

Letter of Transmittal

The Nunavut Planning Commission has prepared the *North Baffin Regional Land Use Plan* in accordance with the procedure for public consultation and government review set out in Part 5, Article 11 of the *Nunavut Land Claims Agreement*.

The plan was submitted to government for final consideration in May, 2000, and was approved in June, 2000.

In preparing the plan, the Nunavut Planning Commission has attended closely to the views expressed by individuals and communities in the region and by Inuit representatives and the other participants in the planning process. Every effort has also been made to address the comments offered by government.

We, the undersigned members of the Nunavut Planning Commission, believe that the plan contained in the following pages incorporates the best concepts from all of these sources. We believe that with appropriate regard and action by government, Inuit land owners, and all affected agencies, this plan can guide and direct development in the region for several years to come.

We wish to sincerely thank all those who contributed their time and thoughts to the preparation of this plan. We also wish to recognize the contribution of our predecessors. David Mablick (Chairperson), Kik Shappa (Vice-Chairperson), David Iqaqrialu, Larry Audlaluk and Robert Hornal (Members) served on the Lancaster Sound Regional Land Use Commission that prepared the original *Lancaster Sound Regional Land Use Plan* submitted in 1989.

Our predecessors on the Nunavut Planning Commission, responsible for the work on this plan between 1996 and 1999, include Akalayok Qavavau (Vice-Chairperson), Louis Pilakapsi, Loseeosee Aipellie, Jobie Nutaraq and Ron Tologanak (Members).

Louis Pilakapsi,

1878

Member

Bob Lyall, Chairperson Loseeosee Aipellie,

Member

Peter Suwaksiork,

Member

Jobie Nutaraq, Member

Moravay

Bob Aknavigak, Member

Bob Almarigan

Akalayok Qavavau,

Member

Ministerial Approval

We, the undersigned, are pleased to approve, on behalf of the Government of Canada and the Government of Nunavut, the *North Baffin Regional Land Use Plan* 2000 which is effective as of June 20, 2000.

Robert Nault

Minister of Indian Affairs and Northern Development

Government of Canada

Peter Kilabuk

Minister of Sustainable

Milabul

Development

Government of Nunavut

Notes to Readers

Previous Plan

The original *Lancaster Sound Regional Land Use Plan* was approved by government in 1990. Following the signing of the *Nunavut Land Claims Agreement* (NLCA) in 1993, and the establishment of the Nunavut Planning Commission (NPC) in 1996, the plan has been reviewed and revised to ensure that it conforms to the NLCA. The review process is described in Chapter 1. This document is the revised plan, the *North Baffin Regional Land Use Plan*.

Acronyms

Many agencies are involved in land management in Nunavut, and virtually all of them are more commonly referred to by their acronym than by their full name. The same practice is, therefore, followed in this land use plan. Two lists are provided in Appendix A to aid readers who may not be familiar with some of the acronyms used in land management in Nunavut. The first list is sorted alphabetically by acronym, the second is sorted by full name.

Definitions

A number of terms that are used frequently in land and resource management in Nunavut, and throughout this land use plan, are defined in Appendix B.

Summary of Terms

A number of numerically ordered Terms are developed and discussed in Chapter 3. For easy reference, these are summarized in Appendices C-E.

Cover photo of Mount Herodier on Bylot Island by Mike Beedell.

Acknowledgements and Dedication



The late Louis Pilakapsi, a former NPC board member, served his people and his homeland in many ways. This land use plan is dedicated to his memory.

The NPC would like to acknowledge all those who contributed to the development of the *North Baffin Regional Land Use Plan:* the Qikiqtani Inuit Association, all the local Hunters and Trappers Organizations, the Community Land and Resources Committees, Hamlet Councils, Nunavut Tunngavik Inc., industry, federal and territorial departments and agencies, and our staff, both in the Baffin Region and elsewhere.

The greatest thanks go to the people of the North Baffin, who participated with enthusiasm in all stages of this review.

Changes to this plan reflect first and foremost the concerns, goals and objectives of the people of the region. The members of the NPC learned a lot from this review and trust that the people of the North Baffin will feel that it has been worthwhile.

This plan is dedicated to the memory of Louis Pilakapsi, who served his people and his land in many capacities, including membership in the NPC from 1996 to 1999.

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INTRODUCTION

The NPC is pleased to present a revised regional land use plan to guide land use in the North Baffin Planning Region. This plan was developed after more than three years of public consultation with members of all regional communities, Inuit organizations, industry, government and other interested parties.

At this early stage in the evolution of land use planning in the Nunavut Settlement Area, the NPC fully expects that the degree of precision of this plan is less than future plans will be able to provide. There are many reasons for this, including the limited availability of planning data for such a vast expanse of land, and the relative newness of the requirements of land use planning in this part of Canada. Another important consideration is the importance the NPC places upon putting plans into effect in Nunavut as early in its mandate as is feasible. Moreover, many of the requirements of this plan involve commitments for action by governments and government agencies. They do not apply directly to individual project proposals.

It is also important to recognize that land use planning in this part of Canada particularly in the context of the NLCA land and resource management system - does not necessarily resemble the administrative process by which municipal officials determine the conformity of land use applications with local zoning by-laws in southern Canada. Again, Nunavut is vast - the scale of land use planning alone in this territory suggests that plans will be broad in their scope. This territory is subject to land use and resource distribution patterns more uncertain and shifting than those that characterize towns and cities. Also, the NPC is not a permitting agency, land use planning under the NLCA is a policy-making function whose regulatory effect is intended to be broad. This understanding of the NPC's mandate is confirmed by Section 11.3.1 of the NLCA, which defines a land use plan as a "document ... for the establishment of

We the five communities in the North Baffin, worked on this plan. The time when there was a request for oil exploration on Lancaster Sound, we were concerned about our waters and we didn't want them contaminated. We worked on this plan when it had no conformity to the Agreement at that time. We needed a treaty because of our animals. Everything is written in the Agreement. In the Agreement it tells us to plan our waters and lands... We Inuit need a policy in our lands that were planned for implementation from our ancestors. Because of this reason, this hearing is important to me. Inuit culture is included in this plan as we had consulted the Elders and people who know this land to implement the plan. Inuit culture should not be excluded in this plan. From my experiences in land use planning, I wish to see this original plan be changed and revised to [comply with] the NLCA...

David Iqaqrialu Lancaster Sound Regional Land Use Plan Review Hearing Pond Inlet, 27 May 1997



Guided by public consultation: in Resolute, members of regional Community Lands and Resources Committees discuss archaeological and cleanup sites.

Photo by Jayko Alooloo

objectives and guidelines for short-term and long-term development" (emphasis added).

Making decisions about particular cases on the basis of a set of policies, principles and standards, rather than specific and predetermined land use designations, is an established method of land use planning.

The original plan was designed to be integrated with the NLCA land claim settlement. The NLCA is now being implemented and there is a requirement to ensure that all existing land use plans comply with its provisions. To that end, the NPC has reviewed the plan and made revisions to ensure that it complies with the NLCA.

In its review, the NPC decided to adhere to the principles laid out in the original plan, since the situation in the North Baffin has not changed appreciably from when that plan was developed. There is still little likelihood of major industrial development going ahead in the near future.

The life of the plan is approximately five years. The plan may be amended during this time. This time period may be extended or shortened depending on the rate of change within the region. Most of the recommended actions should be implemented shortly after the plan is approved, through changes or modifications to current government, industry and community practice. Where this is not the case, the NPC has made comments as to the appropriate timing.

CHAPTER 1 SETTING THE STAGE FOR PLANNING

In September 1986, on the advice of the NWT Land Use Planning Commission, the Minister of DIAND and the Minister of Renewable Resources (GNWT) appointed a six person Regional Commission to prepare a Land Use Plan for the Lancaster Sound Region. In October 1986, the Ministers gave the NWT Land Use Planning Commission general terms of reference for the Regional Commission and asked that more detailed terms of reference be prepared for the Regional Commission.

Lancaster Sound Regional Land Use Plan

p. 65.

1.1 What is the North Baffin Regional Land Use Plan?

The nature of land use planning has not changed since the original *Lancaster Sound Regional Land Use Plan* was approved in 1990. That plan, which was put together by the former Lancaster Sound Regional Land Use Planning Commission, pointed out that there was no longer pressure for large-scale industrial development, as there had been in the late 1970s. Nevertheless, there continued to be pressures on the land, water and communities in the region:

... renewable resource use, shipping, and research are of continuing importance. Activities related to tourism and national defence are increasing. Many land users are advocating the need for protected areas. Land claims are being negotiated.¹

Since the original plan was approved, the NLCA has come into effect. The NLCA creates the NPC as an Institution of Public Government and establishes a process of land use planning throughout Nunavut. Given the nature of land use in the region now and in the immediate future and the fact that there are no large-scale development proposals requiring specific parcels of land, the NPC feels it would be inappropriate to allocate land uses to particular areas. Instead, land users want a balance between uses in the region. Based on its review and on consultations with people in the communities and other interested parties, the NPC feels that general direction on how land should be used and how land users should cooperate in their use of the land continues to be the best way to establish a balance between users. A similar philosophy is guiding land use planning elsewhere in Nunavut.



Working on land use planning in Pond Inlet, 1987. Special attention has been devoted to protecting and promoting the well-being of Inuit and IOL in land use planning.

Photo by Arthur Boutilier

1.2 Principles Guiding Development of the Revised Plan

The primary purpose of the land use plan is to ensure the well-being of the communities and permanent residents of the North Baffin Planning Region, while still taking into account the interests of all Canadians. When the plan was being prepared, the fundamental considerations were the values and priorities of the people of the Region and the importance of the resources. This plan considers that the social, economic and cultural aspects of land use are inseparable from the biophysical considerations.

The following principles guided review of

the original *Lancaster Sound Regional Land Use Plan*. The NPC finds that they are still endorsed by the people of the region and other participants in the process.

Land use planning must be directed towards supporting and enhancing local knowledge as it relates to the relationships between land and people.

i) Planning Principles under the NICA

In conducting its review, the NPC was guided, in particular, by the following principles contained in the NLCA:

 the primary purpose of land use planning in the Nunavut Settlement Area shall be to

protect and promote the existing and future well-being of those persons ordinarily resident in communities of the Nunavut Settlement Area, taking into account the interests of all Canadians; special attention shall be devoted to protecting and promoting the existing and future well-being of Inuit and Inuit Owned Lands (11.2.1 (b));

- the purpose of a land use plan shall be [in addition to those stated above] ... to protect, and where necessary, to restore the environmental integrity of the Nunavut Settlement Area (11.3.2);
- in the development of a regional land use plan, the NPC shall give great weight to the views and wishes of municipalities in the areas for which planning is being conducted (11. 7.3);
- land use plans shall take into account Inuit goals and objectives for Inuit Owned Lands (11.8.2).

ii) Compliance with the NLCA

Regional land use planning is an important part of the land and resource management regime that has been established through the NICA. The NICA confirms the importance of an open planning process and lays out the relationship between the NPC and other comanagement bodies. Regional plans will serve as the first level of review for development proposals. The Implementation Contract for the NICA recognizes that the original Lancaster Sound Regional Land Use Plan is a completed plan, but that it requires "review".

The NPC has revised the original plan in order to meet the requirements of the NLCA. Where appropriate, institutions and bodies created through the land claim have been referenced.

iii) Land Use Planning on Inuit Owned Lands

Section 11.8.2 of the NLCA states:

The land use planning process shall apply to Inuit Owned Lands. Land use plans shall take into account Inuit goals and objectives for Inuit Owned Lands.

It is important to recognize that the general policies in this plan apply to both IOL and other lands in the Nunavut Settlement Area. For that reason, the NPC, Nunavut Tunngavik Inc. (NTI) and Regional Inuit Associations (RIAs) are working on a comprehensive approach that will guide land use planning on IOL. The objectives of this exercise are:

- to promote, protect and enhance Inuit rights and interests on IOL through the concept of sustainable development; and
- [t]o provide Inuit with rights in land that promote economic self-sufficiency of Inuit through time, in a manner consistent with Inuit social and cultural needs and aspirations. (NLCA, s.17.1.1)

This planning work will be carried out in conjunction with regional planning activities, including land use mapping. The objectives are:

- to identify IOL that are of significant environmental, cultural or economic importance to Inuit;
- to ensure the incorporation of Inuit traditional knowledge in the IOL land use planning process;
- to provide sufficient information and direction to RIA land managers when reviewing requests for land use activities; and
- to ensure the co-ordination of land use planning in Nunavut.

iv) Using Local and Traditional Knowledge

Local and traditional knowledge has been used throughout the land use plan. This is the knowledge that local people have about the environment in which they live - everything from the land and wildlife to the location of sites of spiritual significance and archaeological importance to community health and economic well-being.

v) Relationship to Municipal Plans

The NPC's mandate is to plan for land and marine areas throughout the planning region. Under the NLCA, municipalities remain responsible for developing municipal plans. The NPC and municipalities are directed to cooperate to ensure that the regional and municipal land use plans are compatible. In revising the original plan, the NPC has given great weight to the views and wishes of the municipalities, as required by the NLCA.

vi) Sustainable Development

(i) Maintaining the Balance

Sustainable development is the overriding principle guiding the preparation of the *North Baffin Regional Land Use Plan*. The NPC has adopted the following definition of sustainable development.

