D)

Banks Island Migratory Bird Sanctuary No. 2 (Site no. 612D)

Aulavik National Park (Site no. 613E)

Northern Banksland Special Wildlife Area (Polar Bear Denning Area) (Site no. 618C)

Banks Island Caribou Calving Grounds (Site no. 619E)

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

Overlapping Military, Transportation, and Tourism Interests and Activities

Tourist activity related to Aulavik National Park.

Community Guidelines

Land use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan including those of Sections 6.1.1 through 6.4.

**SITE 615C BANKSLAND COASTAL AREAS ADJACENT TO RIVERS
SUPPORTING ARCTIC CHAR**

Map 16. Site 615C Banksland coastal areas adjacent to rivers supporting Arctic char.

Identified By

Department of Fisheries and Oceans.

Management Category

C

Ownership

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

Description

Includes the coastal waters of: southwestern, northwestern, and northern Banks Island, Thesiger Bay and Prince of Wales Strait.

Importance of Site

Feeding of anadromous Arctic char in open water.

Sachs River estuary may provide important seasonal habitat for Greenland cod from March to May.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Area

Offshore and Onshore Banksland (Site no. 601C)

Areas Near or on Sachs, Kellet and Lennie Rivers including Siksik and Survey Lakes (Site no. 603D)

Banks Island Migratory Bird Sanctuary No. 1 (Site no. 611D)

Northern Banksland Special Wildlife Area (Polar Bear Denning Area) (Site no. 618C)

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

Prince of Wales Strait (Site no. 734C)

Community Guidelines

Land use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan including those of Sections 6.1.1 through 6.4.

SITE 616D OFFSHORE AMUNDSEN GULF AND BEAUFORT SEA

Identified By

Department of Fisheries and Oceans

Management Category

D

Ownership

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

Description

Beaufort Sea Transition Zone – starting from 10 km (6.2 mi) offshore to permanent ice pack. Cape Bathurst Polynya – located in Amundsen Gulf.

Importance of Site

Beluga, bowhead migrating along lead system from overwintering areas in Bering Sea, and feeding. Abundant ringed seal on landfast ice of western Banksland. Bearded and ringed seal present in winter. General marine fish habitat.

Amundsen Gulf is a highly productive area. Prime feeding area for beluga, bowhead. Calving may occur. Migrating in leads. Ringed and bearded seal use the area in winter. Bearded seal pupping in shore leads from March to April. Large numbers ringed seal near Cape Kellett and De Salis Bay.

Southern Prince of Wales Strait - ringed seals, year-round.

Community Guidelines

Land use in Site 25 should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan including those of Sections 6.1.1 through 6.4.

SITE 618C**NORTHERN BANKSLAND SPECIAL WILDLIFE AREA (POLAR BEAR DENNING AREA)**

Map 17. Site 618C Northern Banksland special wildlife area (polar bear denning area).

Identified By

Sachs Harbour Community Working Group

Management Category

C

Ownership

Crown lands and Private lands 7(1)(a) and 7(1)(b) within the Inuvialuit Settlement Region.

Description

A 25 km (15.5 mi) strip from the southwestern coast near shore, inland, from Nelson Head to the north shore of Banks Island.

Importance of the Site to the Community of Sachs Harbour

Critical polar bear denning area from November to April.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Area

Offshore and Onshore Banksland (Site no. 601C)

Areas Near or on Sachs, Kellet and Lennie Rivers including Siksik and Survey Lakes (Site no. 603D)

Southern Banksland (Site no. 604C)
Egg River and Big River Junction (Site no. 606E)
Area South of Rufus River (Site no. 607D)
Banks Island Migratory Bird Sanctuary No. 1 (Site no. 611D)
Banksland Rivers (Site no. 614D)
Banksland Coastal Areas Adjacent to Rivers Supporting Arctic Char (Site no. 615C)
Banks Island Caribou Calving Grounds (Site no. 619E)

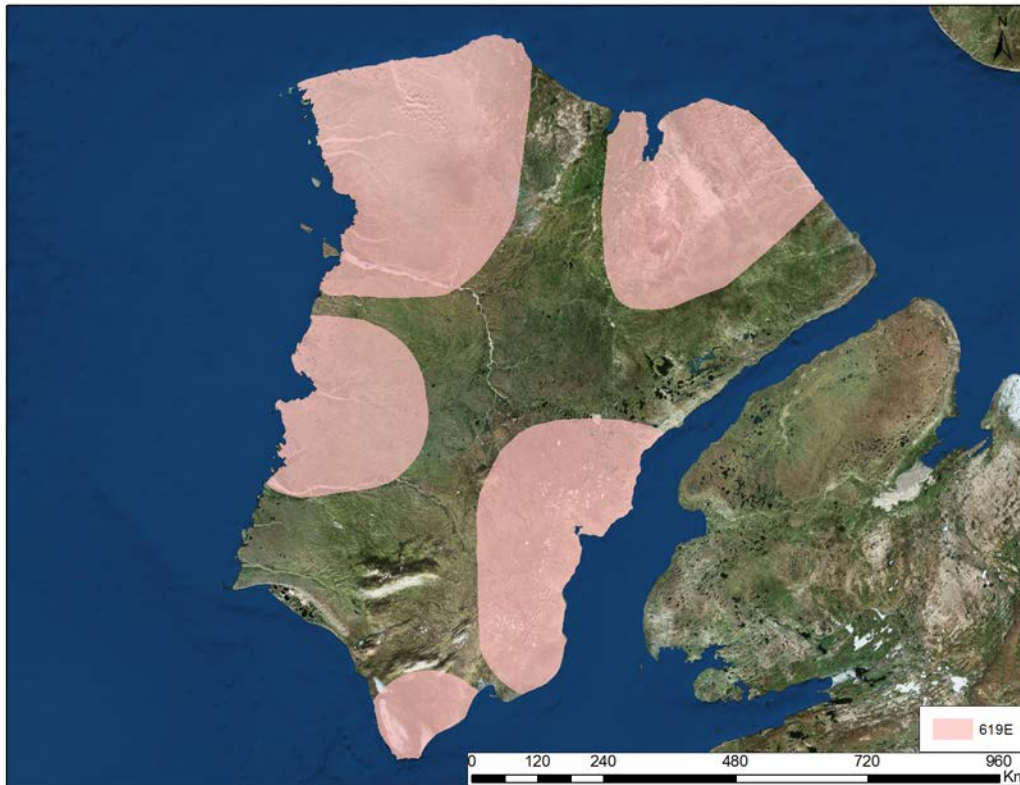
Overlapping Nonrenewable Resource Interests and Activities

None.

Community Guidelines

Land use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan including those of Sections 6.1.1 through 6.4.

SITE 619E BANKS ISLAND CARIBOU CALVING GROUNDS



Map 18. Site 619E Banks Island caribou calving grounds.

Identified By

Sachs Harbour Community Working Group

Management Category

E

Ownership

Crown lands and Private lands 7(1)(a) and 7(1)(b) within the Inuvialuit Settlement Region.

Description

Includes northwestern Banks Island - from M'Clure Strait to Bernard River; from Jesse Bay, radiating inland approximately 50 km (31 mi).

Importance of the Site to the Community of Sachs Harbour

Critical calving grounds for Peary caribou.

Overlap with other Special Designated Areas within the Sachs Harbour Planning Area

Offshore and Onshore Banksland (Site no. 601C)
 Thomsen River Area (Site no. 602D)
 Southern Banksland (Site no. 604C)
 Land Area Around De Salis Bay (Site no. 605E)
 Egg River and Big River Junction (Site no. 606E)

Area South of Rufus River (Site no. 607D)

Banks Island Migratory Bird Sanctuary No. 1 (Site no. 611D)

Banks Island Migratory Bird Sanctuary No. 2 (Site no. 612D)

Aulavik National Park (Site no. 613E)

Banksland Rivers (Site no. 614D)

Banksland Coastal Areas Adjacent to Rivers Supporting Arctic Char (Site no. 615C)

Northern Banksland Special Wildlife Area (Polar Bear Denning Area) (Site no. 618C)

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

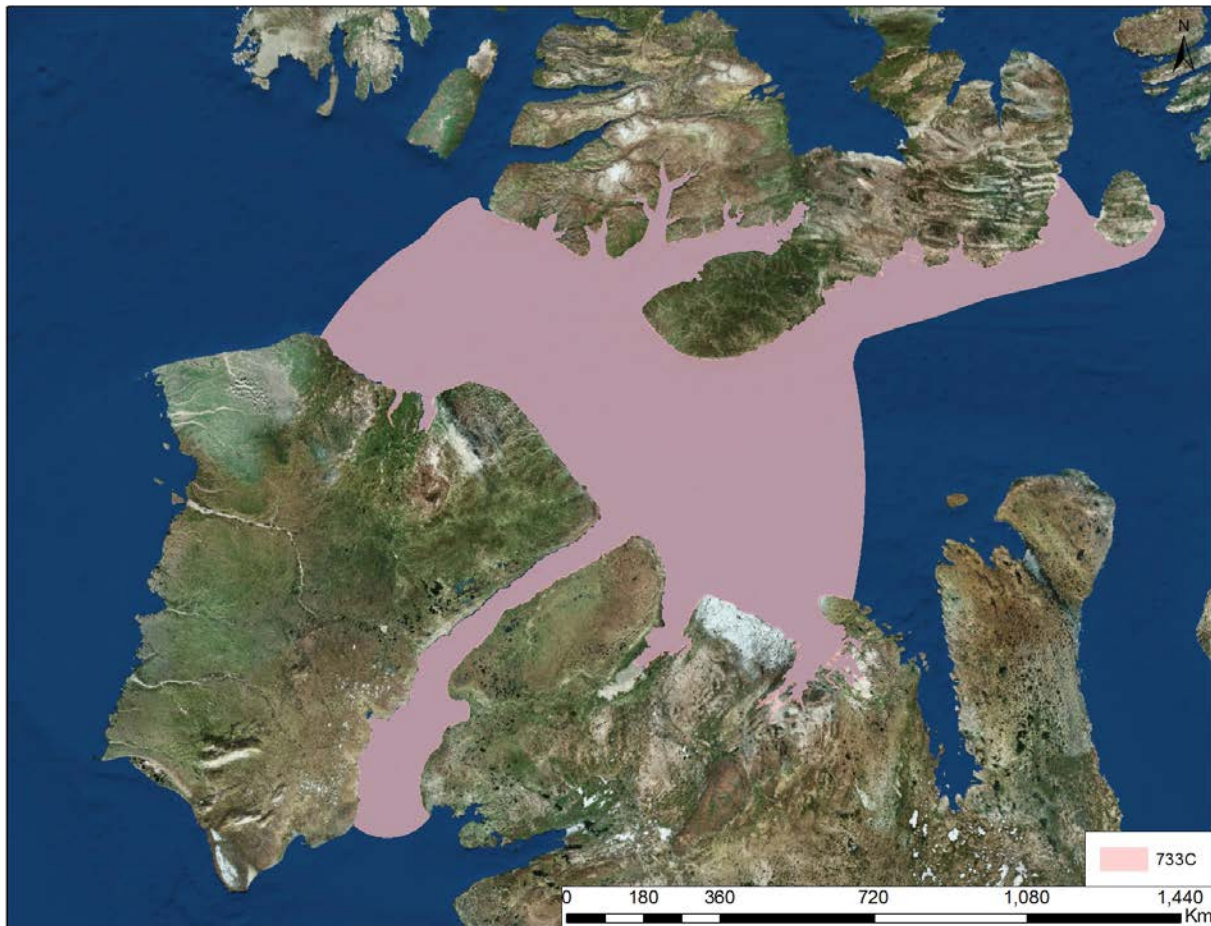
Overlapping Military, Transportation, and Tourism Interests and Activities

Tourist activity related to Aulavik National Park.

Community Guidelines

Land use in site should be consistent with other guidelines described in the Sachs Harbour Community Conservation Plan including those of Sections 6.1.1 through 6.4.

SITE 733C VISCOUNT MELVILLE SOUND AND ADJACENT AREAS



Map 19. Site 733C Viscount Melville Sound and adjacent areas.