Sustainable development is defined generally as the management of human relationships to the natural environment in such a way that economic, social and cultural needs are met and ecological processes and natural diversity are maintained. For a complete definition of sustainable development, see Chapter 3.

The people of the region have stated clearly and consistently over the years that there must be a balance between industrial development and the environment in order to guarantee the long-term preservation and conservation of the land, wildlife and wildlife habitat.

(ii) Support for Regional Economic Development

A significant portion of the North Baffin private-sector economy is based on some use of the land and natural resources. The most important elements of this economy are mineral exploration, tourism, the harvesting of wildlife, and the provision of services such as construction. Apart from social services, a significant number of jobs in the public sector are devoted to regulating or supporting these land-related activities. Any land use plan for the North Baffin must therefore take into account the economic impacts of its recommendations and actions.



Meeting in an Arctic Bay church, 1987. Mining and oil and gas developments decades ago prompted the first regional study of development options for Lancaster Sound.

Photo by Arthur Boutilier

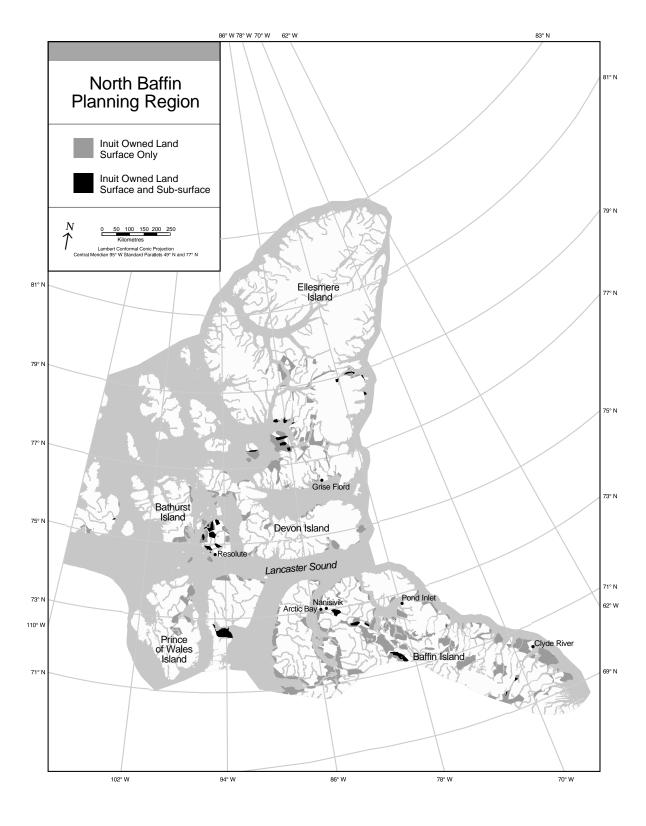
Residents would like to see the development of a stronger local and regional economy that would provide more business and employment opportunities, particularly for youth. At the same time they want to maintain, as far as possible, the traditional lifestyle of Inuit and would like to see more economic endeavours that combine traditional elements with wage employment and business opportunities.

(iii) Encouragement of Multiple Land Uses The land and resources of the North Baffin should be available to all users, subject to the principle of sustainable development.

1.3 Why a Regional Land Use Plan?

The North Baffin Planning Region has been the homeland of Inuit and their ancestors for several thousand years. Since the early 1800s, explorers and developers have been visiting the North Baffin region to look for new kinds of wealth.

In the 1960s and 1970s the pace of development accelerated. The Nanisivik zinc/lead mine opened. Oil and gas exploration permits were granted over vast areas, and large quantities of gas and some oil were identified. The Northwest Passage was



considered as a possible year-round shipping route.

During the 1980s development continued with the opening of the Polaris zinc/lead mine and the development of the Bent Horn oil field as a demonstration project. Oil and gas exploration decreased, however, following a decline in world energy prices. Also in the 1980s, a new kind of activity arose as an increasing number of tourists began to visit the region.

For many years, the federal and territorial governments dealt with each new development separately. Decisions on land use were often made with little regional consultation. However, the situation began to change in 1978 when an Environmental Assessment and Review Process (EARP) Panel was formed to conduct a public review of the proposal by Norlands Petroleum Limited to drill an offshore exploratory well in Lancaster Sound. The EARP Panel concluded that a decision on drilling in Lancaster Sound could not be made until the government had considered the broader issues of all potential uses of the area.

In the summer of 1979, as a result of the EARP Panel's conclusion, DIAND announced that it would conduct a regional study of development options for Lancaster Sound. The result of the study was a Green Paper entitled The Lancaster Sound Region: 1980 - 2000, which set out six resource development options and outlined alternative approaches to regional planning. A public review of the Green Paper indicated that there was strong support for a comprehensive land use

planning process that represented northern interests and priorities.

In 1981, the federal government announced the Northern Land Use Planning Policy. By 1983, the federal and territorial governments, the NWT Metis Association, the Dene Nation, the TFN, and later, the Inuvialuit had agreed upon a community-based planning process.

The Minister of DIAND, Government of Canada, and the Minister of Renewable Resources, GNWT, identified the Lancaster Sound Region as a priority for planning in order to continue the momentum gained from the Green Paper. In September 1986, the Lancaster Sound Regional Land Use Planning Commission was formed and charged with the responsibility of preparing the original plan. That plan was approved by government in 1990.

In early 1997, the NPC began reviewing the plan to ensure that it complies with the NLCA. This review also provided people in the region with an opportunity to comment on the plan and make suggestions for changes. Staff and board members visited all of the communities in the North Baffin and held public meetings with members of hamlet councils, HTOs and CLARCs, and with Elders. The NPC then held an informal public hearing in Pond Inlet in May 1997, attended by local and regional representatives and government officials. Oral and written comments on the Lancaster Sound Regional Land Use Plan (later renamed the North Baffin Regional Land Use Plan) were accepted until the end of August that year. The revised North Baffin Regional Land Use Plan was submitted to the federal

and territorial governments for review in September 1997. Federal comments were received by the NPC in July 1998; territorial comments followed in September of the same year.

Following the NPC reconsideration of the revised plan in light of the comments received, the plan was resubmitted to the ministers for final consideration, and the comments made public. In October 1999, comments on the resubmitted version of the plan were received from the newly established Government of Nunavut. The NPC made non-substantive edits to the resubmitted plan in light of these comments.

The Ministers of DIAND and DSD accepted the resubmitted plan and the Governments of Canada and Nunavut approved it in June 2000.

1.4 How Often Will the Plan be Revised?

The revised plan outlines principles and objectives to guide land uses in the future, and actions that are specific to the next five years. After five years, the revised plan will

again be formally reviewed and updated. Monitoring, amendment and review are part of the continual process of land use planning. These steps are described in Chapter 5.

1.5 How Can the Revised Plan Be Used?

The revised plan has been prepared to provide direction for government, industry and communities on the future management of the region. The NPC intends that the plan be widely circulated within communities, government and industry, and that it be consulted when any land use activity is being considered. It is a document that can assist all users of the land, not only to realize their specific objectives, but also to keep in mind the goals of the communities.

1.6 What is the Authority of the Plan?

The NLCA requires Executive Council and Cabinet approval of land use plans. The responsible ministries are DIAND for the federal government and DSD for the Government of Nunavut.

CHAPTER 2 NORTH BAFFIN – PRESENT NEEDS, FUTURE QUESTIONS

2.1 The Planning Region

2.1.1 Boundaries

The North Baffin Planning Region is a roughly triangular area in the Arctic Archipelago, comprising about 1.5 million square kilometres.

To the west, the boundary is the eastern limit of the Inuvialuit Settlement Region (110°W); to the east, the boundary is the eastern limit of the Outer Land Fast Ice Zone²; to the north, the boundary is the limit of Canada's fishing zone; and to the south, the boundary is the southernmost extent of present land use by the communities within the region. It is understood that, in the marine area and the Outer Land Fast Ice Zone of the planning region, the plan shall be interpreted and applied in a manner consistent with Canada's international obligations.

2.1.2 A Region of Communities

The residents of the North Baffin region live in the five hamlets of Resolute, Grise Fiord, Arctic Bay, Pond Inlet and Clyde River; in a permanent outpost camp at Creswell Bay, and in a mining community at Nanisivik. Transient residents occupy a mining complex at Polaris, on Little Cornwallis Island; and a military base at Alert and a weather station at Eureka, both of which are on Ellesmere Island.

Until the 1950s, Inuit lived a nomadic life on the land. Although they are now gathered in settlements, they still have strong ties to the land, ties which are vital to their cultural, physical and economic well-being. Extensive areas around each community continue to be used regularly for hunting, fishing and trapping. This link between the people and the land gives the region its cohesiveness and makes any activities occurring on the land very much a concern of its residents. The original *Lancaster Sound Regional Land Use Plan* included a map of important areas in the region (See the *Areas of Importance* map).

The 1996 Census put the population of the five hamlets and Nanisivik at 3,132. The Nunavut Bureau of Statistics estimated a 1999 combined population of 3,358.

According to the Nunavut Bureau of Statistics, the region's population is expected to grow to 5,193 by 2020, an increase of 55%. In 1999, almost 46% of the residents were age 19 or younger. As Figure 1 shows, the percentage of people in this age category is much higher than in the rest of Canada. This

combination of a young and growing population accentuates the need for more wage employment as well as business and economic diversification, related to both renewable and non-renewable resources.

2.1.3 Scientific and **Community Knowledge**

A great deal of scientific information is available on the physical, biological, economic and social characteristics of the North Baffin region. This information is readily available from government, industry and academic sources. The documents consulted during the original planning exercise and the NPC review are listed in **Appendix F: Information Resources.**

Local residents have an extensive and intimate knowledge of the land and its resources. This knowledge was used in the planning exercise to identify community concerns, and was combined with scientific information to document and map the natural resources and cultural features of the region. The NPC will continue to work with people in

the communities to map resources in the region, including archaeological and heritage sites, wildlife habitat and harvest areas, and abandoned waste sites. Most of this mapping work will be based on local knowledge.3

2.1.4 Physical Setting

The patterns of land use in the region are determined largely by its geography and climate. Just as the species and distribution of wildlife are a function of biophysical conditions, so too are the types, timing and location of human use of the land.

The region is made up of islands, ice and water. The central geographic feature is Lancaster Sound, which forms the eastern entrance to the Northwest Passage. This Sound lies between Devon and Baffin islands which, along with Ellesmere and Axel Heiberg islands, are the main land masses in the region.

The variety of landforms, from the flat Arctic lowlands in the west to the mountains and deep fiords of the eastern coasts, provides diverse habitat, including well-vegetated

- language;
- culture:
- values and beliefs;
- · survival skills;
- · use of resources:
- humane and sustainable harvesting;
- · understanding of society, ecology and environment.

IQ Guiding Principles:

A Traditional Inuit family and leader/community model with the following principles:

1. Pijitsirniq

- leadership role assumes responsibility to serve community;
- · knowledge and ability-based leadership;
- · authoritative vs authoritarian;
- · serves in the interest of community as opposed to pure self-interest.

2. Aajiiqatigiingniq

- inclusive decision-making;
- ensures that all parties understand each other;
- doing different tasks for a common purpose;
- ensures wise use of resources.

- 3. Pilimmaksarniq

 skill development to ensure success and survival;

 this is contribute.
- · to ensure that all members are able to contribute to the community,
- knowledge gained through observation and experience.

4. Piliriqatigiingniq

- believes that all members can contribute to the community;
- · ensures wise use of limited resources;
- · sharing of resources and collaborative relationships.

5. Avatimik Kamattiarniq

- we are part of the environment;
- · what we put into the environment comes back to us;
- vast store of experiential knowledge pertaining to environment and wildlife needs to be collected and collated to be used in conjunction with Western methods of research and management.

6. Qanuqtuurunnarniq

- improvising with what is at hand;not giving up in the face of obstacles;
- reflecting on a problem before acting on a decision.

³ Where the context permits, the term "local knowledge" in the plan should be interpreted consistently with the following definition of Inuit Qaujimanituqangnit. Inuit Qaujimanituqangnit (IQ) is first-hand knowledge obtained from knowledgeable Inuit Elders, pertaining to:

[&]quot;IQ" consists of the past, present and future experience, knowledge and values of Inuit society.



The intimate knowledge that residents have of the land and its resources was combined with scientific information to map the region's natural resources and cultural features.

Photo by Arthur Boutilier

lowlands, sheltered bays, steep cliffs and tidewater glaciers.

Perhaps more than the conditions of the land, the complex and changing state of the sea and ice affect the use of the region. These changes are so fundamental to Inuit that they mark the change of seasons by the cycles of snow, ice, water and light (Figure 2).

Freeze-up begins in early October. By December, the waters are normally ice-covered. The ice regime is a mix of first-year ice, multi-year ice and icebergs. Landfast ice forms in the more sheltered inlets, fiords, straits and bays, while the ice of Baffin Bay and Lancaster Sound tends to remain unconsolidated, shifting with the winds, currents and tides. Multi-year ice is found

throughout the High Arctic islands, generally entrapped in landfast ice during the winter, drifting south and east during the summer.

Hundreds of icebergs of varying sizes drift into the eastern entrances of Lancaster Sound and Jones Sound. Some are taken by currents as far west as Prince Regent Inlet, while the Baffin Current carries them south along the Baffin coast.

Spring, marked by long hours of sunlight and the widening of cracks and leads, comes in May and June. The open water season, when ice is no longer safe for travel, begins in July - although the actual time and length of this summer period, and the percentage of ice cover remaining, depend on annual weather conditions.

FIGURE 1: COMPARISON OF AGE STRUCTURE BAFFIN REGION AND CANADA (1999)

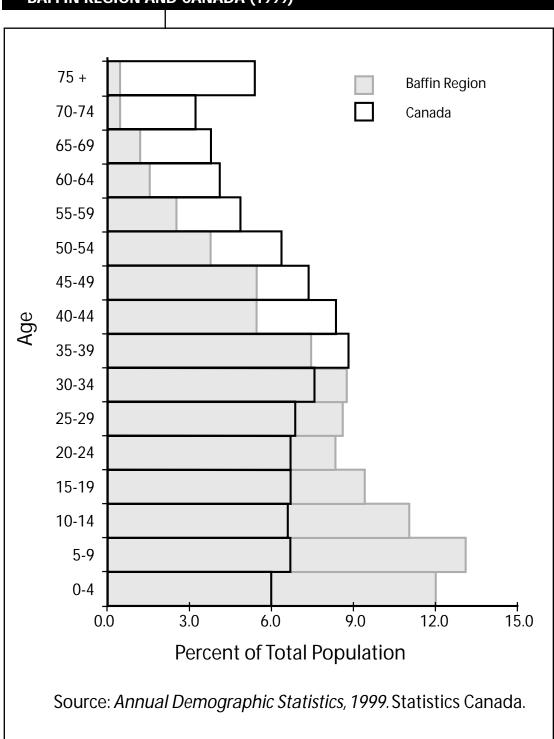
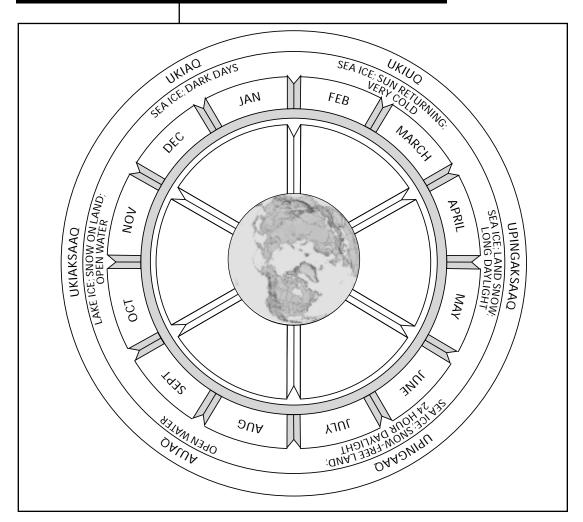


FIGURE 2: ANNUAL SNOW, ICE, WATER & LIGHT CYCLES



The winter landfast ice, summer open water, break-up and freeze-up, tidal currents, and advancing and retreating ice edges interact in a complex pattern to create polynyas, shear zones, early leads and floe edges. These unique niches in the otherwise impenetrable expanse of ice attract both people and wildlife.

2.1.5 Renewable Resources

Ecosystems of National and International Significance

The variety in habitat produces a biological richness in the region: deep fiords for narwhal, shallow bays for beluga, cliffs for nesting seabirds, lowlands for nesting geese, and vegetated river valleys for caribou.

The combination of abundant food sources and early open water associated with polynyas, shore leads and floe edges is

The majestic North Baffin landscape, near Clyde River. Landforms here vary from the flat Arctic lowlands in the west to the mountains and deep fiords of the eastern coast.

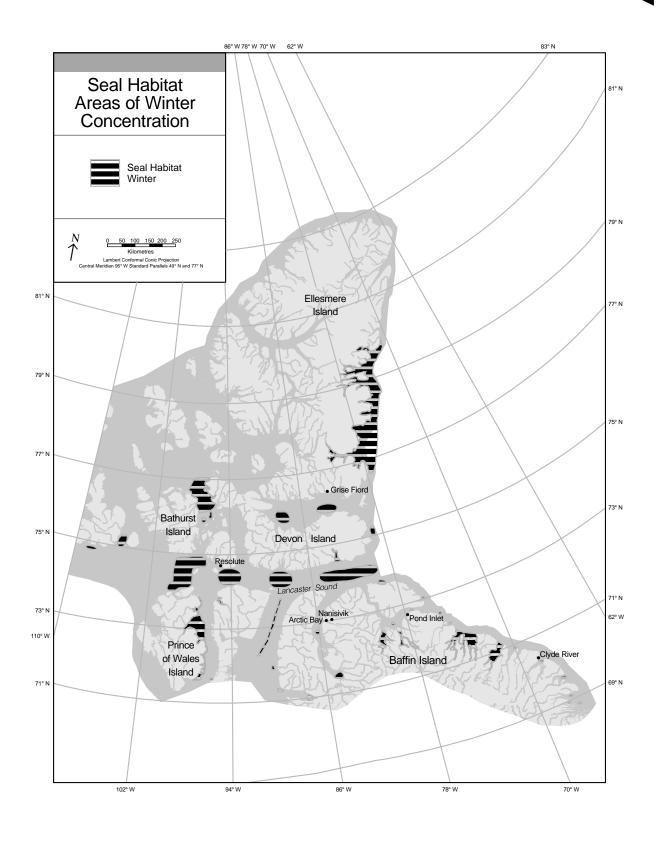
Photo by Arthur Boutilier

extremely important for returning marine mammals and seabirds. In particular, the shore leads along the south coast of Devon Island and in the vicinity of Bylot Island make Lancaster Sound important for funnelling the marine mammals and seabirds, concentrated at the floe edge, into their summering areas further into the region.

The region's marine habitat is essential to the survival of several million seabirds, which occur in concentrations not found elsewhere in the Arctic. Twenty key habitat sites for northern fulmar, black-legged kittiwake, thick-billed murre and black guillemot, as well as glaucous, Ross's and ivory gulls, and snow goose are found across the region. The North Baffin area is also one of the most important marine mammal habitats in the eastern Arctic. Eighty-five percent of North America's narwhal, and 40% of its beluga whales, in addition to large populations of ringed, harp and bearded seals, are found here. Small colonies of walrus are present, and the endangered bowhead whale summers in the southern part of the region.

Arctic char are found in inland and coastal waters. The region also supports muskox, polar bear and caribou.

The biophysical richness of the central part of the region around Lancaster Sound makes it an ecosystem of international significance. The importance of wildlife and other assets





Hunters carve up beluga whales in Resolute. The North Baffin has one of the most important marine mammal habitats in the eastern Arctic.

Photo by Lyn Hancock

throughout the region has been recognized nationally and internationally. The region includes two national parks (Sirmilik and Quttinirpaaq) and one proposed national park (Bathurst Island); two Migratory Bird Sanctuaries; one National Wildlife Area; and 29 sites identified through the International Biological Program. (See "Catalogue of Areas of Special Interest in the Lancaster Sound Planning Region", published as a separate document by the former Lancaster Sound Regional Planning Commission).

Wildlife - A Way of Life

The abundance of marine and terrestrial wildlife has provided food, clothing and

shelter for Inuit and their ancestors for several thousand years. Inuit continue to rely on renewable resources for these things, as well as for their cultural and economic wellbeing. This reliance forms the basis of a profound relationship with the land.

Most Inuit spend at least some time harvesting renewable resources for domestic use as food, clothing and hunting materials. Some residents derive a portion of their income from sport and commercial harvesting, from arts and crafts made with harvested materials, and outfitting and guiding wilderness trips for tourists.

The harvest generally follows the seasonal cycles of wildlife (see Figure 3: North Baffin

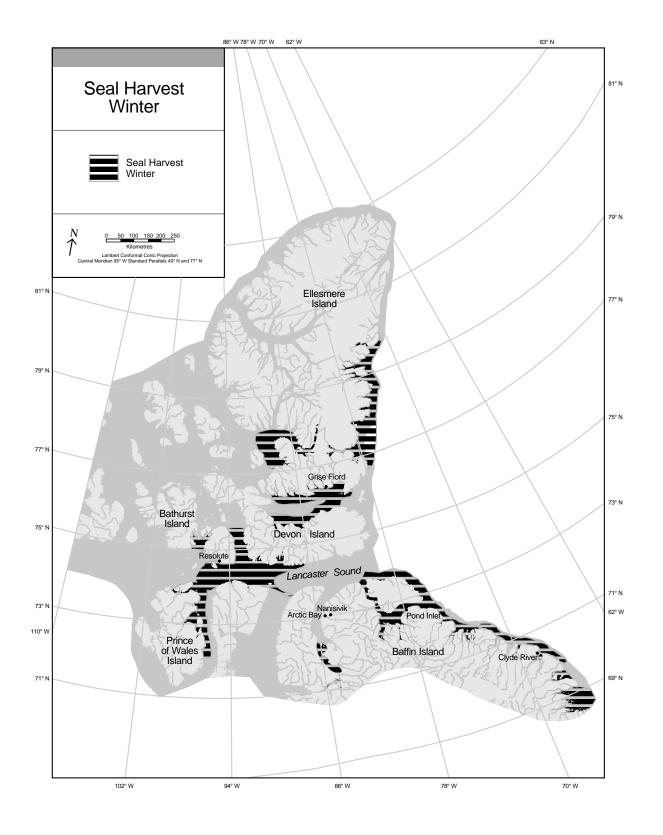
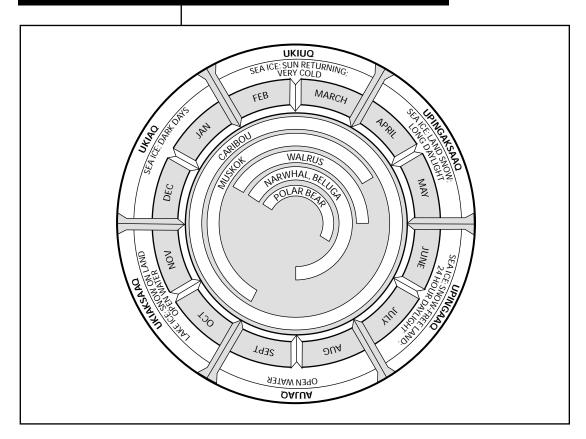


FIGURE 3: NORTH BAFFIN HARVESTING CYCLES



Harvesting Cycles). Caribou, seal and Arctic char are taken year-round as staple food sources. Spring is a particularly important time, as hunters travel to the floe edge and the shore leads, where seal, beluga, narwhal and polar bear concentrate. Entire families participate in these spring hunting trips, and some also move to outpost camps for the summer.

In addition to the economic and physical importance of harvesting, "going out on the land" is a means of spiritual renewal after a long, cold, dark winter.

2.1.6 Non-Renewable Resources

The known non-renewable resources of the

region include oil, gas, lead, zinc, coal, iron, sand, gravel and carving stone.

Although several small oil fields and large reserves of gas have been found, Bent Horn-formerly the region's only producing oil field - is now shut down. The Sverdrup Basin and the eastern end of Lancaster Sound have the highest known oil and gas potential of the sedimentary basins of the Arctic islands. However, it is unlikely that further oil and gas exploration will be undertaken until world oil prices rise significantly.

Much of the region remains unexplored for mineral deposits. To date, the only deposits of minerals that would be profitable to extract



An ancient sodhouse in Pond Inlet. The thousands of archaeological sites in the region are the only visible remains of historic peoples whose cultures date back as far as 4000 BC.

Photo by Arthur Boutilier

are found at the existing zinc/lead mines of Nanisivik and Polaris.

While communities use local deposits of sand and gravel, large-scale extraction of these resources is not foreseen. A large iron ore deposit at Mary River is unprofitable to mine, given current world prices. Coal of generally good quality is present in large quantities, but is not extracted commercially.

2.1.7 Cultural Resources

People have been living in the North Baffin region for several thousand years, but it is the past hundred years that have brought dramatic changes. Inuit have had to adapt to changes brought about by whaling, trade, government, defence activities, non-

renewable resource development and tourism.

There are approximately 2,000 known archaeological sites within the region, which may represent only 10 to 20% of the actual total. These sites are the tangible remains of the ways of life of Paleo-Eskimos (4000 BC to 1000 AD), Thule Inuit (1000 to 1600 AD), and Historic Inuit. All that is known of the Paleo-Eskimos and the Thule Inuit comes from archaeological sites.