Identified By

Ulukhaktok and Sachs Harbour Community Working Groups

Management Category

C

Ownership

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

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

Offshore and Onshore Banksland (Site no. 601C)

Thomsen River Area (Site no. 602D)

Beluga Management Zone 1B - DeSalis and Jesse Bays (Site no. 609E)

Banks Island Migratory Bird Sanctuary No. 2 (Site no. 612D)

Aulavik National Park (Site no. 613E)

Banksland Rivers (Site no. 614D)

Banksland Coastal Areas Adjacent to Rivers Supporting Arctic Char (Site no. 615C)

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

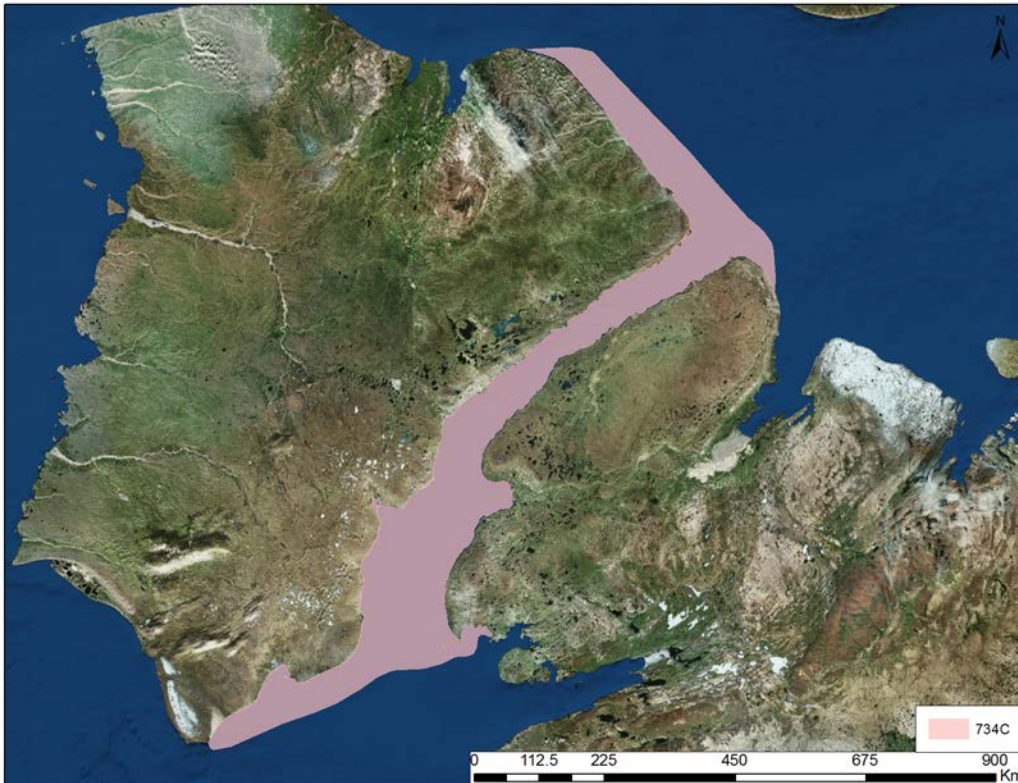
The Ulukhaktok and Sachs Harbour Community Working Groups are concerned that marine traffic through Emangyok Sound will have a negative impact on the wildlife and traditional use in the area. Specific concerns relate to the impact of ship noise on polar bear denning sites, ship track hazards to hunters, 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 20. Site 734C M'Clure Strait and Viscount Melville Sound, Prince of Wales Strait.

Identified By

Sachs Harbour and Ulukhaktok Community Working Groups

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 Communities of Sachs Harbour and Ulukhaktok

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 upwelling. 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 Sachs Harbour Planning Area

Offshore and Onshore Banksland (Site 601C)

Beluga Management Plan Zone 1B in Jesse Bay (Site 609E)

Banksland Coastal Areas Adjacent to Rivers Supporting Arctic Char (Site 615C)

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

Overlapping Nonrenewable Resource Interests and Activities

None.

Overlapping Military, Transportation, 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 Sachs Harbour
5. 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 Sachs Harbour:

1. The Inuvialuit Community, the WMAC (NWT), FJMC, IGC, EISC, EIRB and ILA will rely on their procedures, the Sachs Harbour Community Conservation Plan and the provisions of the IFA to ensure the protection of the Sachs Harbour 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 Sachs Harbour Community Conservation Plan, associated land use designations and recommendations.
3. The Community supports the maintenance of bird sanctuary 1 (based on the understanding that the other is protected within the park; the community is looking into reducing the size of bird sanctuary 1).
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 and YTG, Minister of Renewable Resources) demonstrate to the satisfaction of the Community, WMAC (NWT and North Slope), FJMC and IGC that such areas are necessary.
5. All regulatory agencies support the priority land uses as outlined in the Sachs Harbour 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 Sachs Harbour 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 graphically in Appendix G.

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. If the proposal is on Gwich'in Private Lands, notification should be sent to the Gwich'in Land Administration.
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 when 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 the appropriate government department 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 incremental or gradual losses of wildlife habitat resulting from changes in land use over time, the Community, as represented by the HTC and Sachs Harbour 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 two-year conservation plan review by the Community Working Group, and the complete review by all stakeholders every four years.

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 EISC, the EIRB and 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 licenses. 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 the 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 Sachs Harbour Planning Area.
7. Revoke Permits - Where there is a violation of land use permit conditions deemed serious

by the SHHTC or Sachs Harbour 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 Sachs Harbour will:
 - (a) Carefully review all land use proposals and only give their support to land use activities where they are consistent with the Sachs Harbour Community Conservation Plan.

Through the HTC, IGC or the IRC, refer any projects on Inuvialuit Land that may be in conflict

- (a) Through its HTC, consult with developers on projects proposed within the Sachs Harbour 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 and Developer.
- (c) Through its HTC, advise the EISC or ILA of community concerns about development projects in the Sachs Harbour 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.
- (e) Through the HTC, 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 Sachs Harbour 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 videotape 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 Sachs Harbour 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 Sachs Harbour 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 Sachs Harbour 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 Sachs Harbour 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 HTC, 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 Sachs Harbour 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 Sachs Harbour 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) Develop a consistent set of biological criteria for establishment of harvest quotas in cooperation with the HTC.
- (g) 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 Sachs Harbour 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 Sachs Harbour 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 and resource conservation.
- (f) Where fishing areas are restricted 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.

6.3 TOURISM GUIDELINES

The Community of Sachs Harbour 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 ENR will request that all tourist operators (Inuvialuit and non-Inuvialuit) be licensed, endorse the Sachs Harbour Community Conservation Plan and follow its recommendations as one of the conditions of operator's licence or permit. Licenses may be revoked when 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.) if wolves are present.
- (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 licenses.
- (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.



Biology

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). Foxes feed on lemmings and birds and are known to move great distances (e.g. Alaska to Banks Island).

Traditional Use

Furbearer.

Important Habitat

Arctic fox widespread above tree line, often near coastal areas. Red Fox widespread below tree line.

Management Plans/Agreements

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

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

Research Priority

Low: though there is interest/concern over rabies.

Population Status

Can be highly variable year to year.

Population Goal

Unspecified.

Conservation Measures

- Identify and protect important habitats from disruptive land uses.
- Only trap in season.
- Do not disturb denning foxes.

ARCTIC HARE (*Lepus arcticus*) / UKALIQ

Biology

Two to seven young are born in June or July. Adults may weigh 4 - 5 kg. Numbers vary from year to year; groups of hundreds or thousands may form. Most people in the Community include Arctic Hare in their diet.

Traditional Use

Good food, fur used occasionally.

Important Habitats

Distribution may vary seasonally and annually. Masik Pass area commonly has a high density of hares.



Management Plans/Agreements

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

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

Recent Research

Larter NC (1999) Seasonal changes in arctic hare, *Lepus arcticus*, diet composition and differential digestibility. Can. Field-Nat. 113:481-486

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

Research Priority

Low priority

Population Status

Can be highly variable year to year

Population Goal

Unspecified, adequate supply for community needs at present.

Conservation Measures

- Identify and protect important habitats from disruptive land uses.
- Management Plan complete

CARIBOU (*Rangifer tarandus pearyi*) / TUKTU

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. Caribou in good condition can calve every year. Sexual maturity occurs between 2 and 4 years of age with adults living to 15 years in the wild.

Traditional Use

Food, clothing, crafts



Trevor Lucas

Important Habitat

Winter in valleys and sidehills, sexes separate; spring inland, from Jesse Bay; summer along coast, use hills, valleys, slopes; fall migration moving to Fish lakes area; Sachs, Kellet, Lennie River areas also important.

Management Plans/Agreements

Peary Caribou were 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.

Research Priority

1. Caribou-muskox interactions.
2. Community wants additional information regarding presence of cysts in meat.
3. Interested in wolf-caribou interactions (also collar wolves if study undertaken).
4. Continue regular population surveys; next one is planned for the summer of 2019

Population Status on Banks Island (non-calf)

Caribou on Banks Island (*Rangifer tarandus pearyi*) are considered to be part of the Banks Island and NW Victoria Island meta population. The herd was at its known historical high of 12,098 non-calf animals in 1972. The herd was stable between 1991 and 1994, declined to 436 \pm 71 non-calf caribou between July 1994 and July 1998 but has since increased to 2,234 \pm 830 in 2014. The cause of the overall decline from the 70s is not known, however, possible factors include: predation by wolves, adverse climate conditions and migration.

Year	Population Estimate
1982	9038
1985	5000
1987	4500
1989	2593
1992	1018

1994	742
1998	451
2001	1142
2005	929
2010	1097
2014	2234

Since 1990, Peary caribou have been under quota on Banks Island. The current quota is 72 tags with mandatory sample submission targeting a male dominated harvest.

The 2012 survey of the islands north of Banks Island indicate numbers increased since 1997, however, the 2015 survey on northwest Victoria Island continues to indicate low numbers in that area.

Population Goal

5,500

Conservation Measures

- Do not shoot cows or calves.
- Share your hunt and use all parts.
- Do not harvest more than quota.
- Maintain current quota (72, male dominated) until population goals reached.
- Selectively harvest muskox from important caribou wintering areas.
- If caribou numbers continue to decline, do not hunt them at all.
- Until population reaches 5,500 animals, harvest should be managed to allow caribou population growth.
- Continue to harvest wolves as normal; the Community does not support systematic wolf control or elimination.
- Continue regular population census.
- Identify and protect important habitats from disruptive land uses.
- WMAC (NWT) should encourage early completion of a Caribou Management Plan for Banksland.



Map 21. Peary Caribou range.

MUSKOX (*Ovibos moschatus*) / UMINGMAK

Calving generally occurs from about 15 March to 15 June with approximately 90% of the calves being born by May 1st. Cows normally produce a single calf annually, and it is approximately 3 weeks before the calf can keep up with the 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.



Traditional Use

Food, clothing, crafts, travel (skins for sleeping on)

Important Habitat

In winter, muskox feed in valleys and drainages, in May using valleys and particularly sidehills, widespread in summer, in fall (August, September) using tops and sides of hills to loaf, feeding in valleys.

Masik Pass, Nelson River, N.W. of Sachs approximately 10 km (6.2 mi) (near Kellet River), Thomsen River, Muskox River, Egg River, Parker River.

Management Plans/Agreements

No management plan specifically for muskox; managed under general hunting and HTC by-law 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 Banks Island, 1998/99 to 2002/2003 (DRAFT).

Research Priority

1. Determine how to selectively harvest to ensure muskox available in proximity to Sachs Harbour for subsistence, sport hunting and tourism.
2. Muskox movements on Banksland.
3. Wolf predation.
4. Muskox disease and parasites

Population Status on Banks Island

Muskox numbers were low on the island during the first part of the century but had increased to several thousand by the 1960's. During the 1970's, 1980's, and 1990's their numbers increased rapidly reaching a high of $68,585 \pm 6,975$ non-calf animals in July 2001. Since 2001 the population has declined and in 2014 survey estimated the population at just under 14,000 non-calf animals.

Quota: 10,000

Year	Population Estimate
------	---------------------

1982	12,482
1985	25,700
1989	34,266
1992	53,526
1994	66,297
1998	45,922
2001	68,585
2005	47,209
2010	36,676
2014	13,767

Population Goal

20,000

Conservation Measures

- Selectively harvest muskox from certain areas on a rotational basis.
- Use all parts of muskox (save heart and liver for dogs if not used for human consumption).
- Maintain population of muskox near Sachs Harbour for subsistence, tourism and trophy hunting.
- When shooting muskox take a neck shot to reduce meat wastage.
- Establish quota to maintain population goal.
- Below a population of 20,000 Muskox on Banksland, review harvest strategy and reset quota.
- Continue regular population census (next planned 2019).
- Identify and protect important habitats from disruptive land uses.

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.



Trevor Lucas

Traditional Use

Furbearer, clothing, handicrafts, food and hides for sale.