The archaeological and historical sites are important because they show the movement of ancient Arctic peoples into the more northerly latitudes and their adaptations to the environment. Archaeological studies show that strong Inuit ties to the land can be traced



Arctic Bay, like almost all communities in the North Baffin, is closely tied to the land. The traditional harvest of renewable resources is a strong factor in the regional economy.

Photo by Arthur Boutilier

back to their prehistoric roots. With appropriate protection, some archaeological sites could be developed for tourists who are interested in Inuit heritage. Archaeological programs and field schools could also take advantage of some of these sites.

2.1.8 Regional Income, Employment, and Education⁴

Value of a Mixed Economy

Similar to other areas in Canada's North, the North Baffin Planning Region has developed, over the last 30 years, a mixed traditional/

4 The information for this section is from the 1984, 1986 and 1988 reports of the GNWT Department of Economic Development and Tourism; the 1981, 1986 and 1991 national censuses; the 1984 and 1994 NWT labour force surveys; and the NWT Bureau of Statistics.

wage economy that depends on the use of renewable resources, the public sector, service businesses and non-renewable resource exploration and extraction.

In addition to its cultural and social importance, the traditional harvest of renewable resources contributes significantly to the regional economy. The dollar value of this harvest is calculated as the cost of replacing country foods with store-bought products.

Studies have consistently shown that in many cases subsistence and sport fishing offer considerably higher value than the commercial fishery. As an example, the replacement value of Arctic char harvested for food in the Baffin region exceeds \$3.00 per

pound, while the commercial value of this fish is between \$1.00 and \$2.00 per pound. Depending on circumstances, sport fishing may yield an even higher return, up to \$20.00 per pound.⁵

Associated with the traditional harvest is the smaller portion of the regional income that comes from the commercial sale of renewable resources such as meat, fur, fish and ivory. Income from the sale of arts and crafts, and from tourism, is also part of the renewable resource sector.

Tourism

The continued development of tourism facilities, attractions and programs provides an important source of income to the people of the North Baffin region. The largest growth is in adventure and naturalist package tours. Visits between June and September have increased substantially since the original Lancaster Sound plan was developed. People in the region want tourism development but, as with other forms of development, they are not in favour of it at any cost.

The further development of the renewable resource sector is of increasing interest, in part because of the uncertainty of non-renewable resource development activity, and also because it offers options that are more stable and compatible with the traditional lifestyle.

Sources of Wage Income

A major influence in the regional economy is the income from government economic development subsidies, social assistance, government employment, and goods and services sold to government by regional businesses. In 1986, earned wages from the public sector made up about half of all income to the Baffin Region. If all government sources are included, the percentage of the regional income rises to 62%.

Income from non-renewable resource development is significant in the region, although at present most of this contribution comes from the mine at Nanisivik.

Oil and Gas Development

Although the potential for petroleum development in the region is high, the future contribution of the oil and gas industry is also expected to be largely determined by fluctuating world prices. In 1982, income to

You all know about the lack of employment opportunities throughout the north. Employment opportunities that are available but a threat to the environment are in areas of non-renewable resources exploration. There is a need to introduce and create job opportunities within the traditional aspects of Inuit such as hunting. Pond Inlet caribou is in demand.... There are endless economic development opportunities in this area. There are too many unnecessary restrictions. For example, seals from Broughton Island and Clyde River are said to be quite delectable by people from other communities. Up to today we've never seen seal meat in a store indicating that it is seal meat from Broughton Island and this caribou is from Baker Lake and this aged walrus meat is from Igloolik. This kind of economic development poses no threat to the environment.

Apitak Enuaraq Lancaster Sound Regional Land Use Plan Review Pond Inlet, 29 May 1997

^{5 &}quot;Economic Framework," Department of Resources, Wildlife and Economic Development, GNWT.

the North Baffin region from the oil and gas industry was \$765,000 (3.7%). At the present low level of activity, income to the region is negligible, and little change is anticipated in the immediate future.

Changes in Labour Force Activity

According to the 1999 Nunavut Community Labour Force Survey released by the Nunavut Bureau of Statistics, the average unemployment rate in the communities according to the 'National Criteria' definition of unemployment⁶ was 21.4%. This compares with 20.7% for Nunavut as a whole for the same period. However, the *Survey* points out that this characterization of the labour force and unemployment is not appropriate for describing the labour market in many Nunavut communities where few jobs are available, and where the competitions for those jobs are not advertised within the community. Many unemployed had not looked for work because they perceived no jobs to be available. Using this 'No Jobs Available' definition, the unemployment rate for North Baffin communities is actually 30%.

Education and Training

Since the original plan was developed, education levels have increased throughout the region. The extent to which communities can take advantage of employment opportunities is determined to some degree by the education and skill levels of the

residents. Few students graduated from high school between 1985 and 1988 in the North Baffin communities, and in both 1981 and 1986, about 75% of the population aged 15 or older had less than a Grade 12 certificate. Most of the 25% who had Grade 12, a trade diploma, some university experience or a university degree were transient residents.

Other training programs are available for regional residents. Many residents take Nunavut Arctic College and Adult Education courses, and both of the mines offer training in conjunction with the Government of Nunavut's Apprenticeship Program. All programs and courses are aimed at increasing the education and skill levels of regional residents as communities prepare themselves to take greater advantage of future economic opportunities.

With a limited number of jobs at present in each community, an already high unemployment rate, a high birth rate, the present low levels of education, and no immediate prospects for ongoing major development projects to offer employment, creation of local employment opportunities is of major concern to community residents, their governments and the NPC. In the future, it will become increasingly important to identify and assess available economic opportunities in each sector of the economy.

The establishment of Nunavut is bringing with it increased employment opportunities. Nevertheless, the goal of sustainable development cannot be achieved in the North

⁶ The percentage of the labour force who are unemployed – that is, persons available for work during the week prior to the survey who: 1) were without work and had actively looked for work in the previous four weeks 2) had been on temporary lay-off, or 3) had definite arrangements to start a new job within the next four weeks.



While years have passed since the original Commission met with the communities, many concerns expressed in those early days are still valid.

Photo courtesy of the NPC

Baffin by an increased public sector. It also requires a healthy private sector.

2.2 Regional Concerns

The original Commission met with the communities, government, industry and interest groups to determine their concerns about land use in the region. In reviewing the Lancaster Sound Regional Land Use Plan, the NPC held a series of community meetings, followed by an informal public hearing in Pond Inlet in May 1997. Interested parties were also invited to submit written briefs to the NPC, outlining any changes that were needed in the document and its recommendations. The results of this process led the NPC to the conclusion that many of the

concerns expressed during the original planning exercise were still valid. Those concerns were:

- the need to have regional residents participate in the decision-making processes regarding land use in the region;
- the need to conserve wildlife species, habitat and community harvesting areas;
- the desire for completion of a region-wide protected areas system;
- the need to ensure that shipping activities do not interfere with hunters and marine mammals;
- the potential consequences on wildlife harvest of the Government of Canada's policy to support year-round shipping;
- the desire for as much of the region as

- possible to be open to mineral exploration and development;
- the need to resolve conflicts between mineral exploration parties requiring access to land, and the wildlife and community uses of that land;
- the desire to conduct offshore oil and gas exploration in North Baffin;
- the need for flexibility to establish safe and economical oil and gas operations, while minimizing the conflicts with wildlife and community use areas;
- the lack of effective oil spill cleanup technology, especially in ice-covered waters and strong ocean currents;

- the need for economic development within the region, particularly more wage employment, to meet the needs of a young and growing population; and
- the speed at which tourism is being introduced to the region and its implications for the communities.

The following section addresses these concerns. It has been updated and revised to reflect the priorities and direction established for land use planning under the NLCA, as well as issues raised during the review process.

CHAPTER 3 A PLAN FOR STABILITY, GROWTH, AND CHANGE

3.1 A Vision of the Planning Region

To carry out its task of providing guidance for land use in the region, the original Commission envisioned what it would like the region to be in the future and then prepared a plan that would attain - or strive to attain - this vision, through general long-term policies and specific short-term actions. After consultations with people in the region, the NPC feels this vision remains an important basis for resolving potential land use conflicts in the North Baffin.

Several years ago, the former Commission envisioned that, in the future, the region would ideally have the following features:

- The renewable resource-based lifestyle of the residents will be maintained. Wildlife populations will be managed so that they continue to meet the needs of the young and growing population.
- Research into sustained yield, and into the effects of development on wildlife, will lead to improved land and resource management.
- The concept of sustainable development will be widely applied, through the conservation of the region's natural and

- cultural resources, the establishment of protected areas, and the promotion of self-reliant, long-term, sustainable economic growth in both the renewable and non-renewable sectors.
- Community governments (hamlet councils)
 will have greater responsibility for decisions
 about land use. This will lead to better
 communication between hamlet councils,
 resource developers, government resource
 managers, community residents and
 transportation interests. With improved
 communication, land use conflicts will be
 reduced, and those that do occur will be
 more readily resolved.
- The TFN land claim will be settled and new organizations for strengthening resource and community management will be introduced into the region.
- The public sector will further decentralize, increasing job and business opportunities in the communities.
- The economy of the region will become more diverse as both renewable and nonrenewable resource development continues. Well-trained employees and goods and services will be available from within the region to meet the needs of

developers. The infrastructure and income from development will encourage further diversification.

- Employment opportunities for the region's residents will increase from both the renewable resource base (jobs such as butcher, country foods store entrepreneur, store clerk, tourist guide, hotel manager, outfitter), and the non-renewable resource base (jobs such as driller, miner, resource manager, trucker, engineer, expeditor, pilot).
- The education levels of the people in the region will increase, allowing residents to successfully compete for technical and professional jobs in government and industry.
- Non-renewable resource development and tourism will supplement and reinforce the harvesting lifestyle by providing wage employment opportunities and by improving the infrastructure.
- The life of Nanisivik will continue beyond the life of the mine. The community will be used for other purposes, such as defence, education and research.

While some parts of this vision of the future remain to be realized, it is still a useful tool to help guide land use planning. Indeed, the settling of the Nunavut land claim provides Inuit the wherewithal to ensure that some of this vision becomes reality. The powers of the NPC, as described in the NICA, mean that land use planning is a much more effective tool in this respect than it was when the *Lancaster Sound Regional Land Use Plan* was developed.

3.2 Turning the Vision into Action

To move the region toward this vision of the future, the original Commission developed a policy framework to conserve land values and to achieve cooperation between land users, while keeping future options for land use open. Much of this framework is echoed in the NLCA and in the consultative review process developed for the North Baffin plan. In the sections that follow, the revised plan presents this framework as principles, objectives and terms directing how land should be used and regulated, and how land use decisions should be made. In addition, to guide land users, regulators and decision the plan provides makers, detailed information on the resources and values of the planning region. The plan gives land users, regulators and decision-makers the flexibility to deal with present, as well as future, land use issues.

The NLCA ensures that local people will play a key role in determining land use priorities for their regions. The revised *North Baffin Regional Land Use Plan* encourages and supports current initiatives for community involvement in land use decision making, and introduces new means of accomplishing this involvement. These projects include negotiations for a proposed national park on Bathurst Island, negotiations for the establishment of a whale sanctuary in Isabella Bay, and any discussions concerning a protected area system for Nunavut.

The NPC believes that all land use within the

region should be subject to three basic principles. These principles are:

CONSERVE COMMUNICATE DEVELOP

These principles, and the NPC's terms for applying them to land use, are described below. Following these terms, Sections 3.3 - 3.13 contain the various categories of land use and describe objectives and actions for each.

1. CONSERVE

Conservation, or the wise use of all resources - both renewable and non-renewable - is essential for the future of the region and is, therefore, the central principle of this plan. Conservation is an ethic and a process that is fundamental to all land uses rather than a specialized separate activity. It does not necessarily mean "do not use".

The NPC, during its community meetings and its consultations with government, industry and special-interest groups, mapped the uses of the land by the communities and by wildlife, and recorded the reasons why the land was important to them. It also recorded the potential disturbances from land uses of

7 Please note: Each planning term is followed by a code which indicates its legal status. [A] refers to "actions", or measures that, on approval of this plan, are required to be taken either by government or the NPC pursuant to s. 11.5.9 of the NLCA. [CR] refers to "conformity requirements" that, on approval of the plan, will be applied by the NPC in determining the conformity of project proposals with the plan under s. 11.5.10 of the NLCA. [REC] refers to "recommendations", or, in other words, NPC proposals. Recommendations are not legally binding. In particular, Cabinet and Executive Council approval of this plan does not make the plan's recommendations legally binding, and does not signify that government adopts them. Rather, such approval indicates that government is prepared to consider the recommendations. Statements followed by more than one code have

more than one status.

these "land values" that are of concern to communities and wildlife managers. The land values and concerns are presented in Appendix G. They are grouped according to the degree of importance to communities and to wildlife. These groupings into areas of varying importance are shown on the *Areas of Importance* map.