Important Habitat

Denning areas along the west coast, from Nelson Head to the northwest corner of Banks 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 and 2000, 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

Population	Population Estimate (95% Confidence Interval)	Year
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)

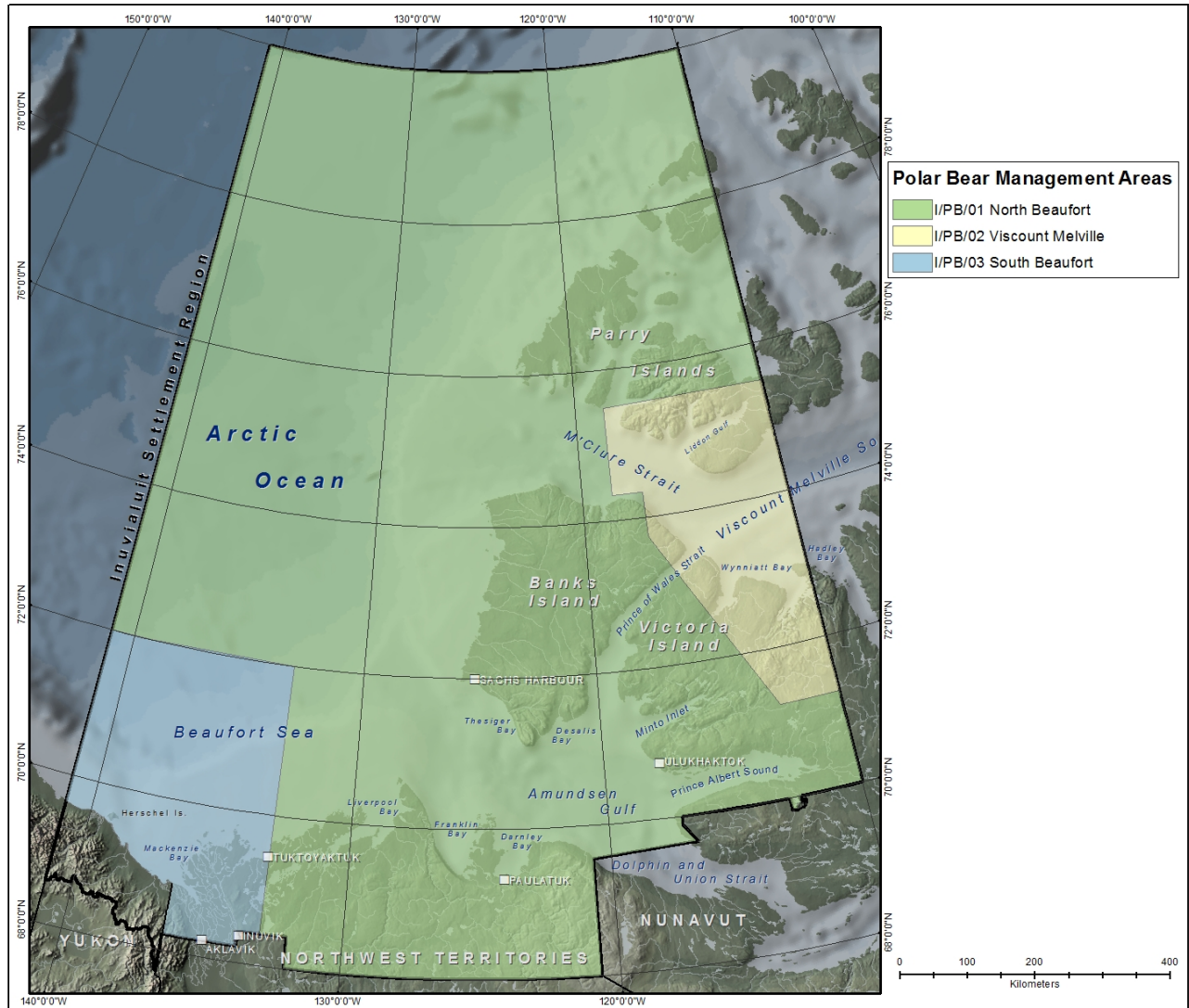
(Stable)	980 (825 – 1135)	(2006)
	867 (726 – 1008)	(1987)
	745 (499 – 991)	(1975)
Viscount Melville Sound	215 (SE 57.4)	(1999- based on RISKMAN modeling of 5-year moratorium)
	161 (SE 34)	(1992)

Population Goal

Unspecified. Maintain at level which can produce the maximum sustained yield.

Conservation Measures

- Follow regulations agreed to in HTC 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.
- Hunt males from October 1 to May 31; females from Dec 1 to May 31.
- Collect and report all information requested in bylaws after making a kill.
- Identify and protect important habitats from disruptive land uses.



Map 22. 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.



Traditional Use

Clothing, crafts, sale of furs

Key Habitats

Big River, Masik Pass, Raddi Lake Hills, Thomsen River, Muskox River, Parker River.

Management Plans/Agreements

No management plan specifically for wolves; managed under general hunting and HTC by-law 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 Banks Island, 1998/99 to 2002/2003 (DRAFT).

Research Priority

Moderate/high.

1. Population status.
2. Movement and predation study done in conjunction with any radio telemetry study of muskox or caribou.

Population Status

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. Fifteen adult wolves were seen during the whole island survey done in July 2014 compared to 28 adults and 6 pups seen in 2010.

Population Goal

Unspecified.

Conservation Measures

- Do not harvest in summer when fur is poor.
- Hunt by traditional means; do not use aircraft or poison to control wolves.
- If guiding tourists, do not hunt wolves.
- Identify and protect important habitats from disruptive land uses.

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 sandlance and capelin that appear to be becoming a more prominent food source in recent years. Belugas harvested in Ulukhaktok in 2014 had been feeding primarily on sandlance 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

Jesse Bay, DeSalis Bay, Central Amundsen Gulf, south of Nelson Head, Prince of Wales Strait, M'Clure Strait, south-west coast of Banks Island. Calving in Mackenzie Bay and Shallow Bay.

Major summer concentrations occur in mid-July in Kugmallit Bay, 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 and females with calves tend to remain in shallower coastal areas.

Management Plans/Agreements

- Beaufort Sea Beluga Management Plan (FJMC, 2013)
- Sachs Harbour 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 and sent for analyses.

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

- 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

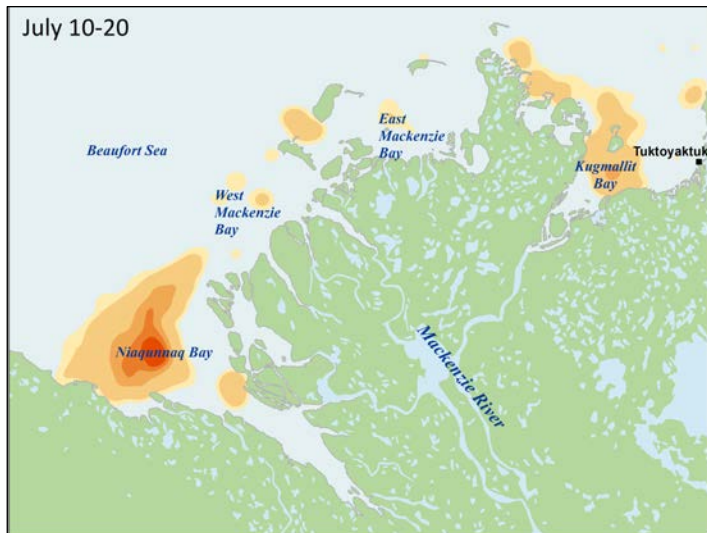
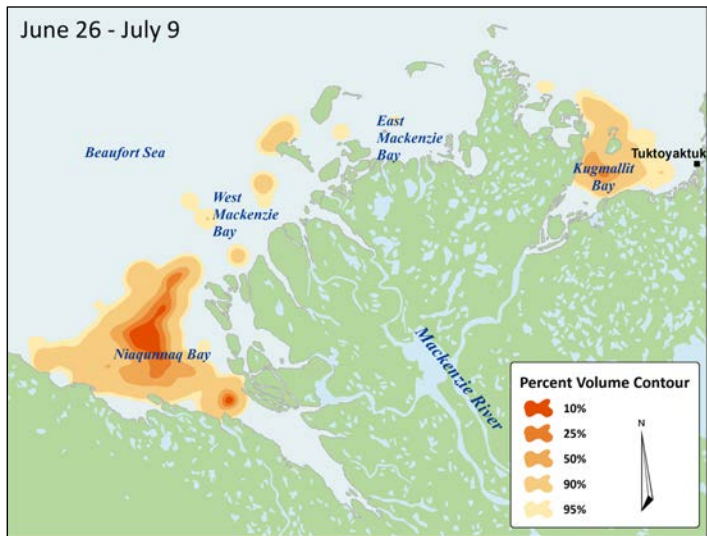
- Support the Beaufort Sea Beluga Management Plan.
- Follow HTC Beluga Bylaws.
- Identify and protect important habitats from disruptive land uses.

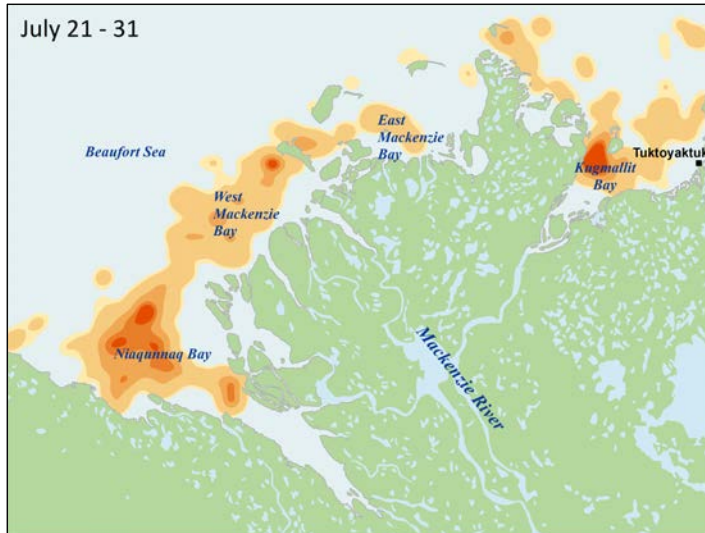
SACHS HARBOUR HUNTERS & TRAPPERS COMMITTEE BELUGA HUNTING BYLAWS

1. Each boat will have the following equipment:
 - a) A rifle of not less than .243 calibre;
 - b) Two harpoons equipped with line and float, or one such harpoon and a “seal hook”;
 - c) One grapple hook attached to sufficient length of line to reach the ocean bottom in the area being hunted;
 - d) One float marker with enough line to reach the ocean bottom in the area being hunted, and equipped with an anchor;
 - e) A towing line.
2. Each hunter must attempt to retrieve sunken or wounded whales before hunting for 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 operators.

Beluga Hunting Guidelines

1. A proven method by some hunters has reduced loss rates considerably, by harpooning first. Whales should be harpooned before shooting.
2. It would be preferable that no person should hunt alone.
3. Each boat should have at least one experienced hunter.
4. All areas around whale kills should be cleaned up after processing.
5. These Guidelines and Bylaws may be changed by the Sachs Harbour HTC as necessary.





Map 23. 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, 1977-1985 and 1992 (Harwood et al. 2014).

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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 western 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).

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

Important Habitat

Thesiger Bay, Northern Amundsen Gulf, east of Nelson Head, King Point, Shingle Point, Mackenzie Bay, Herschel Island, West Whitefish Station.

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

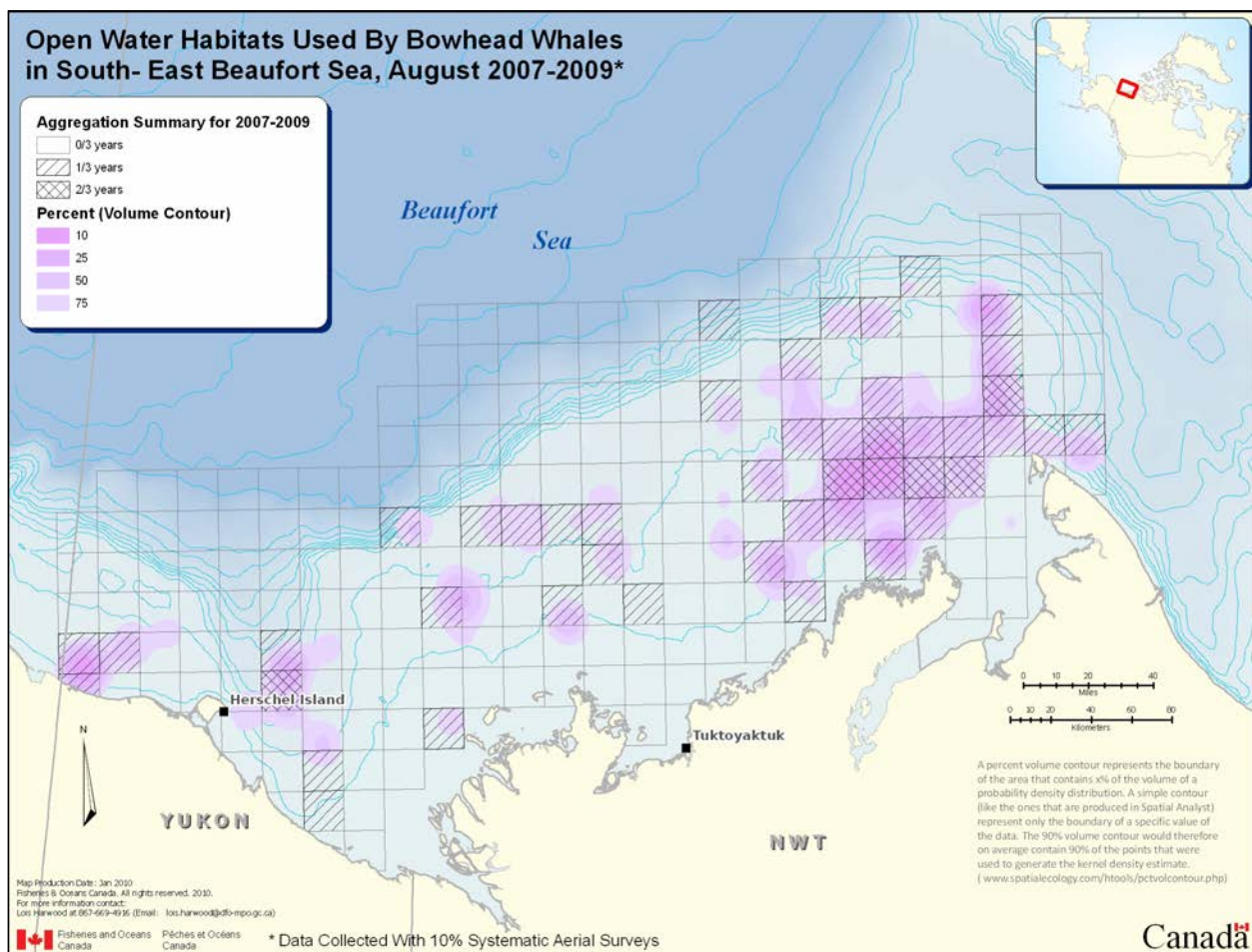
- The 2001 Bering-Chukchi-Beaufort bowhead population estimate is 10,470 (95% confidence intervals 8,100-13,500).
- Population growth rate from 1978-2001 was 3.4%
- Since 2009, the Bering-Chukchi-Beaufort population of bowhead has been designated as a species of 'special concern' under COSEWIC (Committee 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 24. Bowhead open water habitat use in South-East Beaufort Sea, August 2007-2009.

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SEALS

RINGED SEAL (*Pusa hispida*) /
NATCHIQ and
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.



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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.

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. Traditionally used for kayak lining, rope, and traces for dog harnesses. Seal oil has traditionally been used (and continues to be occasionally used) as fuel for heat and light.

Important Habitat

Sea Otter Harbour and north to Storkerson Bay, De Salis Bay, Jesse Bay, Prince of Wales Strait, south Banks Island offshore, Banks Island coastlines (western, southwestern, southern).

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 has 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

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

Population Status

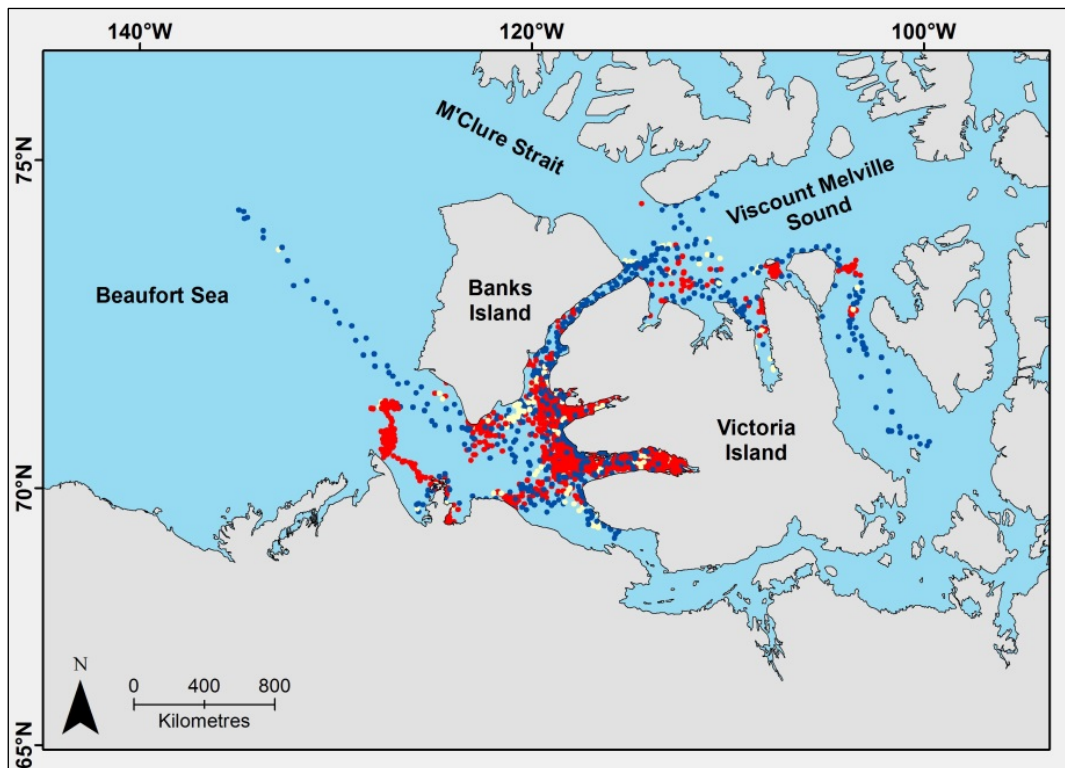
Ringed seals generally more abundant than bearded seals; surveys in the 1970s estimated their ratio to be 17:1. Bearded seals are more common in certain localized areas.

Population Goal

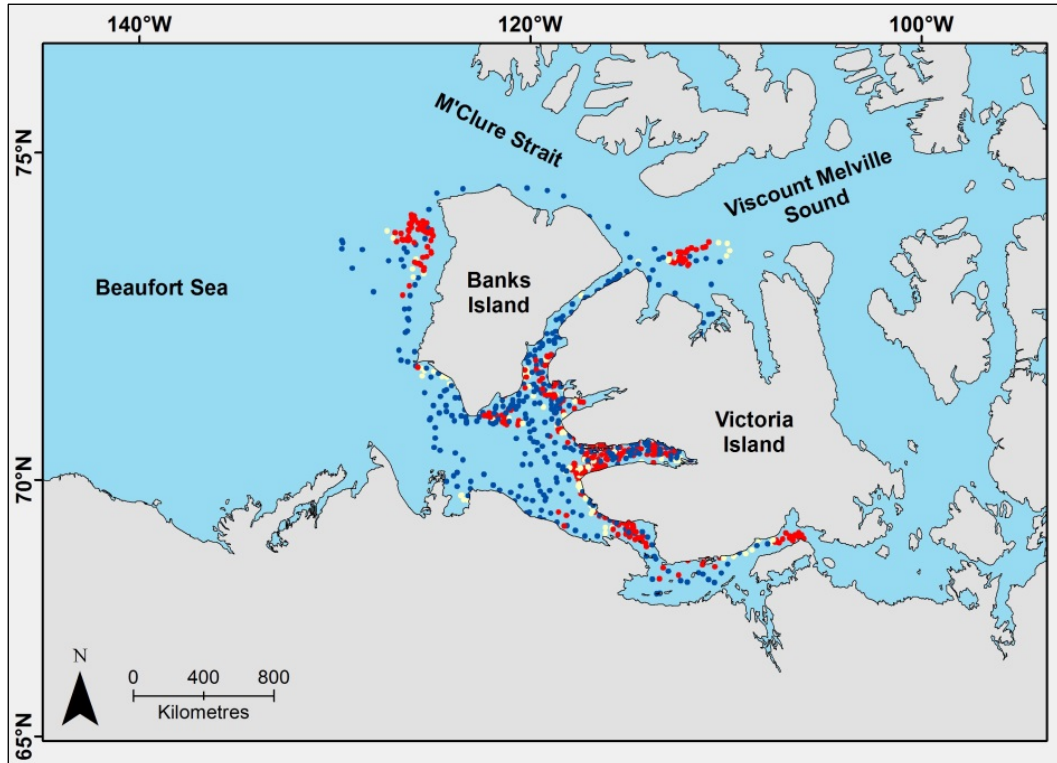
Adequate supply at present.

Conservation Measures

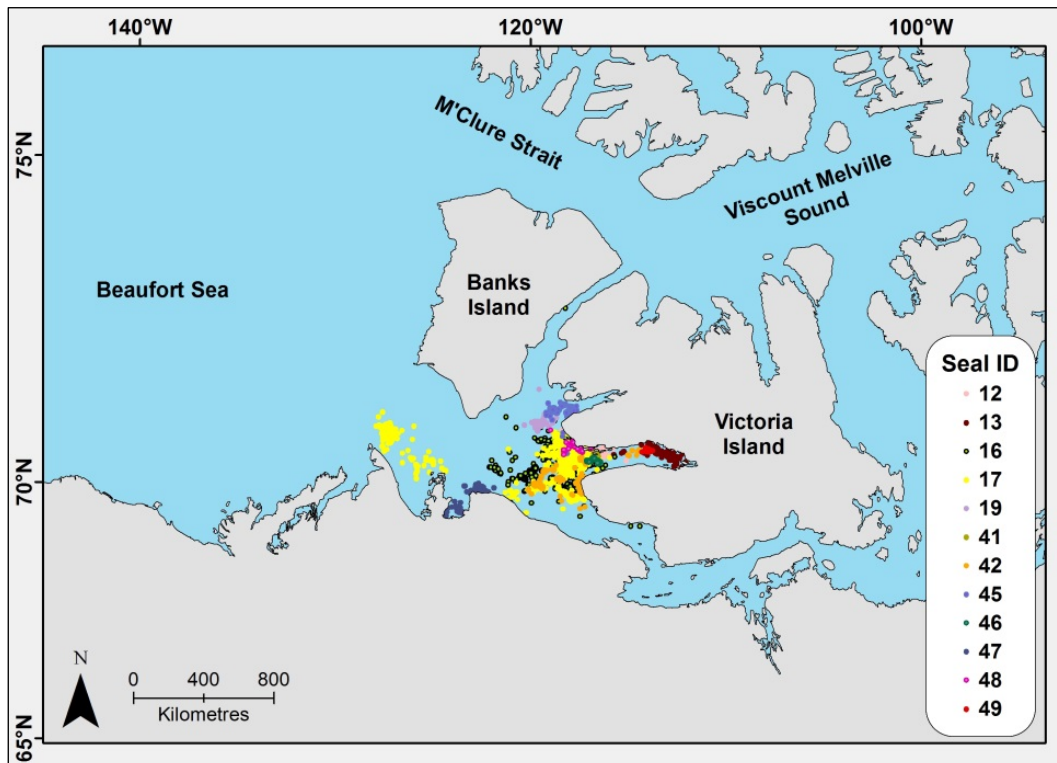
- Share hunt among elders.
- Identify and protect important habitats from disruptive land uses.
- Only harvest what is needed.



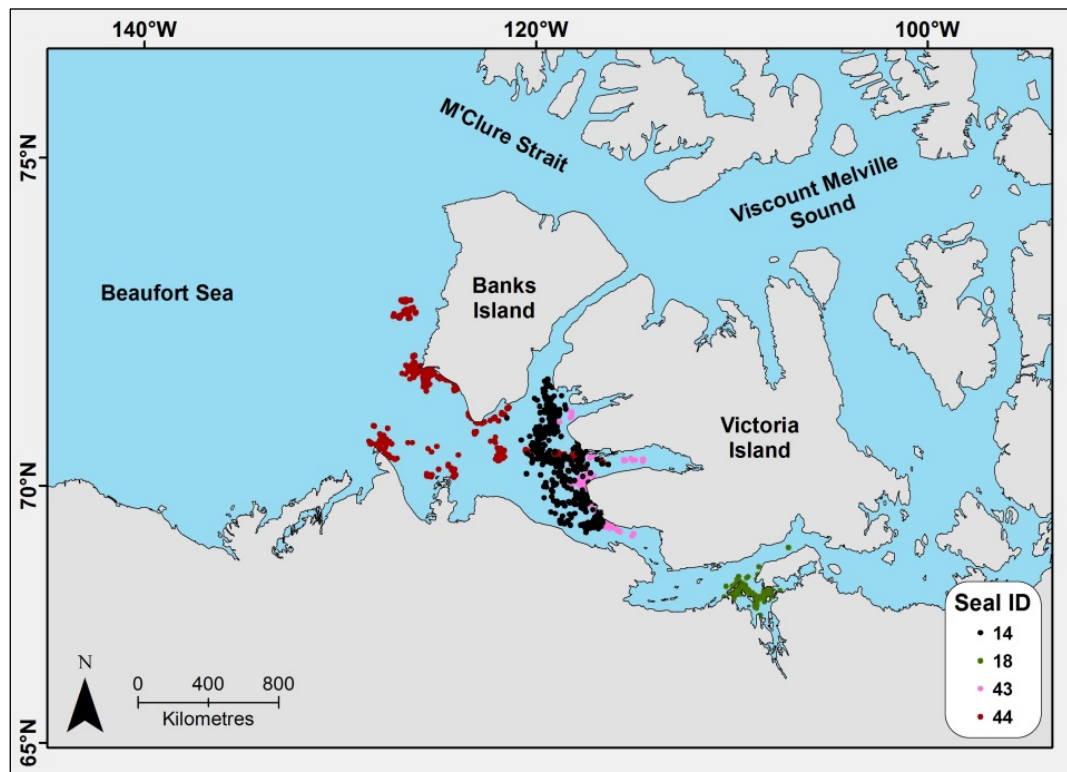
Map 25. *Adult* ringed seal open water habitat use based on tagging studies: red = inferred feeding locations; blue = travelling (Harwood et al. 2015).



Map 26. *Subadult* ringed seal open water habitat use based on tagging studies: red = inferred feeding locations; blue = travelling (Harwood et al. 2015).