Terms⁷

- 3.2.1 All land users shall refer to the land values and concerns in Appendix G, and to the *Areas of Importance* map, to determine important land values and concerns in areas where they plan to work, as well as to adjust their work plans to conserve these values. [CR] Those who regulate the areas shall ensure through the project approval process that these values are conserved. [A]
- 3.2.2 DSD shall continue to develop the Nunavut Sustainable Development Policy for the land and water areas of Nunavut, currently still in the drafting stages, and shall implement the policy when complete. Further, DIAND shall implement its Sustainable Development Strategy and ensure that the interests of the residents of Nunavut are considered before it is submitted to Parliament for approval. [A]

2. COMMUNICATE

When different activities compete for the same resources in the region, the NPC

believes that the best way to ensure balanced development and to resolve conflicts between land users is to have continual and effective communication between all parties.

The exchange of knowledge that will come about with improved communication will ensure that development proceeds in the best possible ways. This is happening through the latest developments in communications technology, such as Internet access, in even smallest communities. **Improved** the communications will allow those people most likely to be affected by resource development projects to understand the risks and benefits so that they can make informed choices.

Communication between communities and other land users, as well as within the communities, has improved over the past decade. At times, however, communication has broken down. The original Commission was presented with numerous examples of information which had reached

community, but not the interested parties within the community, or which was not in a format or language that could be understood. In its 1997 review, the NPC heard that finding ways to improve communication remains an important goal in the region. For example, besides the recommendation below, people in the communities expressed a strong desire to have researchers consult with the CLARCs⁸ to determine what information needs the community might have. They also want to make sure enough information is translated so that people can assess and understand the work being carried out in their area.

Communication among all land users is particularly important when considering the "Essential Areas" on the Areas of Importance map.

Terms

3.2.3 **Community Land and Resources** Committees (CLARCs) have been

8 The following description was provided by Nunavut Tunngavik Incorporated: "Community participation is the cornerstone of the Inuit Land Management Regime. Community Land and Resource Committees were formed in each community in Nunavut to advise the RIA Land Managers on matters concerning the management of IOL within the community's area of interest. In some communities, there has to date been no formal land use activity, and therefore no need to establish a committee, except for the purpose of training or information sharing or general consultation. The Committees meet 'as and when required' to review and advise whether or not a land use operation should proceed and, if approved, what terms and conditions should be imposed. It should be noted that the CLARCs are advisory groups to the RIAs; the RIAs retain decision making authority for the IOL. The CLARCs participate and provide advice and recommendations in the following land use areas. They:

- · receive and review all IOL use applications;
- collect information for the community area of interest;
- · inform community members of land use proposals as necessary;
- · convey information and concerns to and from the community, the RIA and NTI;
- recommend land use decisions:
- · recommend any conditions that should be attached where applications are
- assist in monitoring and inspecting land use operations;
- participate in land use planning.

RIA Land Administration Departments are responsible for establishing and maintaining CLARCs in each of the communities in their region, as and when required. The composition and method of selection is regionally determined, therefore they vary slightly from one region to the next. However, the important responsibilities of the CLARCs require that the members are Inuit beneficiaries with the following qualities:

- · respected member of the community
- · long time resident of the community · intimate knowledge of the community and regional:
 - lands
 - · wildlife
 - · renewable and non-renewable resources
 - development activities
 - · archaeological sites
 - · travel routes
 - · hunting areas
 - · trapping areas
 - fishing sites
 - traditional camp sites
 - · other areas of social and cultural significance to Inuit.

All CLARCs have five members. All CLARC members are Inuit beneficiaries. Most CLARCs are composed of representatives from the following community groups, with particular emphasis given to Elders from the community:

- · RIA, community representative
- HTO
- · Hamlet Council
- Youth groups
- · Women's groups
- · Elders.

The operating expenses of the local CLARC are kept to a minimum. Honorarium is generally paid on a daily rate when an informal meeting is called by the RIA."



All land use within the North Baffin region should be driven by the principles of conservation, communication, and development.

Photo courtesy of the NPC

appointed for each community. The CLARCs shall continue to provide input to regulatory processes and to disseminate information on land uses outside the community boundary. [A]

- The QIA [REC] and DIAND [A] shall 3.2.4 continue to use CLARCs to dispense land use-related information in the communities.
- The CLARCs shall regularly use 3.2.5 community radio and other local media to inform residents of activities in the region. [A]
- Provided that a significant and 3.2.6 relevant amount of activity has occurred, lands managers, government resource managers [A] and

organizations such as the Canadian Petroleum Association and the NWT and Nunavut Chamber of Mines [REC] shall hold annual information sessions in the region, or provide yearly updates on their activities within the region to each community. **Delegates from CLARCs attending such** sessions must inform their home communities of the results of these meetings over community radio and other local media, and through presentations to regular hamlet council, HTO and other meetings. [A] The CLARCs, HTOs, QIA and the NPC,

3.2.7 [A] as well as industry and other interested parties, should use the

latest Internet and other communications media as they become available to speed up the acquisition and distribution of information between CLARCs, HTOs, the QIA, industry, government and other interested parties. [REC]

Research carried out in the North 3.2.8 Baffin shall be translated into Inuktitut and made available to the people of the region as soon as possible. Reports shall be translated in a format that will be understood by a non-technical person, but not simplified to the point where meaning is lost. At a minimum, researchers shall include a translated summary of their work. Researchers should also endeavour to present their findings orally in communities affected by their work. They shall also consult with the CLARCs to determine what other information needs the community might have, and ensure that any additional materials, including final reports, are translated into Inuktitut. [A] [CR]

3. DEVELOP

The Report of the National Task Force on Environment and Economy defined "sustainable development" as development that ensures that the utilization of resources and the environment today does not damage prospects for their use by future generations. The NPC concurs with this definition and also

agrees with the Task Force that biophysical and economic planning are inseparable and cannot be treated independently. The NPC has developed a definition of "sustainable development" that reflects northern priorities:

Sustainable development is defined generally as the management of human relationships to the natural environment in such a way that economic, social and cultural needs are met and ecological processes and natural diversity are maintained.

Sustainable development considers the wellbeing of social, ecological and economic systems and recognizes that quality of life depends upon all these. This understanding leads to an integrated approach to planning, decision making and monitoring.

The notion of sustainable development is not new to Nunavut communities. Rather, it builds upon ancient knowledge of how to live in relation to the world. For example, the Inuktitut translation of "sustainable" is based on the word *Ikupik*. *Ikupik* means to conserve and not take all at once, what is brought in from a hunt. Everyone takes a small piece for the family, always making sure there is enough to go all the way around. Inuit would call this *Ikupingniq*.⁹

It is also not a fixed understanding. As communities change, their understanding of how to live in a sustainable relationship with the land and with each other will also develop and evolve.

The NPC believes that renewable and nonrenewable resource development projects within the region should proceed in phases, with strict environmental controls, maximum regional benefits and, when necessary, only after demonstration projects and research have proven that the available technology meets government standards and addresses community concerns.

Another kind of development is community development. Regional organizations and residents need to acquire expertise in resource management so that they can propose modifications to projects to best suit the goals of the communities.

Terms

- When development is being planned 3.2.9 for the region, a member of the CLARC from each community near the proposed development shall participate in regulatory approval to the fullest extent possible. The NPC, NIRB, NWB, NWMB, QIA, DIAND and other key agencies will provide information to CLARCs on an ongoing basis. [A]
- 3.2.10 Land managers should refer all land use permits for activities on IOL to the CLARCs for review before being approved. [REC] All land use permits for activities on Crown land should be reviewed by the CLARCs prior to DIAND approval of a permit. [A]
- 3.2.11 The QIA shall be responsible to invite and send members of the CLARCs to regional training sessions held by

- DIAND and the territorial government to learn resource management techniques. DIAND and the Nunavut Government shall give QIA notice of such training; QIA shall provide the resources for the members' travel and participation. [A]
- 3.2.12 Community representatives, appointed by the CLARCs, should be included in DIAND inspections of resource projects on Crown land and report to their home communities the results of these inspections. DIAND should continue working with QIA to train staff to carry out similar inspections on IOL. [REC]

3.3 Renewable Resource Use

Background

Renewable resources are the vital threads that link Inuit culture and society from the past to the present and into the future.

Inuit and their ancestors have sustained themselves for several thousand years on the renewable resources of the region. Hunting, fishing and trapping continue to provide people in the region with food, clothing, shelter, cash and materials for arts and crafts. In recent years, the more widespread commercial promotion of country foods, arts and crafts and tourism opportunities has introduced new income-generating possibilities compatible with this renewable-resource based lifestyle.

A main goal of land use planning is to protect and maintain the health and well-

being of people, the environment and wildlife. For millennia, Inuit fortunes were linked to the animals they hunted. Today, a healthy wildlife population remains vital to Inuit social, cultural and economic well-being. Prior to division, the GNWT stated that renewable resources had a value to the territorial economy in the order of \$55 million to \$60 million annually. Over 70% of NWT Aboriginal households hunted and fished, and more than 90% consumed food from this harvest. 10

The Inuit economy is "mixed". That is, it has two components, each dependent on the other: harvesting from the land, and wage employment. Wage earnings are used to supplement hunting activities; hunting provides food, which, among other benefits, replaces expensive imported items.¹¹

Although harvesting is a part-time activity for most people, production per hunter is high. The average hunter in the Arctic takes 1000 to 1500 kilograms of meat and fish each year. This food has:

...an imputed value of \$10,000 to \$15,000. These harvest levels are not restricted to a few smaller communities like Broughton Island, Pelly Bay, Baychimo [sic], and Paulatuk. They occur also in such larger centres as Baker Lake, Pond Inlet, and Coppermine. 12

In 1988, the average Baffin hunter's harvest was about 1500 kilograms. This works out to an average of just over 300 kilograms per capita.¹³

Country food replaces expensive store-bought food, which can only be purchased with cash. "Numerous studies since the mid-1970s have reported that harvesting consistently provides a higher yield of food per dollar spent than can be bought with money earned from wage labour." Wild food is also a better source of nutrients, such as iron, magnesium and calcium, than imported food. Seal meat, for example, has six to ten times the iron content of beef. 15

Issues

Communities, government and a number of national interest groups have identified as a major issue the need to ensure the wise use of all wildlife species and habitats in the region so that wildlife can be used by present and future residents of the region.

The communities are particularly concerned that no land use activity disturb or deplete habitat or wildlife to such an extent that populations could not fulfill continuing harvest needs.

¹⁰ GNWT, Department of Renewable Resources, Tradition and Change: A Strategy for Renewable Resource Development in the Northwest Territories, 1994, p.1.

¹¹ A useful explanation is provided by Gary Kofinas, "Subsistence Hunting in a Global Economy: Contributions of Northern Wildlife Co-Management to Community Economic Development", in Making Waves: A Newsletter for Community Economic Development Practitioners in Canada, vol. 4, no 3 (August 1993):

[[]NOTE: [T]here are actually two sectors of the economy, one formal and another informal. The formal sector is easily comprehensible to those of us immersed in western industrialized life... The informal sector is, by definition, difficult to measure. Generally based on non-monetary exchange, private ownership of modes of production, and family, informal economic activities have been defined as those transactions which provide for subsistence and do not increase profits or accumulate capital for its own sake... In many native communities of the North American Arctic and Sub-Arctic, the informal sector is based largely on subsistence hunting and traditional uses of wild foods.]

¹² P.J. Usher and Frederick H. Weihs, Towards a Strategy for Supporting the Domestic Economy of the Northwest Territories (Ottawa, 1989), p. 11.

¹³ Usher & Weihs, p. 12.

¹⁴ Environment Canada, "The Inuit Economy - Sustaining a Way of Life: A State of the Environment Fact Sheet," p. 6.

^{15 &}quot;The Inuit Economy", p. 7.

People have expressed concerns over the increasing pressure on wildlife from the growing human population. The wildlife stocks used by North Baffin communities are also shared with other communities outside of the region.

Communities and government want to find

additional ways to use renewable resources that will contribute to the economy.

Commercial harvesting may be a possibility, but only when it has been determined that the regional wildlife populations can sustain such harvesting.

Objectives

- ✓ TO PROTECT THE OPPORTUNITY TO USE WILDLIFE FOR THE NUTRITIONAL, ECONOMIC AND CULTURAL NEEDS OF THE PERMANENT RESIDENTS.
- ✓ TO ENSURE THAT THE EFFECTS OF ANY LAND USE ACTIVITY DO NOT THREATEN THE SUSTAINABLE WILDLIFE HARVEST.
- ✓ TO FIND NEW WAYS OF DERIVING INCOME FROM RENEWABLE RESOURCES WHILE RECOGNIZING THE NEED TO AVOID OVERHARVESTING.