Map 27. *Adult* ringed seal winter (1999-2001, 2001-2011) habitat use based on tagging studies (Harwood et al. 2015).



Map 28. Subadult ringed seal winter (1999-2001, 2010-2011) habitat use based on tagging studies (Harwood et al. 2015).

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OTHER MAMMALS

In addition to the species of mammals listed, Banksland also supports populations of Greenland collared lemming, brown lemming, and ermine. Wolverine are harvested occasionally. Grizzly bears occasionally arrive on Banksland from the mainland though no breeding populations are believed to occur. Walrus may occasionally show up in coastal waters but are also very uncommon. No breeding populations exist in the area. Observations of rare or unusual species should be reported to the GNWT and CWS.

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*) / **Aktaq**
 Bowhead Whale (*Balaena mysticetus*) / **Aqvic**
 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*) / **Aktaq**
 Hoary Marmot (*Marmota caligata*)
 Least Weasel (*Mustela nivalis*)
 Lynx (*Lynx canadensis*) / **Piqtuqsiraq**
 Marten (*Martes americana*) / **Qavviasiaq**
 Meadow Vole (*Microtus pennsylvanicus*)
 Mink (*Neovison vison*) / **Tiriaqpak**
 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*) / **Aukpilaqtaq**
Richardson's Collared Lemming, *Dicrostonyx richardsoni*
Ringed Seal (*Pusa hispida*) / **Natchiq**
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* / **Qavvik**

DUCKS / QAUGAIT**King Eider** (*Somateria spectabilis*) / **QUINGALIK****Common Eider** (*Somateria mollissima*) / **QUAGAQ****Long-tailed Duck (Oldsquaw)** (*Clangula hyemalis*) /**AAHAANLIQ****Pintail** (*Anas acuta*)**Biology**

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

Eiders (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 semi-colonally 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 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 (Oldsquaw)*

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: west coast Banks Island, coastal areas of MBS no. 1 (on Banks Island)

Common Eider: west coast Banks Island

Long-tailed Duck: coastal areas of MBS no. 1 (on Banks Island), (distribution in the ISR is not well documented)

Northern Pintail: distribution on Banks Island not well documented, at northern limit of range

Management Plans/Agreements

Migratory Birds Convention Act, 1994.

North American Waterfowl Management Plan (NAWMP 2012).

Sea Duck Joint Venture (formed under NAWMP)

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. 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 Report Series Number 520, Canadian Wildlife Service, Edmonton, Alberta. 94p.

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.

Population Status

Species	Population estimate	Details of Population estimate
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King Eider	592,000 371,000 802,000	(2004) (1996) (1976) (North America)
Pacific Common Eider	110,550 73,000 153,000	(2004) (1996) (1976)
Long Tailed Duck	314,216	(1988-2008 average)
Northern Pintail • Continental goal:	3.2 million 5.6 million	(2014) (North America) (NAWMP 2012)

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.
- Identify and protect important habitats, including wintering areas, from disruptive land uses.

GEESE AND TUNDRA SWAN

Cackling Goose (*Branta hutchinsii hutchinsii*)

Canada Goose (*Branta canadensis*) /

ULUAGULLIK

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

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

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

White Fronted Goose / **NIRLIQ**

Ross' Goose



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. Both can be found on Victoria Island. Cackling Geese are smaller than Canada Geese, they nest above the tree line and make up the majority of the birds in this area. The Cackling Geese nesting on islands in the ISR are part of "Mid-continent Cackling Geese" population. They winter in the central U.S. to Colorado and Texas and arrive in the ISR 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 early September.

Snow Geese - Local birds part of Western Arctic Population. Winter California and Mexico. Arrive mid-May. Lay 2-10 eggs (average 6) first week of June. Incubate approximately 22-33 days, off nest first week of July. Feed on terrestrial and aquatic vegetation. 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.

Leave early September. 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.

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 Mexico to B.C. Arrive late May, early June. Nest close to water. 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. 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 clothing, pillows and blankets.

Important Habitat

White-fronted Goose: range is extending, more are being seen in the area

Cackling Goose: low densities dispersed throughout central and eastern Banks Island

Lesser Snow Goose: Banks Island MBS no. 1, Thomsen River; Masik River valley, upper Kellett River and Raddi Lake wetlands are important spring staging areas

Brant: Castel Bay and Thomsen River (moulting), Big River river valley, wide distribution throughout Banks Island MBS no. 1; Masik River valley, upper Kellett River and Raddi Lake wetlands are important spring staging areas

Tundra Swan: dispersed throughout Banks Island MBS no. 1; Masik River valley, upper Kellett River and Raddi Lake wetlands are important spring staging areas

Management Plans/Agreements

Migratory Birds Conventions Act, 1994.

North American Waterfowl Management Plan (NAWMP 2012).

Arctic Goose Joint Venture (part of NAWMP).

Co-management Plan for Caribou, Muskox, Arctic Wolves, Snow Geese & Small Herbivores on Banks Island (Draft - 2000)

Draft Pacific Coast Brant Management Plan (1991).

Eastern Tundra Swan Management Plan

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.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.
- Evaluate the impact of grizzly bear predation and other factors on the colonies of brant and snow geese at Anderson River.

Population Status

Species	Population
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).

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).

LOONS

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

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

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



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. 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

Red-throated Loon: Thomsen River

Yellow-billed Loon: Thomsen River, (distribution in the ISR is not well-documented)

Pacific Loon: Thomsen River

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 indigenous observation suggests that Yellow-billed loons used to be abundant but now are less so.

Population Goal

Thriving population.

Conservation Measures

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

PTARMIGAN (*Lagopus spp.*) / AQIJGIQ
Rock Ptarmigan (*Lagopus mutus*) /
NIKSAAKTUALUK
Willow Ptarmigan (*Lagopus lagopus*) /
AQIJGIVIK

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, forb, muskeg areas, sheltered valleys.

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

Low.

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*) / TATIJGAQ

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, aquatic plants, grains, amphibians. Fall migration late August early September.

Important Habitat

Throughout Banks Island MBS no. 1.

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.

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.

PEREGRINE FALCON (*Falco peregrinus anatum*) / KIJGAVIK
GYRFALCON (*Falco rusticolus*) / KIJGAVIK
ROUGH LEGGED HAWK (*Buteo lagopus*) / QILGIQ

Biology

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

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

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

Important Habitat

Coastal areas with suitable cliff nesting habitat.

Management Plans/Agreements

GNWT and Yukon Birds of Prey Regulations.

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

Research Priority

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

Population Status

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.



Trevor Lucas

SNOWY OWL (*Nyctea scandiaca*) / UKPIK

Biology

Most snowy owls migrate to the region in the 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 32-33 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

Have been used as food in past.

Important Habitat

Coastal Areas.

Management Plans/Agreements

None

Research Priority

Low.

Population Status

Population appears to be high in some years and low in others.

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

BIRD SPECIES LIST

A number of other birds may visit and nest on Banksland. Some may only rarely occur and do not routinely breed on the island. A list of these birds, including those already mentioned, is presented below. It is recognized that these species may be important components of the ecosystem on which other species depend. These species are also of potential economic value as they represent an important focal point and attraction for tourists. As with other species, protection should be given to important habitats or ecological relationships when these become known.

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
American Golden Plover	
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
Brownheaded Cowbird	
Buff-breasted Sandpiper	South America, especially Argentina
Canada Goose / Uluagullik	North Mexico to limits of open water
Common Eider / Qaugaq	West coast of Alaska and Aleutians
Glaucous Gull / Nauyavatkusiq	West coast of Alaska, Canada, U.S. to southern California
Green-winged Teal	
Gyrfalcon / Kijgavik	West coast of Alaska, Canada, U.S. to southern California
****Horned Lark	Vancouver Island, Mexico, South America
Iceland Gull	Great Lakes and east coast to Maryland
King Eider / Qingaliq	Aleutians and northern west coast of North America
Lapland Longspur	Southern Canada to southern U.S.
Long-tailed Jaeger	Migrant at sea, well off-shore, Southern Hemisphere
Northern Fulmar	
Northern Hawk Owl	

Northern Pintail	Along Pacific coast, Texas, Mississippi Delta, California, Mexico
Pacific Loon / Malri	Along coast of S.E. Alaka to N.W. Mexico
Parasitic Jaeger	At sea from southern U.S. to Tierra del Fuego
Pectoral Sandpiper	South America
Peregrine Falcon / Kijgavik	Sparsingly 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-throated Loon / Qaqsauq	Along coast to northern Mexico and Florida
Red-winged Blackbird	
Rock Ptarmigan	Some withdrawal from higher to lower elevations
Ross' Goose	
Ross' Gull	
Rough-legged Hawk / Qilgiq	Southern Canada to southern U.S. but rarely Mexico
Ruddy Turnstone	Coastal U.S. Hawaii
Sabine's Gull	In Pacific to Chile, local in Atlantic
Sandering	West coast of North America
Sandhill Crane / Tatijgaq	Mexico, locally in southern U.S.
Scaup	
Scoter	
Semi-palmated Plover	
Semi-palmated Sandpiper	Mainly east of Rockies to South America
Short-eared Owl	Southern U.S. to central Mexico
Snow Bunting	West coast and central North American, in open country.
Snow Goose / Kanguk	California, New Mexico, northern Mexico
Snowy Owl / Ukpik	Cyclic winters to central U.S., Canada except Arctic
Tundra Swan / Qugyuk	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.
Whimbrel	
White-fronted Goose / Nirliq	Mexico, Gulf states and occasionally north to Dakotas
White-Rumped Sandpiper	South America
Willow Ptarmigan / Aqjigivik	Resident year-round
Yellow-billed Loon	Along coast of northwestern North America

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

Sachs River, Masik River, Kellet River, Thomsen River, Fish Lake, Raddi Lake, Swan Lake, De Salis River, Bernard River, Rufus River, Atitok River, Capron Lake, Kuptan Lake, 25 Minute Lake, Jean Lake, Roger Lake, Middle Lake, Muskox River, Johnson Point Lakes, Headwater Lake, Sik Sik Lake, Red Fish lake, Black Lake; most deep lakes have Arctic char.

Management Plans/Agreements

None.

Recent Research

- ISR Community-Based Monitoring Program (CBMP) summer char monitoring in 2014 at Capron, Raddi, Fish, Kuptan, and Middle lakes.
- Scientific and Inuvialuit knowledge for community monitoring of Arctic char (Jennie Knopp, Trent University, 2009-2012)
- Preliminary assessment of fish populations in Capron, Raddi, Fish, Middle, and Kuptan lakes, 1993-1994 (DFO).
- Genetics work in 1994.
- Preliminary assessment for char done at Jesse Harbour in 1989.

Research Priority

High: General interest in knowing more about fishing resources of Banksland.

Population Status

Unavailable.

Population Goal

Unspecified. Maintain adequate numbers to sustain (current/ increased) harvest.

Conservation Measures

- Release smaller fish.
- Take only what you need.
- Suggested mesh size at 9 - 12.7 cm (3.5 - 5 in.).
- Identify and protect important habitats from disruptive land uses.

References

- Knopp, J.A., Furgal, C.M., Reist, J.D., Babaluk, J.A., Sachs Harbour Hunters and Trappers Committee and Olokhtomiut Hunters and Trappers Committee. 2012. Indigenous and ecological knowledge for understanding Arctic char growth. In: C. Carothers, K.R. Criddle, C.P. Chambers, P.J. Cullenberg, J.A. Fall, A.H. Himes-Cornell, J.P. Johnsen, N.S. Kimball, C.R. Menzies, and E.S. Springer (eds.), *Fishing People of the North: Cultures, Economies, and Management Responding to Change*. Alaska Sea Grant, University of Alaska Fairbanks.
- 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.
- Stephenson, S.A. 2010. Fishes of the Thomsen River, Banks Island, Northwest Territories. *Can. Manuscr. Rep. Fish. Aquat. Sci.* 2944: vi + 44 p.

LAKE TROUT (*Salvelinus namaycush*) / IQALUAKPAK

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-September) 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

Granny Lake, Middle Lake, Fish Lake, Kuptana Lake, Capron Lake, Sik Sik Lake and others. Most lakes on Banks Islands have lake trout.

Management Plans/Agreements

None

Research Priority

High: Community would like more information on fishing resources as well as appropriate mesh size.

Population Goal

Unspecified. Maintain adequate population to support community harvest needs.

Conservation Measures

- Release smaller fish.
- Take only what you need.
- No commercial fishing in lakes.
- Identify and protect important habitats from disruptive land uses.

References

- Kissinger, B.C., Gantner, N., Anderson, W.G., Gillis, D.M., Halden, N.M., Harwood, L.A. and Reist, J.D. 2015. Brackish-water residency and semi-anadromy in Arctic lake trout (*Salvelinus namaycush*) inferred from otolith microchemistry. J. Great Lakes Res. Supp. (*in press*)

- Roux, M.-J., Harwood, L. A., Illasiak, J., Babaluk, J.A., and de Graff, N. 2011. Fishery resources and habitats in a headwater lake of the Brock River, NT, 2003-2005. Can. Manuscr. Rep. Fish. Aquat. Sci. 2932: viii + 61 p.
- Roux, M.-J., Sparling, P., Felix, J., and L.A. Harwood. 2014 Ecological Assessment of Husky Lakes and Sitidgi Lake, Northwest Territories, 2000-2004. Canadian Technical Report of Fisheries and Aquatic Sciences 3071.
- Stephenson, S.A. 2010. Fishes of the Thomsen River, Banks Island, Northwest Territories. Can. Manuscr. Rep. Fish. Aquat. Sci. 2944: vi + 44 p.



FISH SPECIES LIST

A variety of species of fish occur within the freshwater and marine environments of Banksland. Most lakes and rivers on Banksland support fish populations. A partial list of these including those already mentioned 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*) / **Qaluhaq**
 Capelin (*Mallotus villosus*)
 Fourhorn Sculpin (*Myoxocephalus quadricornis*) / **Kanayuq**
 Greenland Cod (*Gadus ogac*)
 Saffron Cod (*Elegiums navaga*)
 Sand Lance (*Amodytes* sp.)
 Starry Flounder (*Platichthys stellatus*)

Freshwater

Arctic Char (*Salvelinus alpinus*) / **Iqalukpik**
 Broad Whitefish (*Coregonus nasus*) / **Aanaaktiq**
 Chum Salmon (*Oncorhynchus keta*)¹
 Lake Trout (*Salvelinus namaycush*) / **Iqaluakpak**
 Lake Whitefish (*Coregonus clupeaformis*) / **Pikuktuuq**
 Nine-spine Stickleback (*Pungitius pungitius*)
 Pink Salmon (*Onchorhynchus gorbuscha*)¹
 Sockeye Salmon (*Onchorhynchus nerka*)¹

1. These fish spend part of their life in salt water and part in fresh water. This lifestyle is called "anadromous".

CRABS, SHRIMP, CLAMS AND SCALLOPS

The Community of Sachs Harbour is aware that the coastal waters support populations of crabs, shrimp, clams and scallops. A preliminary study of a fishery for these species was conducted by the FJMC in 1988. The study identified six species of shellfish and shrimp which may occur in the area and have commercial importance:

Clinorcardium ciliatum (cockle shell)
Serripes groenlandicus (clam)
Mytilus edulis (Bay mussel)
Delectopecten greenlandicus (Greenland scallops)
Pandalus montagui tridens (Striped shrimp)
Pandalus borealis (Pink shrimp)

It is recognized that these species may be important components of the food chain on which other animals depend, as well as potential food sources for subsistence and commercial use. As with other species, protection should be given to important habitats or ecological relationships where these become known.

The Community places a high priority in obtaining more information on these species. In 1999 and 2000, the Department of Fisheries and Oceans conducted an FJMC sponsored small scale exploratory fishery for shrimp and scallops. This study will be used to determine the feasibility of commercial fishing and help assess the ecological impacts of commercial fishing.

INSECTS

A great number of terrestrial and aquatic insects occur on Banksland. It is recognized that these species may form an important part of the food chain on which other animals (e.g. waterfowl) or plants depend. Some species such as mosquitoes also have a significant effect on the behaviour and habitat use patterns exhibited by other animals (e.g. caribou) while others, such as butterflies, may be a potential tourist attraction.

As with other species, protection should be given to important habitats and ecological relationships (as appropriate) where these become known.



PLANTS OF BANKSLAND ARRANGED BY FAMILIES

A large number of plant species occur on Banksland. They provide an essential component of the ecosystem on which all other living animals on the island depend. They provide food and shelter for wildlife, influence water quality, provide food for humans and make a valued contribution to the overall appearance of the land. As with other species, protection should be given to important habitats and ecological relationships when these become known.

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. Community also interested in edibility of local mushrooms.

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.

List compiled by Dr. S. Aiken, Canadian Museum of Nature.

Plant Species List

Asteraceae, daisy family

Antennaria compacta (syn. = *Antennaria friesiana* subsp. *compacta*)

Antennaria friesiana (syn. = *Antennaria friesiana* subsp. *friesiana*)

Arnica angustifolia (syn. = *Arnica alpina* subsp. *angustifolia*)

Artemesia richardsoniana

Artemesia tilesi (syn. = *Artemesia tilesii tilesii*)

Aster yukonensis (rare)

Aster pygmaeus

Leucanthemum integrifolium (syn. = *Chrysanthemum integrifolium*)

Crepis nana (syn. = *Crepis nana* var. *nana*)

Erigeron compositus

Erigeron eriocephalus

Erigeron grandiflorus

Erigeron humilis (syn. = *Erigeron unalaschkensis* cespitose)

Matricaria ambigua (Recorded by Porsild (1957))

Matricaria maritima subsp. *phaeocephala* (syn. = *Tripleurospermum phaeocephalum*).

Petasites frigidus locally used as a food plant.

Senecio atropurpureus subsp. *frigidus*

Senecio congestus
Senecio hyperborealis
Taraxacum alaskanum (syn.=*Taraxacum pumilum* recorded Porsild (1957))
Taraxacum officinale subsp *ceratophorum* (syn.=*Taraxacum ceratophorum* and *Taraxacum lacerum*)
Taraxacum phymatocarpum (syn. = *Taraxacum hyperarcticum*).

Betulaceae, birch family

Betula glandulosa (Recorded on original Conservation Plan list. Not recorded in Porsild (1957). Recorded from Melville Island)

Boraginaceae, lungwort family

Mertensia maritima (syn.= *Mertensia maritima* subsp. *maritima*)

Brassicaceae (Cruciferae), Draba family

[*Braya humilis* (*Braya humilis purpurascens* is a mixed name).]
Braya humilis (syn. = *Braya humilis* subsp. *arctica*).
Braya thorild-wulffii (syn.= *Braya purpurascens*)
Cardamine digitata (syn.=*Cardamine hyperborea*)
Cardamine pratensis var. *angustifolia* (syn. = *Cardamine pratensis* subsp. *angustifolia*)
Cochelaria officinalis subsp. *arctica* (syn.=*Cochelaria officinalis* subsp. *arctica*)
Descurainia sophioides
Draba alpina (syn. = *Draba micropetala*)
Draba cinerea
Draba glabella (Recorded Porsild (1957)).
Draba norvegica (syn.=*Draba hirta*)
Draba lactea
Draba corymbosa (syn.= *Draba bellii* and *Draba macrocarpa*)
Draba nivialis
Draba oblongata (syn. = *Draba groenlandica*)
Draba subcapitata
Erysimum pallasii (wallflower)
Eutrema edwardsii
Lesquerella arctica
Parrya arctica (Recorded Porsild (1957))

Campanulaceae, bluebell family

Campanula uniflora

Caryophyllaceae, pink family

Arenaria rossii (syn.=*Minuartia rossii*)
Arenaria rubella (syn.= *Minuartia rubella*)
Arenaria sajanensi (syn. =*Minuartia biflora*)
Arenaria peploides var. *diffusa* (syn.= *Honckenya peploides*)
Ceratium arcticum (Recorded Porsild (1957))
Cerastium beeringianum
Cerastium regelii
Silene involucrata subsp. *involucrata* (syn.=*Melandrium affine*)
Silene uralensis subsp. *uralensis* (syn.=*Melandrium apetalum*)
Silene sorensenis (syn. =*Melandrium trifolium*)
Sagina intermedia
Silene acaulis var. *exscapa* (syn.= *Silene acaulis*)
Stellaria crassipes (syn.= *Stellaria edwardsii*)
Stellaria humifusa
Stellaria longipes (syn. = *Stellaria laeta*)

Cyperaceae, sedge family

Carex aquatilis var. *stans* (syn. = *Carex aquatilis*)

Carex atrofusca
Carex bicolor
Carex bigelowii subsp. *lugens* (Not in Conservation Plan list)
Carex capillaris (Not in Porsild (1957), but nearby on Victoria)
Carex gracilis (Not in Porsild (1957), but nearby on Victoria Island)
Carex glareosa (syn. = *Carex glareosa* subsp. *glareosa*) (Not in Porsild (1957), but nearby on Victoria Island)
Carex marina subsp. *marina* (syn. = *Carex amblyorhyncha*) Not in Porsild (1957) . Nearby on Victoria Island.
Carex maritima
Carex membranacea
Carex fuliginosa (syn. = *Carex miscandra*)
Carex rupestris
Carex saxatilis
Carex scirpoidea
Carex subspathacea
Carex ursina
Carex vaginata
Eriophorum angustifolia subsp. *angustifolia* (Recorded from Cape Kellett, Southern Banks, Porsild (1957).
Eriophorum angustifolia subsp. *triste* (syn. = *Eriophorum triste*)
Eriophorum callitrix
Eriophorum scheuchzeri (syn. = *Eriophorum scheuchzeri* var. *scheuchzeri*)
Eriophorum vaginatum (syn. = *Eriophorum vaginatum* subsp. *spissum*)
Kobresia myosuroides
Kobresia sibirica (Coast next to Victoria Island)
Kobresia simpliciuscula (Coast next to Victoria Island)

Empetraceae, crowberry family

Empetrum nigrum subsp. *hermaphroditum* (Not recorded for Banks Island in Porsild (1957). One location on Victoria Island.)

Ericaceae, bilberry family

Arctostaphylos alpina
Arctostaphylos rubra Apparently occurs in Sachs Harbour.
Cassiope tetragona (syn. = *Cassiope tetragona* subsp. *tetragona*)
Ledum palustre subsp. *decumbens* (Not recorded for Banks Island in Porsild (1957))
Rhododendron lapponicum
Vaccinium uliginosum (syn. = *Vaccinium uliginosum* subsp. *microphyllum*)
Vaccinium vitis-idaea subsp. *minus* (Not recorded for Banks Island Porsild (1957))

Equisetaceae, horsetail family

Equestum arvense
Equisetum scirpoides
Equisetum variegatum

Fabaceae (Leguminosae), pea family

Astragalus australis (syn. = *Astragalus aboriginum*)
Astragalus alpinus (syn. = *Astragalus alpinus* subsp. *alpinus* and *Astragalus alpinus* subsp. *arcticus*)
Astragalus eucosmus (Not recorded for Banks Island, Porsild (1957))
Hedysarum alpinum var. *alpinum* (syn. = *Hedysarum alpinum* subsp. *americanum*)
Hedysarum boreale subsp. *mackenziei*
Lupinus arcticus
Oxytropis arctica
Oxytropis borealis var. *hudsonica*. Recorded from Banks Island as *Oxytropis glutinosa* (Porsild 1957).
Oxytropis campestris subsp. *gracilis* (syn. = *Oxytropis monicola*)
Oxytropis maydelliana
Oxytropis nigrescens var. *uniflora* (syn. = *Oxytropis nigrescens* subsp. *arctobia* or *Oxytropis arctobia*)

Gentianaceae

Gentiana propinqu subsp. *propinqua* (syn.= *Gentiana propinqu* subsp. *arctophila*)

Hippuridaceae, mare's tail family

Hippuris vulgaris

Juncaeae, rush family

Juncus biglumis

Juncus castaneus (syn.=*Juncus castaneus* subsp. *castaneus*) (Not recorded in Porsild (1957), but nearby on Victoria)

Juncus albescens (syn. =*Juncus triglumis* subsp. *triglumis*)

Luzula arctica

Luzula confusa

Liliaceae, lily family

Tofieldia coccinea (Recorded Porsild (1957))

Tofieldia pusilla (Not recorded in Porsild (1957), but nearby on Victoria)

Linaceae, flax family

Linum lewisii (syn. =*Linum perenne* subsp. *lewisii*). (Not recorded for Banks Island in Porsild (1957). Recorded in original Conservation List)

Onagraceae, fireweed family

Epilobium arcticum (syn.=*Epilobium davuricum*)

Epilobium latifolium

Papaveraceae, poppy family

Papaver radicum subsp. *radicum* (syn.= *Papaver lapponicum* subsp. *occidentale*)

Papaver kanei subsp. *kanei*

Papaver keelei (Recorded in Porsild (1957))

Plantaginaceae, plantain family

Plantago septata (Recorded from Banks Island but not on existing list)

Plumbaginaceae, leadwort family

Armeria maritima (syn. =*Armeria maritima* subsp. *arctica*)

Poaceae, grass family

Elymus alaskansus (including *Agropyron boreale* subsp. *boreale* and *A. boreale* subsp.

hyperarcticum syn. =*Agropyron violaceum* var. *hyperarcticum*)

Alopecurus borealis (syn. =*Alopecurus alpinus*)

Arctagrostis latifolia subsp. *latifolia* (syn. = *Arctagrostis latifolia* var. *latifolia*)

Arctophila fulva

Calamagrostis stricta subsp. *stricta* (syn. = *Calamagrostis neglecta*)

Calamagrostis purpurascens (Recorded from southern Banks Island in Porsild 1957)

Deschampsia cespitosa subsp. *brevifolia*

Deschampsia paramushirensis (syn.=*Deschampsia pumila*) (Not recorded Porsild (1957), but shown on Prince Patrick Island)

Dupontia fisheri subsp. *fisheri*

Festuca baffinensis

Festuca brachyphylla

Festuca rubra subsp. *richardsonii* (syn. = *Festuca rubra*)