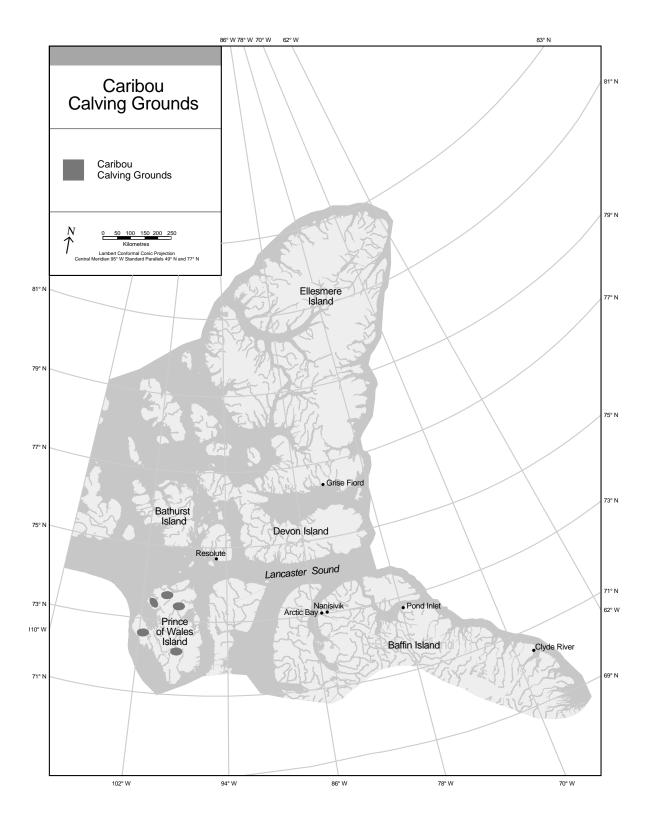
Terms

- 3.3.1 All land uses shall be conducted in keeping with the policy of sustainable development in order to protect the opportunities for domestic harvesting. All land users shall avoid harm to wildlife and wildlife habitat and damage to community travel routes through the timing of their operations, through careful selection of the location of their main camps and travel routes, and through other mitigative measures. In order to achieve these ends, all land users shall follow the Code of Good Conduct contained in Appendix H. [CR]
- 3.3.2 DSD shall continue to assist the

communities in the development of economic opportunities that are compatible with the renewable resource-based lifestyle and within the limits of sustained use. These opportunities include initiatives such as:

- environmental protection and enhancement;
- parks and tourism;
- community harvester assistance;
- sealing industry initiatives;
- fur price program; and
- commercial fisheries assistance.

This assistance must take into consideration the training required by the communities and the necessary funding, recognizing that



- Government of Nunavut funding may not be the only appropriate funding source. In meeting this requirement, appropriate eligibility criteria for the assistance may continue to be applied. [A]
- 3.3.3 The QWB is coordinating research into sustainable yields and the life cycles and habitat requirements of harvested species. This work should continue and should be supported by DSD, the NWMB, DFO, and Environment Canada. [REC]
- 3.3.4 DIAND and the NPC shall complete the design and implementation of the monitoring program outlined in section 12.7.6 of the NLCA. Such a monitoring program shall include the Sverdrup Basin and Lancaster and Jones Sounds. [A]
- 3.3.5 The NWMB, in conjunction with the QWB, DFO, and the communities, should ensure that research is conducted into migration, winter distributions and habitat of marine mammals that use the region. This work should involve the HTOs and other community representatives. An example of such work is the NWMB's *Inuit Bowhead Knowledge Study*, released in 2000. [REC]
- 3.3.6 The QWB and the communities should carry out research on caribou in the region, particularly with regard to calving grounds and migration patterns. This work should involve the HTOs and other community

- representatives in order to ensure the best combination of local and scientific knowledge. [REC]
- Development activities shall be 3.3.7 prohibited within all caribou calving areas during calving season, as well as caribou water crossings in the North Baffin region. The QIA and DIAND shall implement caribou protection measures on Inuit Owned and Crown lands respectively. [A][CR] These protection measures proposed should follow the measures found in Appendix I of this document. [REC]
- 3.3.8 Development activities shall be restricted near polar bear denning areas and walrus haul-outs. [A][CR]
- 3.3.9 When a land use permit is issued, land users shall be given details by DIAND or the QIA of the important renewable resource values in the area of land in which they operate. Government shall ensure their assistance in maintaining and reporting on these values. [A]

3.4 Conservation Areas and Parks

Background

All land users in the region accept the need to maintain the genetic diversity and long-term productivity of the renewable resources, and to preserve related cultural features and values.

The NPC accepts that there is a need to complete a system of conservation areas. According to the NLCA, a "Conservation Area" means any conservation area or protected area established by legislation and in existence at the date of the ratification of the NLCA, and listed in Schedule 9-1, as well as any other area of particular significance ecological, established for cultural, archaeological, research or similar reasons. This is an important distinction, and one that the NPC notes is necessary to ensure strict compliance with the spirit and letter of the NLCA. (For further discussion and detail, see Appendix N: Guidelines to Establish, Assess and Review Conservation Areas in Nunavut Through the Land Use Planning Process). These guidelines will be used by the NPC to:

- determine whether to recommend the creation of new conservation areas as part of the development of new regional land use plans;
- review the status of conservation areas during the periodic review of regional land use plans or the preparation of new plans; and
- determine whether to recommend the creation of new conservation areas as amendments to existing plans.

The provisions in the NLCA reflect the fact that identifying or designating conservation areas is no longer solely a government responsibility. Through the NLCA, Inuit now have a

major say in developing conservation areas.

Within the planning region there are several sites that have been recognized as being particularly important for wildlife and/or having significant cultural values. The original plan grouped these into three categories:

- 1. Specific sites that are presently protected through legislation:
 - Bylot Island Migratory Bird Sanctuary (Migratory Birds Convention Act);
 - Seymour Island Migratory Bird Sanctuary (Migratory Birds Convention Act);
 - Quttinirpaaq National Park (Canada National Parks Act);¹⁸
 - Polar Bear Pass National Wildlife Area (Canada Wildlife Act);
 - Prince Leopold Island Migratory Bird Sanctuary (Migratory Birds Convention Act);
 - Sirmilik National Park (Canada National Parks Act);
 - numerous known and unknown archaeological and historic sites (Historical Resources Act, NWT Archaeological Sites Regulations, Territorial Land Use Regulations).
- 2. Specific sites that have been proposed for protection:
 - Igaliqtuuq (Isabella Bay) National Wildlife Area (proposed national wildlife

The NLCA gives co-management bodies, especially the NWMB, important powers over the establishment of conservation areas in Nunavut.¹⁶ The NLCA also requires that the proposed national park in the North Baffin region (North Bathurst Island) "shall become a National park on the first anniversary of the conclusion of an IIBA..."¹⁷
Within the planning region there are several

¹⁶ See especially NLCA 5.2.34 and Article 9, which, among other things, defines "conservation area".

¹⁷ See NLCA 8.2.3 and 8.2.4.

¹⁸ Parks Canada and the QIA concluded an IIBA in August, 1999.

area, whale sanctuary and International Biosphere Reserve).

- 3. Sites recognized by government departments or other organizations as particularly significant areas, but having no formal designation at this time:
 - DSD Wildlife Areas of Special Interest;
 - CWS Key Migratory Bird Habitat Sites;
 - DFO Priority Marine and Freshwater Habitat Areas;
 - International Biological Program Sites;
 - historic buildings;
- muskox and caribou management areas. Any activity in the first category is subject to the regulations under the particular legislation setting up the site. In the last two categories, any protection will rely on the cooperation of land users, and on standard management practices resource legislation. The location and detailed description of the values of these sites have been outlined by the interested government departments and the communities, and can be found in the "Catalogue of Areas of Special Interest in the Lancaster Sound Planning Region", a background document to the original plan. The sites and the resource managers' concerns for their protection are also listed in Appendix G: Land Values and Concerns.

Issues

The conservation of valued renewable resources often requires the delineation of certain limited areas where human activities and their potential adverse impacts can be closely controlled and/or restricted. These protection measures may either restrict all other uses, or, if applied to specific times when - and places where - resources are most sensitive, they may still accommodate those other land uses at different times of the year. For example, caribou protection measures apply only when caribou are on calving grounds or at water crossings. At these times, all individual operations - such as mineral exploration - must cease. While these measures may not solve the problem of what to do about long-term development, they do offer flexible interim protection. Given the lack of prospective development in the region, the kinds of measures in Appendix I may be beneficial.

Protection measures could be implemented at least three different ways: as part of a regional land use plan; through the NWMB (wildlife regulations); and through terms and conditions attached to land use authorizations (land use regulations). For example, the Qikiqtani Inuit Association could follow the lead of the Kitikmeot Inuit Association and attach caribou protection measures to permits it grants to companies seeking to work on its lands.

In its draft 1997 Revised North Baffin Regional Land Use Plan, the NPC recognized that the Beverly and Qamanirjuaq caribou herd had prospered since the protection measures were introduced. The NPC commented on the flexibility of such measures:

Objectives

- ✓ TO DESIGNATE CERTAIN ADDITIONAL SITES FOR IMMEDIATE PROTECTION BECAUSE OF THEIR NATIONAL, REGIONAL AND/OR COMMUNITY SIGNIFICANCE.
- ✓ TO SUPPORT A CO-ORDINATED PROCESS FOR IDENTIFYING, DESIGNATING AND
 PROTECTING AREAS IMPORTANT FOR WILDLIFE AND FOR PRESERVING CULTURAL
 VALUES.
- ✓ TO PROMOTE THE USE OF SEASONAL OR TEMPORARY PROTECTION FOR CERTAIN AREAS, SO THAT THE LAND CAN BE USED AT OTHER TIMES AS LONG AS THE VALUES ARE NOT THREATENED.

Given the existing level of knowledge, the Commission thinks that the existing caribou protection measures are adequate. The measures should be reviewed in the future in light of new knowledge. On the one hand, more protection might be considered if research indicates that this would be required to maintain a healthy caribou population; on the other hand, future changes in mining technology may reduce the impact of mining activities on caribou.¹⁹

Government departments, within their particular mandates, have identified areas of significance, which have not yet received protection. Residents in the region have also identified important areas that support wildlife on which they depend. At one time, there was no mechanism to protect these community-identified areas, unless the area

happened to meet criteria for an existing type of government protection. However, the NLCA provides for the creation of protected areas. Article 8 sets out provisions to guide development of national and territorial parks and ensures that communities will have a major role in this work. Article 9 deals with Conservation Areas, and the NPC has developed guidelines to establish, assess or review conservation areas in Nunavut. This process has been designed to work within the land use planning process. Articles 8 and 9 deal with the requirement that, in most cases, an IIBA be negotiated before a park or conservation area is established.

Although there are territorial mechanisms for the protection of tourism values and recreational areas, it was found that there is no designation available to protect sites strictly for ecological reasons.

All archaeological sites, discovered or undiscovered, are protected through federal and territorial legislation. Undiscovered sites,

Beautiful Ellesmere Island, home to Quttinirpaaq National Park. Any agency that wishes to create a new conservation area in Nunavut, or change an existing one, must adhere to the provisions of the NLCA.

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because they have not been researched and/or mapped, are particularly vulnerable to disturbance. The NPC is working with the communities to map heritage and archaeological sites. The NPC has developed a series of recommendations to respond to people's desire to safeguard these important resources.

Industry is concerned about the possible proliferation of protected areas where industrial activities may be prohibited for part or all of the year. The value of the area to industry may change over time and industry is concerned that they may not be able to use the protected land when they wish.

Terms

The NPC supports the following existing initiatives, subject to the approval of affected communities and the successful negotiation of IIBAs (agencies carrying out work in these areas shall be responsible for ensuring there is adequate consultation):

- Work on assessing the potential for a national park at Tuktusinqvalik (northern Bathurst Island). The people of Resolute are working on a feasibility study with Parks Canada, the Government of Nunavut, Inuit organizations and other agencies. Land for the proposed park was withdrawn from development in 1996.
- The work of the Igaliqtuuq Steering Committee, the community of Clyde River,

- DFO, and other agencies in establishing the National Wildlife Area and International Biosphere Reserve at Isabella Bay (Igaliqtuuq) to protect the bowhead whale.
- The IHT, in its efforts to clarify the responsibilities of all land users in the region regarding the protection of archaeological and historical sites, and to educate land users about the importance of protecting these resources.

Since the original Lancaster Sound Regional Land Use Plan was approved, one national park and two important conservation areas have been established. Sirmilik National Park in North Baffin opened in August 1999, following the successful conclusion of IIBA negotiations with Arctic Bay and Pond Inlet. The new park includes a marine component. The Prince Leopold Island Bird Sanctuary was set up in 1991 and is home to hundreds of thousands of seabirds, including thick-billed murres, northern fulmars, black-legged kittiwakes, and black guillemots. This sanctuary is in Lancaster Sound, 160 kilometres southeast of Resolute and 13 kilometres off the northeast tip of Somerset Island.

A second conservation area, the Nirjutiqavvik National Wildlife Area on Coburg Island, was established in 1995. Located off the southeast tip of Ellesmere Island, it is also an important nesting area for seabirds.

The proximity of Coburg Island to yearround openings in the sea ice (polynyas) in Baffin Bay and Lady Ann Strait provides abundant food for the birds and attractive habitat for polar bears, ringed and bearded seals, walrus and migrating narwhal and beluga, and [human] hunters.²⁰

- 3.4.1 The NLCA sets out procedures to guide the establishment of conservation areas in Nunavut. Any agency proposing to create a new or modify an existing conservation area shall do so in accordance with the provisions of the NLCA. Proponents are directed to Appendix N of this document. Any proposed conservation or protected area strategy shall involve a thorough community consultation process.
 - The NPC endorses important community-based criteria for any protected area system, such as:
 - maintaining wildlife harvesting patterns;
 - protecting wildlife and wildlife habitat; and
 - preserving cultural identity and traditional use of the land. [A][CR]
- 3.4.2 Government resource managers shall continue to recommend seasonal or temporary protection of areas wherever possible. At present, seasonal protection is used in CWS Migratory Bird Sanctuaries. [A]
- 3.4.3 Visitors to the region, and local residents, shall adhere to the Code of Good Conduct contained in Appendix H. [REC]

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- 3.4.4 Caribou protection measures, based on those suggested in Appendix I and further developed by DIAND and the QIA Inuit land managers in consultation with NWMB, local HTOs and DSD shall be implemented for all caribou herds in the North Baffin Planning Region by DIAND and by the QIA. [A]
- 3.4.5 The NPC, the NWMB, NIRB, DIAND, Inuit land managers and DSD should work together to monitor the effectiveness of the caribou protection measures and compliance, and to determine whether special protected areas for caribou are required. [REC]

3.5 Marine and Terrestrial Transportation

Background

Shipping is central to the economic well-being of the region. Present shipping activity usually occurs between June and November. The types of vessels are: ships carrying community supplies of dry goods and fuel; ore carriers from Nanisivik and Polaris; CCG ice-breakers; and research and survey vessels. Tourist cruise ships and small craft of various descriptions occasionally visit the area.

Future shipping activity could include oil and/or gas tankers traveling to and from the Sverdrup Basin.

Apart from immediate regional considerations, shipping in the Arctic has

national and international economic, defence, sovereignty and trade implications. The Government of Canada's policy is to encourage commercial shipping in the waters of the Arctic Archipelago, subject to requirements ensuring Canada's sovereignty and security, the preservation of the environment, and the well-being of the residents of the region. In accordance with international law, foreign-flag vessels enjoy the right of innocent passage in Canada's territorial sea, and the right of freedom of navigation seaward of this 12-mile limit.

Ships navigating in Canadian Arctic waters must meet or exceed operating standards designed to ensure safe, pollution-free passage. Canada's rules for such ships are unusual in that ships of all nations must meet Canadian standards for hull strength and engine power before entering the Arctic Zones, and these ships generally leave the Zones within the time period set for safe navigation. The Marine Safety Branch of Transport Canada enforces these standards through regular inspection. The Marine Safety Branch also requires proof of insurance coverage for ships carrying any form of pollutant in large quantities, whether as cargo or fuel. This insurance is in addition to the international regime that provides insurance coverage for laden tankers.

Issues

Communities, governments and interest groups are concerned about the potential effects of shipping on wildlife. Concerns include:

Objectives

- ✓ TO ENSURE THAT ADVERSE EFFECTS ON WILDLIFE AND HARVESTING ACTIVITIES ARE MINIMIZED, WHILE SHIPPING RIGHTS, SAFETY AND ECONOMIC CONSIDERATIONS ARE RESPECTED.
- ✓ TO IMPROVE COMMUNICATION AND UNDERSTANDING BETWEEN THE SHIPPING INDUSTRY, GOVERNMENT REGULATORS AND THE COMMUNITIES ABOUT ACTIVITIES AND CONCERNS, SO THAT CONFLICT CAN BE RESOLVED.
- ✓ TO EXCHANGE TRADITIONAL AND SCIENTIFIC KNOWLEDGE AS A MEANS OF IMPROVING COMMUNICATION, UNDERSTANDING AND TRUST BETWEEN ALL PARTIES.
- ✓ TO ENSURE THAT WHEN SHIPPING TAKES PLACE ALL EFFECTS ARE MONITORED SO THAT FUTURE ACTIVITIES CAN BE IMPROVED.
- the effects of noise, which may alter the behaviour and distribution of some marine mammals:
- the direct mortality of marine mammals e.g., the flooding of seal dens near ship tracks:
- the cumulative effects on ecosystems from various shipping activities, including those associated with ports;
- oil spilled from ships and its effects on habitat, seabirds and marine mammals; and
- premature break-up of fast ice and the floe edges in Lancaster Sound and Admiralty Inlet with possible changes in wildlife movements.

Communities, in particular, are concerned about the adverse effects of shipping on harvesting activities. Concerns include:

 inconvenience and risk to hunters crossing ship tracks;

- loss of equipment through ice broken by ships; and
- premature break-up of fast ice and the floe edge, which are essential to the spring harvest.

Although only a limited number of ship transits are made at present, year-round shipping, with an increased number and frequency of transits, could intensify any adverse effects.

For safety and economic reasons, ships require the flexibility to respond to changing ice conditions and to have as long an operating season as safety permits. Reduced flexibility in routing and timing, due to environmental and community concerns, could mean greater risks and higher costs to both the industry and the communities.

Terms

The NPC does not support year-round Arctic shipping because of the uncertainty about its effects on regional residents and the environment and wildlife.

The NPC supports the co-operative approach to compensation developed by Canarctic Shipping Company Limited, Nanisivik Mine and the community of Arctic Bay to deal with conflicts between shipping and harvesting activities.

The NPC supports the CCG and the Arctic shipping industry in their efforts to hire northerners as crewmembers and as research associates.

- 3.5.1 The Nunavut Marine Council should address the need for regional Inuit shipping advisory committees and an improved communications system to reduce interference with people and wildlife. It should encourage the use of Inuit monitors on board any ship travelling through the region. [REC]
- 3.5.2 The CCG shall meet with the Nunavut Marine Council prior to the shipping season to exchange information about ship movements and community concerns. [A]
- 3.5.3 CCG operations staff shall meet with community representatives in the region at least once a year to discuss topics of mutual concern. [A]
- 3.5.4 Whenever safe and practical to do so, all ships shall remain at least 10 kilometres from all coastlines in the region, unless approaching or leaving port. This zone will be plotted on the

- maps to be contained in the Arctic Sailing Directions. [A]
- 3.5.5 Whenever safe and practical to do so, all ships shall remain at least 20 to 25 kilometres from the coasts of Lancaster Sound unless approaching or leaving port to avoid direct contact with concentrations of marine wildlife. This zone will be plotted on the maps to be contained in the Arctic Sailing Directions. [A]
- 3.5.6 Ship traffic through and around the floe edges in April, May and June shall be minimized. Possible ways to protect the edges (such as having ships travel in convoys), shall be discussed by community representatives and the Canadian Marine Advisory Committee (Northern). [A]
- 3.5.7 Ships travelling to and from the Polaris Mine shall avoid the floe edge between Griffith Island and Cornwallis Island whenever it is safe and practical to do so. [A]
- 3.5.8 The shipping industry, the CCG, DFO, and the communities shall continue to monitor the effects of ship passages. New information on appropriate ways to reduce adverse effects shall be distributed by the CCG to the shipping industry through the Canadian Marine Advisory Committee (Northern), and to the communities through the CLARCs. [A]
- 3.5.9 The CCG shall devise a formal method of informing ships travelling through

Essential Areas as shown on the *Areas of Importance* map, and through and around floe edges in the spring, about current knowledge including harvesting activities, the known distribution of marine mammals, and local ice conditions. This formal communication system shall also allow for ships to provide the communities with information on ship schedules and location, particularly in the spring. [A]

- 3.5.10 While ensuring the respect of applicable Canadian international obligations in the region, the NPC implement shall the concept transportation and/or of communications "corridor" as a land use policy having general application, and applying to land and water routes throughout the region, based on the processes outlined in Appendices J and K. [A]
- 3.5.11 All parties wishing to develop a transportation and/or communications corridor shall submit to the NPC a detailed application for an amendment. This application must include an assessment of alternative routes, plus the cumulative effects of the preferred route. It shall provide reasonable options for other identifiable transportation and utility facilities. [A][CR]
- 3.5.12 The NPC, and either NIRB or a panel acting under section 12.4.7 of the NLCA, shall publicly review the

proposed corridor to determine whether the proposal adequately meets the guidelines set out in Appendices J and K. Once it is determined that a proposal does meet the guidelines, the NPC may request the ministers to amend the plan to include the new transportation corridor. [A] [CR]

3.6 Mineral Exploration and Production

Background

Mineral exploration within the region has proceeded intermittently since the arrival of Europeans in the mid-1800's. Since then, two operating mines have been developed; several undeveloped deposits of iron, zinc/lead, and coal have been identified; numerous deposits of sand and gravel are known; and the communities use several carving-stone quarries. The potential for other deposits is unknown, as the area has not yet been thoroughly explored.

Of the two mines, Polaris operates as a fly-in/fly-out camp. Nanisivik Mine, owned by Breakwater Resources Ltd., was created by the company and government as a townsite for its employees and their families. The policy of the GNWT is to discourage the formation of new communities in favour of fly-in/fly-out mining camps. This policy encourages the use of existing community infrastructure and facilitates eventual abandonment of mines when the ore reserves are no longer economic. The NPC supports this approach.



The **HMV Arctic** docks in the mining settlement of Nanisivik. Shipping traffic in North Baffin includes ore carriers from Nanisivik and Polaris, community-bound sealift ships, ice-breakers, and research and survey ships.

In 1995, Nanisivik produced 97,000 tonnes of zinc concentrate. This production was shipped in four voyages of the HMV Arctic. The Polaris Mine, owned by Cominco Ltd., shipped over 225,000 tonnes of zinc concentrate and over 45,000 tonnes of lead concentrate that same year.21 However, Polaris is scheduled to close down in 2002, and Nanisivik may close down in the next five to eight years unless new reserves are found. There are no known deposits in the area that could replace these operations. However, the potential for amber, gold, copper, nickel, platinum, zinc and other commodities is high in this region - which accounts for the continuing active exploration - and there may be more mining activity in the future. The Commission also notes that exploration companies, like other agencies operating in the north, are increasingly sensitive to local community needs.

The industry, through its producing mines and exploration parties, provides employment for local people, job training and infrastructure such as airstrips and docks for all to use. As well, communities will continue to need new sources of carving stone. Exploration parties often find this material.

Issues

Mineral exploration requires access to the land to conduct physical surveys of the surface and the subsurface. This access must be economical, or else mineral exploration

companies will search elsewhere. While community residents may welcome the economic benefits of mining, they do not want mineral exploration to threaten their use of the wildlife or the land.

Effective decision making requires good information about, and an understanding of, mineral potential throughout the planning region.

Communities want to ensure that they receive maximum benefits from mineral exploration and production and that they are prepared to take advantage of such economic opportunities, employment and the provision of goods and services.

Communities and governments want mine abandonment to be planned well in advance of closings in order to minimize disruption to the region and its communities. Abandonment of exploration camps and, potentially, mines remain a key issue for land use planning. There is a consensus among all parties that proposals for mining development should include plans for the eventual closing and restoration of the site. At the time of writing, DIAND was consulting on an updated policy on mine reclamation in the NWT and Nunavut.²² This policy will provide certainty to mine operators, while reassuring people in the region that environmental standards will be met at any potential mine site.

The NLCA makes Inuit the owners of the carving stone found in Nunavut. Communities need adequate economic stocks of this important material. Carvers in the communities would benefit from the discovery of new deposits, and exploration and mining companies are encouraged to work with local

²¹ Data from the GNWT Department of Resources, Wildlife and Economic Development (Minerals, Oil and Gas Division).

²² DIAND. "Mine Reclamation Policy for the NWT." February 1997.

remains unregulated and is extremely hazardous.

Objectives

- ✓ TO ENCOURAGE MINERAL EXPLORATION AND PRODUCTION WHILE PROTECTING WILDLIFE RESOURCES AND MAXIMIZING ECONOMIC BENEFITS TO THE REGION.
- ✓ TO IMPROVE THE KNOWLEDGE OF MINERAL POTENTIAL THROUGHOUT THE PLANNING REGION AS PART OF THE NECESSARY BASE FOR EFFECTIVE DECISION MAKING.
- ✓ TO ENSURE THAT THE COMMUNITIES ARE PREPARED TO TAKE ADVANTAGE OF THE ECONOMIC OPPORTUNITIES OFFERED BY EXPLORATION AND PRODUCTION.
- ✓ TO ENSURE THAT MINING EXPLORATION, PRODUCTION AND ABANDONMENT PROCEED WITH MINIMAL ADVERSE EFFECTS ON THE ENVIRONMENT AND THE COMMUNITIES.
- ✓ TO INCREASE LOCAL KNOWLEDGE OF THE LOCATION OF CARVING STONE WITHIN THE REGION.