Leymus mollis (syn.=*Elymus arenarius* subsp. *mollis* var. *villosissimus* and *Elymus arenarius* subsp.

mollis var. *mollis*)

Heirochloe alpina

Heirochloe pauciflora

Phippsia algida

Pleuropogon sabinei

Poa abbreviata

Poa alpigena (rare)
Poa alpigena var. *colpodea* (Recorded in Porsild (1957))
Poa arctica
Poa glauca
Puccinellia agrostidea (Recorded in Porsild (1957))
Puccinellia andersonii (rare)
Puccinellia angustata
Puccinellia phryganodes
Puccinellia vahliana (syn.= *Colpodium vahlianum*).
Trisetum spicatum (Recorded in Porsild (1957))
Trisetum sibiricum

Polemoniaceae

Phlox sibirica subsp. *richardsonii*
Polemonium boreale

Polygonaceae, buckwheat family

Oxyria digyna
Rumex arcticus
Polygonum viviparum

Polypodiaceae, fern family

Cystopteris fragilis (syn. = *Cystopteris fragilis* subsp. *fragilis*)
Dryopteris fragrans
Woodsia glabella

Primulaceae

Androsace chamaejasme var. *arctica* (Recorded in Porsild (1957))
Androsace septentrionalis
Primula stricta

Pyrolaceae

Pyrola grandiflora
Pyrola secunda (Not recorded in Porsild (1957))

Ranunculaceae, buttercup family

Anemone parviflora
Anemone patens (syn.=*Pulsatilla patens*)
Caltha palustris (syn. =*Caltha palustris* subsp. *arctica*)
Ranunculus gmelini (syn. =*Ranunculus gmelini* subsp. *gmelini*)
Ranunculus hyperboreus
Ranunculus nivalis
Ranunculus pedatifidus var. *affinis* (syn.= *Ranunculus pedatifidus* var. *affinis*)
Ranunculus pygmaeus (syn.= subsp. *pygmaeus*)
Ranunculus sabinei (syn. = *Ranunculus pygmaeus* subsp. *sabinei*)
Ranunculus sulphurus (syn.= *Ranunculus sulphurus* var. *sulphurus*)

Rosaceae, rose family

Dryas intergrifolia (syn. =*Dryas intergrifolia* subsp. *interifolia*)
Dryas punctata (Recorded Porsild (1957)).
Geum rosii (Not recorded for Banks Island by Porsild (1957) but found on Melville)
Potentilla chamissonis
Potentilla hookeriana subsp. *hookeriana* (syn. = *Potentilla hookeriana* subsp *hookeriana* var. *hookeriana*)
Potentilla hyperarctica
Potentilla pulchella
Potentilla rubicaulis
Potentilla vahliana

Rubus chamaemorus (rare) (Not recorded in Porsild (1957))

Salicaceae, willow family

Salix alaxensis (syn. = *Salix alaxensis* subsp. *alaxensis*)

Salix arctica (syn. = *Salix arctica* subsp. *arctica*)

Salix calcicola var. *calcicola* (Recorded as *Salix richardsonii* by Porsild (1957))

Salix nipoclada

Salix polaris (syn.= *Salix polaris* subsp. *pseudopolaris*)

Salix reticulata

Saxifragaceae, saxifrage family

Chrysopenium tetrandrum

Saxifraga aizoides

Saxifraga caespitosa

Saxifraga cernua

Saxifraga flagellaris subsp. *platysepala*

Saxifraga foliosa

Saxifraga hieracifolia (Not recorded in Porsild (1957))

Saxifraga hirculus

Saxifraga nivalis

Saxifraga oppositifolia (syn. = *Saxifraga oppositifolia* subsp. *oppositifolia* and subsp. *smalliana*)

Saxifraga rivularis

Saxifraga tenuis (Recorded north east tip of Banks Island by Porsild (1957))

Saxifraga tricuspida

Scrophulariaceae, fernweed family

Castilleja pallida subsp. *elegans* (syn.= *Castilleja elegans*)

Pedicularis arcticus (syn.= *Pedicularis langsdorffii* subsp. *arctica*)

Pedicularis lanata (syn. = *Pedicularis kanei* subsp. *kanei*)

Pedicularis capitata

Pedicularis sudetica subsp. *albolabiata* Hultén (subspecies not recognized by Porsild 1957)

Pedicularis lanata (Recorded in Porsild (1957)).

In Arctic Islands but not yet recorded from Banks Island

Crassulaceae, stonecrop family/

Diapensiaceae

Haloragaceae, watermilfoil family/

Lentibulariaceae, bladderwort family/

Lycopodiaceae, club-moss family. (Recorded from Melville Island)

Orchidaceae, orchid family/

Portulacaceae. *Montia lamprosperna* has been recorded from Western Melville Island. *Potamogetonaceae*, pondweed family.

HARVEST SEASONS IN THE SACHS HARBOUR PLANNING AREA

Jan 1-15	Jan 15-31	Feb 1-15	Feb 15-28	Mar 1-15	Mar 15-31	Apr 1-15	Apr 15-30	May 1-15	May 15-31	Jun 1-15	Jun 15-30
furbearers	furbearers	furbearers	furbearers	furbearers	furbearers	furbearers	furbearers	birds	birds	birds	
polar bear	polar bear	polar bear	polar bear	polar bear	polar bear	polar bear	polar bear	polar bear	polar bear		
muskox	muskox	muskox	muskox	muskox	muskox	muskox	muskox	muskox			
caribou	caribou	caribou	caribou	caribou	caribou	caribou	caribou	caribou	caribou	caribou	caribou
						fish	fish	fish	seal	seal	fish

Jul 1-15	Jul 15-31	Aug 1-15	Aug 15-31	Sep 1-15	Sep 15-30	Oct 1-15	Oct 15-31	Nov 1-15	Nov 15-30	Dec 1-15	Dec 15-31
						furbearers	furbearers	furbearers	furbearers	furbearers	furbearers
muskox	muskox	muskox	muskox	muskox	muskox	muskox	muskox	muskox	muskox	muskox	muskox
caribou	caribou	caribou	caribou	caribou	caribou	caribou	caribou	caribou	caribou	caribou	caribou
seal	seal	seal	seal	seal							
fish	fish	fish	fish	fish							
										polar bear	polar bear

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

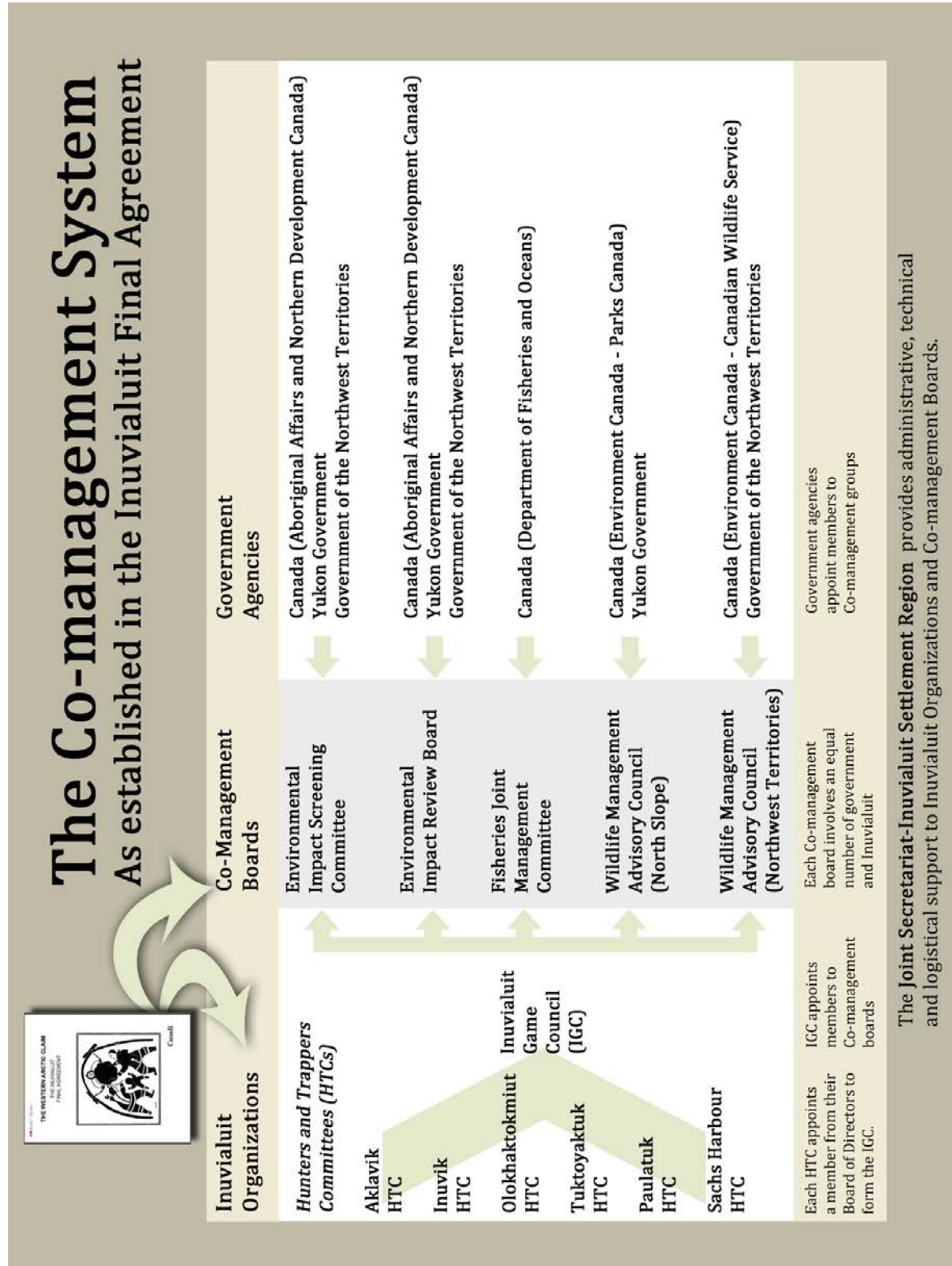
GOALS

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.

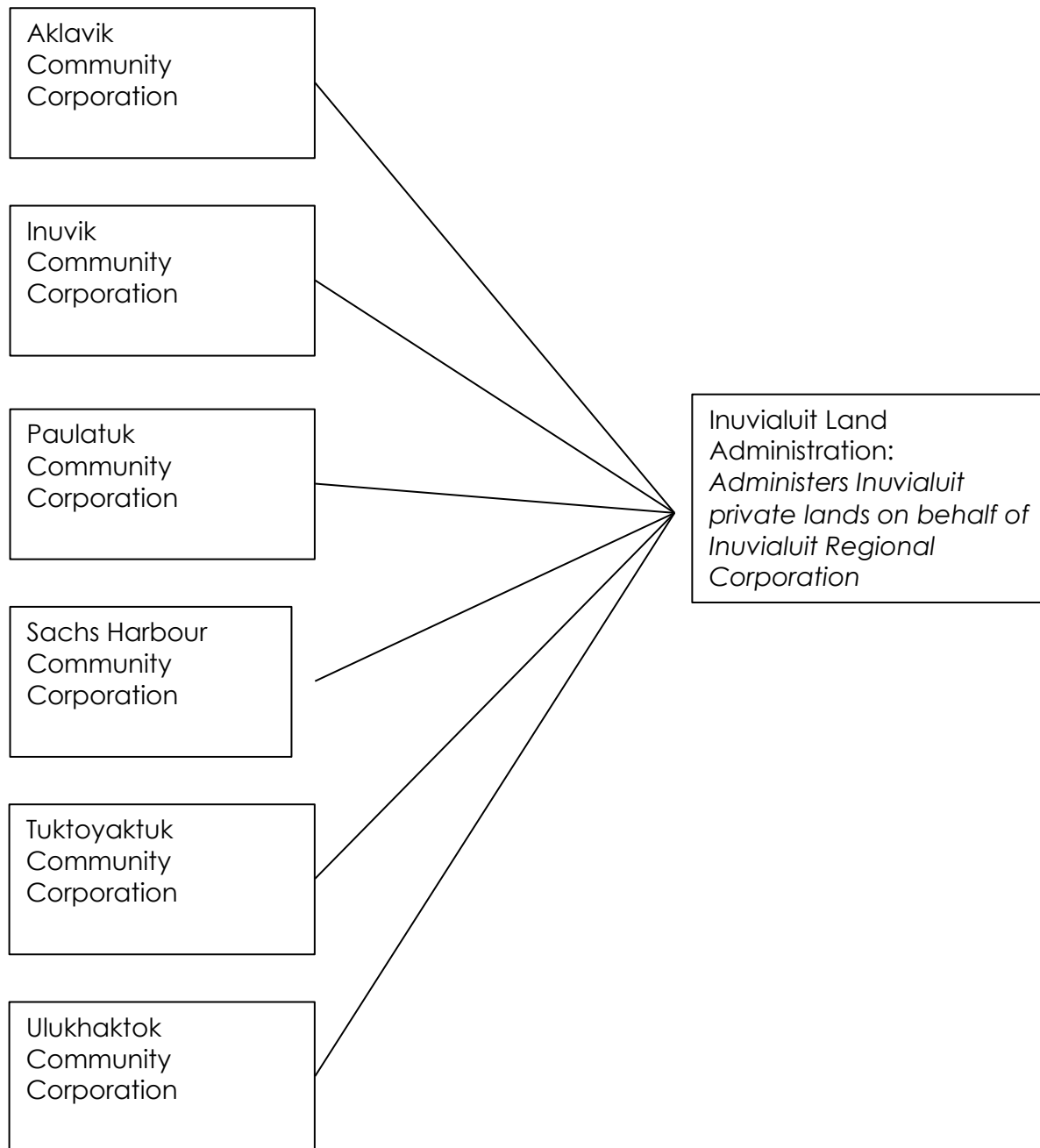
PRINCIPLES

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 wellbeing.
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.

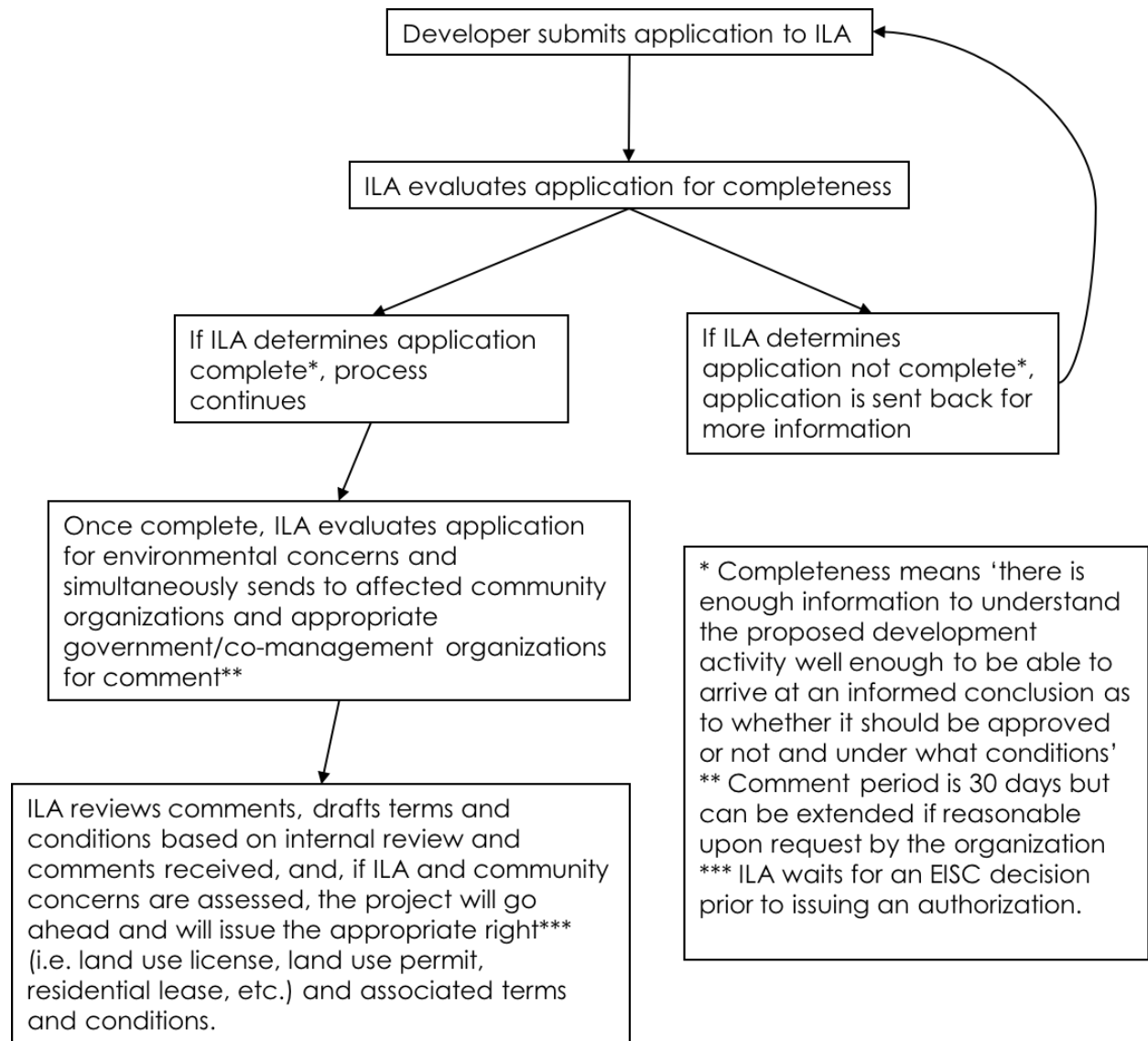
APPENDIX C: ORGANIZATION CHART FOR RENEWABLE RESOURCE MANAGEMENT UNDER THE INUVIALUIT FINAL AGREEMENT



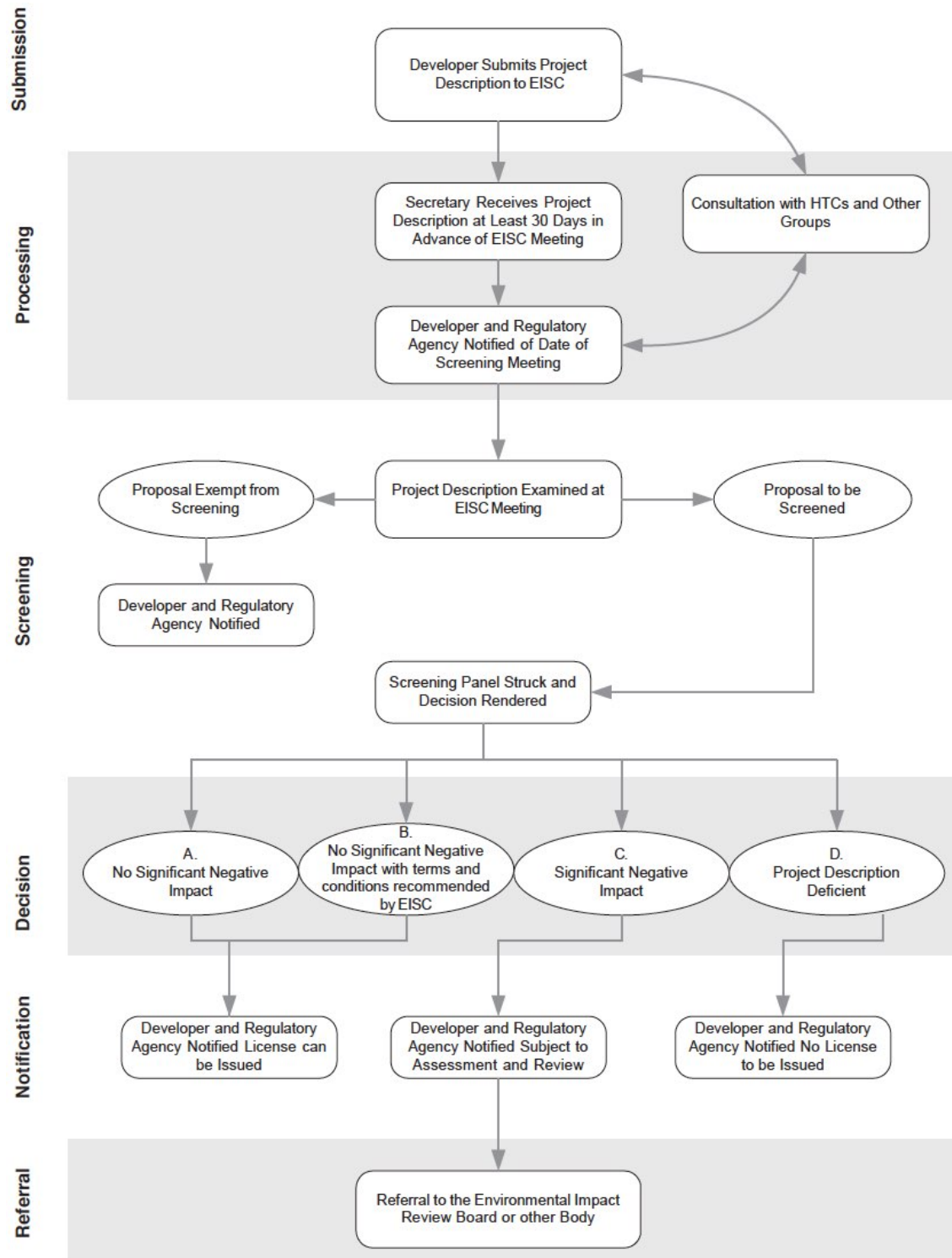
APPENDIX D: ORGANIZATION CHART FOR PRIVATE LAND MANAGEMENT UNDER THE INUVIALUIT FINAL AGREEMENT



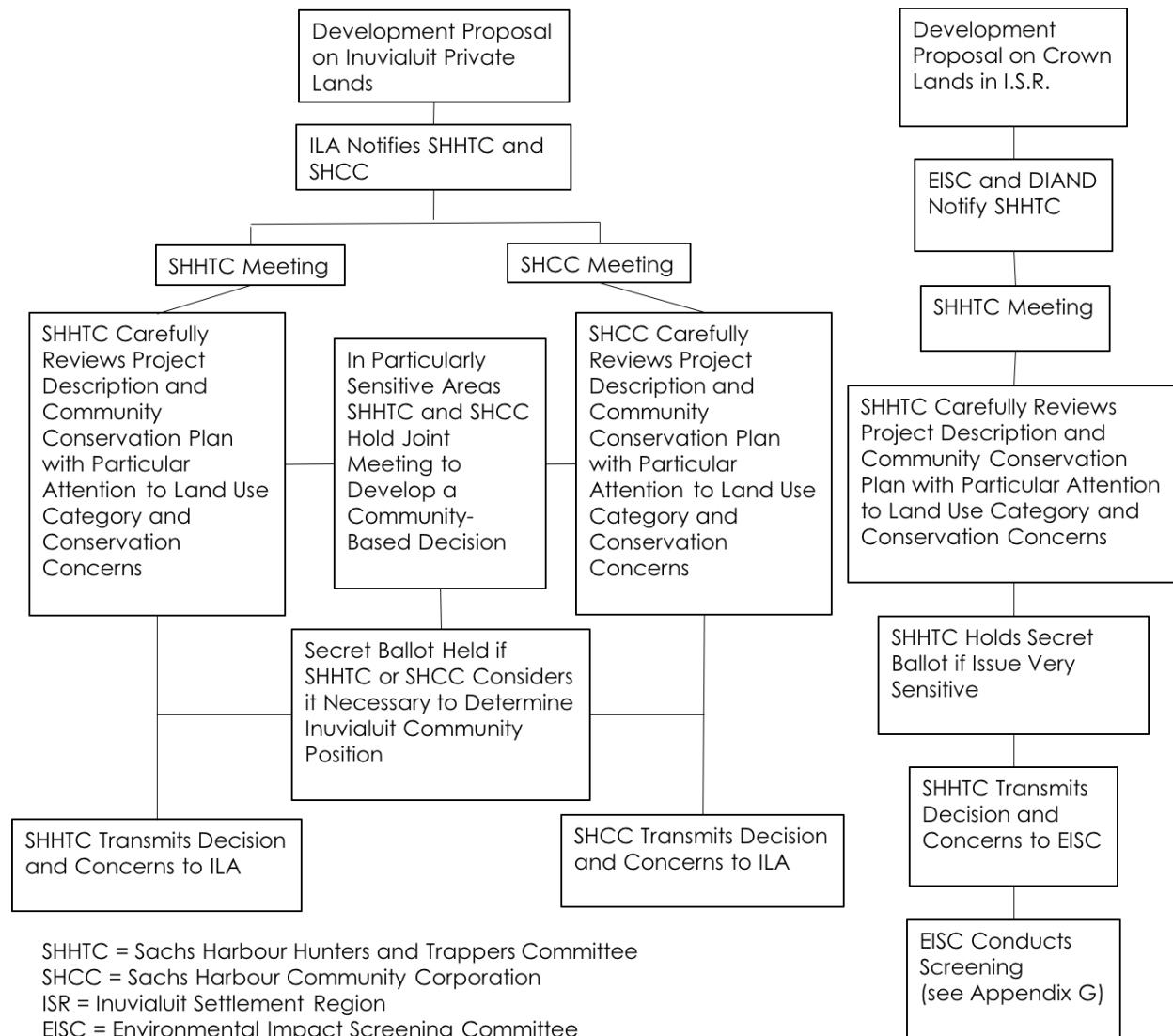
APPENDIX E: INUVIALUIT LAND ADMINISTRATION APPLICATION REVIEW PROCESS



APPENDIX F: INUVIALUIT SETTLEMENT REGION ENVIRONMENTAL IMPACT SCREENING AND REVIEW PROCESS



APPENDIX G: SACHS HARBOUR LAND USE DECISION PROCESS



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;
- (e) 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;
- (f) 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;
- (g) 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;
- (h) 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
- (i) 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.