Terms

The NPC, recognizing the value and contribution of mineral exploration and development to the region and to the nation as a whole, supports industry's requirement of access to land for exploration, and supports research needed to determine the mineral potential of the region, subject to conservation of the Land Values (Appendix G). For its part, industry needs to be sensitive to the changed approval process introduced under the NLCA, the need for adequate communication and consultation prior to commencement of exploration or other work, and the very real desire of the people of the

region to share in the benefits that mining produces. This issue was raised a number of times at the NPC's public hearing in Pond Inlet in May 1997:

In the action about hiring local residents, there's been problems to that. Since the 1994 Agreement was signed by Nanisivik Mines, and in that Agreement it states that Nanisivik would have 60% Inuit employees at the mine. Now, it is only 18% Inuit-employed. What happens now that they did not pursue that employment level that they had agreed to? Are you convinced that they will follow these

plans? I know Qikiqtani Inuit Association decided recently to look into this matter. I like to hear the NPC's perspective about this. How do you think you can convince other existing mining industries and new proposed mining explorers to follow this action plan? To the mining exploration proposals, consult with them in advance, before the actual mining development, and give them no other alternative. We have to make sure that they keep up to their Agreement. Inuit are unemployed because the mines had not lived up to them. Perhaps the plan should be more severe towards the proposals from the mining industries when the mining companies don't follow their Agreement.23

- 3.6.1 The mining industry and government should continue to support the development of a local industry to service the needs of exploration companies and any future mining ventures. [REC]
- 3.6.2 The NWT and Nunavut Chamber of Mines, on behalf of the mining industry and with all other land users, should adopt a Code of Good Conduct, as a guide to good land use practices, at least equal to that suggested in Appendix H. [REC]
- 3.6.3 DIAND shall ensure that, in the future, it has adequate funds to properly restore abandoned exploration camps, following, where possible, the

- principle of "the polluter pays". [A] Raising the level of security deposits and increasing the minimum and maximum fines under the Territorial Lands Act would help ensure that the sites of exploration camps are properly restored. [REC]
- 3.6.4 The NPC is encouraged that DIAND and the NWB have adopted the Guidelines for Abandonment and Restoration Planning for Mines in the NWT that were originally published by the NWT Water Board. At the time of writing, DIAND was consulting on an updated policy on mine reclamation in the NWT and Nunavut. [A]
- 3.6.5 All proposals mining for developments shall include plans, complete with financial guarantees, for the eventual abandonment and restoration of the site. As a priority, waste sites where risks to human health, safety, the environment or legal obligations exist shall be addressed. Toxic waste shall be removed where possible. [A][CR] Management of the sites should follow the Northern Environmental Risk Assessment Strategy and risk assessment/risk management principles. [REC]
- 3.6.6 Mining exploration companies and mine operators shall continue to minimize the negative effects of their activities on the environment. [CR]

²³ Silas Attagotsiak, The Lancaster Sound Regional Land Use Plan Review Public Hearings: English Transcript, (NPC: Pond Inlet, 27 - 29 May 1997), p. 77.

- 3.6.7 Mining companies should hire locally and purchase local goods and services when possible. Mineral exploration parties should hire qualified local residents as field assistants. [REC]
- 3.6.8 The mining industry is encouraged to assist in identifying local carvingstone deposits. Mineral exploration parties should report any carvingstone locations they discover to the CLARC and land owner. [REC]
- 3.6.9 Special hunting restrictions at mine sites and along transportation routes shall be strictly enforced by mine operators and land managers to prevent over harvesting of wildlife.

 [A][CR]

3.7 Oil and Gas Exploration and Production

Background

Since the 1960s, substantial reserves of gas and several small oil fields have been found in the region. When this plan was originally developed, there was a single working oil and gas production facility in the region at Bent Horn. That operation has since been shut down. The potential for more discoveries in the Sverdrup Basin, Lancaster Sound and north Baffin Bay is high, but potential development must wait for a more favourable investment climate.²⁴

Since oil prices dropped in the mid-1980s, the rate of exploration has decreased and associated employment opportunities have disappeared. This situation is unlikely to change until there is a rise in the world price of oil or gas.

Issues

The Government of Canada considers exploration and production of the oil and gas reserves in the High Arctic to be in the national interest. At the same time, there is a need to address the risks that oil exploration and production present to the region's residents and to the internationally significant ecosystem of North Baffin.

If oil and gas exploration and production are to proceed, the residents of the region want to be sure that they will benefit economically and that their use of the land and wildlife will not be threatened. Communities, governments and groups with environmental concerns want to be sure that ecological values will not be threatened.

While the pace and scale of exploration and development is often determined by national and international factors, their environmental effects are felt most directly by those living in the region. Residents are interested in maximizing their economic benefits from oil and gas exploration and development.

As long as the potential of any reserves on the existing holdings in Lancaster Sound and north Baffin Bay remains untested, and the reserves in the Sverdrup Basin remain undeveloped, any benefits to the region and nation remain unrealized.

²⁴ In late 1998, DIAND announced that it wanted to invite oil and gas companies to start bidding for the right to resume exploration in the High Arctic. At least one company indicated that it might be interested. Under NLCA Article 27, Inuit have a right to be consulted prior to the issuance of exploration licences, and this process was getting under way as this plan was being finalized. (Nunatsiaq News, Nov. 19, 1998)

A great deal of information on predicting and responding to the effects of oil and gas exploration and development has been collected by various agencies. However, a gap exists between the amount of information available and the communities' understanding of it. This communication gap intensifies the communities' concerns about the risks.

In spite of continuing research, effective methods for cleaning up oil spills in iceinfested waters or in strong ocean currents have yet to be developed. These spills are of particular concern to communities in the region. People in the region have expressed concern about the impact of large spills as well as the effects of smaller, more localized spills. The CCG is coordinating the placement of oil spill response equipment in communities in the region, as well as training people in what to do should an oil spill occur. This work is subject to budgetary constraints.

Objectives

- **✓** TO REDUCE THE RISK OF OIL SPILLS IN THE REGION.
- ✓ TO ENABLE COMMUNITIES TO KNOW AND FULLY UNDERSTAND HOW THE RISKS ASSOCIATED WITH OIL AND GAS EXPLORATION AND PRODUCTION ARE IDENTIFIED AND CONTROLLED.
- ✓ TO MAXIMIZE THE BENEFITS OF OIL AND GAS EXPLORATION AND PRODUCTION TO THE REGION'S RESIDENTS BY ENSURING THAT THEY ARE PREPARED TO TAKE ADVANTAGE OF ALL ECONOMIC OPPORTUNITIES THROUGH PROGRAMS SUCH AS THE CANADA BENEFITS PROGRAM.

Terms

The Commission believes that oil and gas exploration and production should proceed in accordance with the principles of this plan and the conservation of the Land Values (Appendix G).

3.7.1 Holders of existing rights in Lancaster Sound and Baffin Bay may submit a proposed drilling program, for approval to the National Energy

Board and carry out this exploration program involving the communities at all stages. If, at the conclusion of this program, no significant discovery has been made, then no additional exploration licences shall be issued in these areas without prior community consultation. [A]

3.7.2 The oil and gas industry should conduct further research on oil spill

- cleanup in ice-infested waters and in strong ocean currents. [REC]
- 3.7.3 Where budgets permit, the CCG shall continue to install oil spill cleanup equipment in the communities and ensure that people are trained to use it properly. Equipment shall be stored in an accessible, well-marked location. [A]
- 3.7.4 DIAND and relevant departments of the Government of Nunavut shall provide the communities with the best information available concerning the risks and benefits of oil and gas exploration and production. [A] DIAND and DSD shall encourage the exchange of information between local residents and others who have knowledge of, or experience in drilling, in ice-infested waters and in strong ocean currents (e.g., residents, researchers, drilling operators in the Beaufort Sea and the east coast regions). [A]

DIAND and DSD shall ensure that communities help set research priorities and participate in research; that they have access to independent, as well as government and industry, sources of information; and that they understand the research results. [A]

3.7.5 Prior to further exploration or development, the oil and gas industry and DIAND shall demonstrate to the communities most likely to be affected how industry and government would respond to oil spills in ice-infested

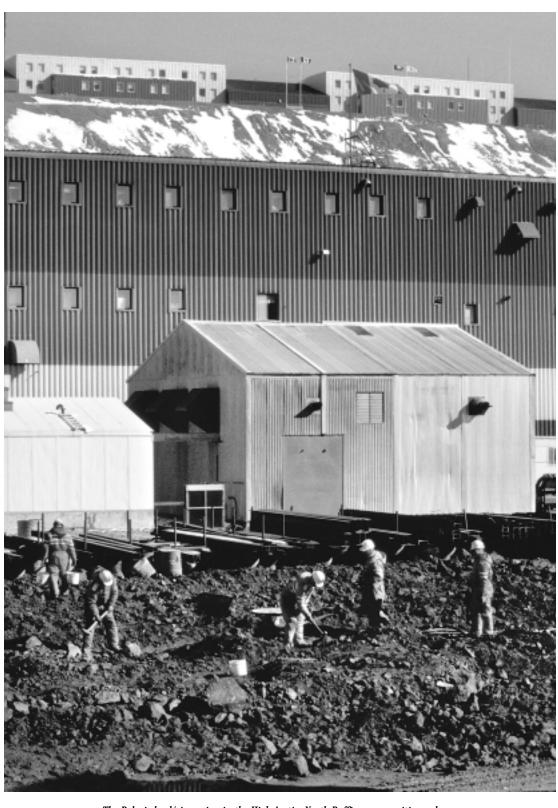
- waters and in strong ocean currents. [CR] [A]
- The oil and gas industry, the 3.7.6 communities and the federal and territorial governments should develop and implement programs assist the communities to advantage of economic take opportunities. These opportunities could be developed through benefit packages, training programs and local hire, joint venture arrangements, and funding programs. [REC]
- 3.7.7 Oil and gas exploration companies shall continue to minimize the negative effects of their activities on the environment. [CR] Companies should be aware of the rights and benefits accorded Inuit through IIBAs as established in the NLCA. [REC]

3.8 Tourism

Background

The region contains many significant features and characteristics that are of interest to visitors, including majestic scenery, fascinating flora and fauna, historic sites, a unique northern lifestyle and much more. The number of tourists visiting the area to experience the High Arctic, to learn of its people and culture and to take advantage of sport hunting and fishing, is increasing.

The tourism industry has become increasingly important to the economy of the



The Polaris lead/zinc mine in the High Arctic. North Baffin communities welcome the economic benefits of mining – but not if they threaten the use of their wildlife or land.

Many of the communities are developing tourist facilities such as hospitality and outfitting services. In addition, some communities have identified specific areas that show the natural beauty of the region, and which could be developed for tourism.

Issues

Some residents are concerned that tourists may interfere with their harvesting activities

and community lifestyle, or disturb wildlife unnecessarily. Tourists, on the other hand, like to have the freedom to explore areas of their choosing.

The attitude toward the pace and scale at which tourism has developed, and will proceed in the future, varies among communities of the region. Some residents wish to quicken the pace, while others wish to limit it.

At present, there are certain times of the year, particularly in spring and summer, when there are more tourists wishing to visit the region than facilities and services can accommodate.

Objectives

- ✓ TO ENCOURAGE DEVELOPMENT OF THE TOURISM INDUSTRY AT A PACE AND SCALE THAT RESPECTS THE VALUES, NEEDS, PRIORITIES AND CAPABILITIES OF THE COMMUNITIES.
- ✓ TO MINIMIZE CONFLICT BETWEEN TOURISM ACTIVITIES AND COMMUNITY LAND-BASED ACTIVITIES.
- ✓ TO PROMOTE A MUTUAL AWARENESS AND UNDERSTANDING OF THE NEEDS AND VALUES OF TOURISTS AND COMMUNITY RESIDENTS.

Terms

- 3.8.1 Communities, with the continuing assistance of Nunavut Tourism and the DSD, should identify specific tourism facilities and packages that take advantage of both local and regional features and values. [REC]
- 3.8.2 Communities should identify sites and resources in the vicinity of the communities that would be most suitable for tourists to visit, either by themselves or accompanied by outfitters and guides. [REC]

- 3.8.3 Visits by tourist ships should be coordinated by individual communities,
 with the help of Nunavut Tourism.
 Arrivals and departures in the region,
 as well as details of community visits,
 should be discussed in advance
 between the vessel operators and the
 particular community. Operators of
 tourist ships should ensure that the
 necessary licences and permits are
 obtained from the DSD and that all
 other requisite permits and licences
 are also obtained. [REC]
- 3.8.4 Tourists should adhere to the Code of Good Conduct for land users found in Appendix H. [REC]

3.9 Research

Background

Research conducted in the High Arctic, and in the planning region specifically, has helped Canada to develop practical technology for cold climates. Research into Arctic ecosystems has also advanced the understanding of the life systems which the Arctic supports, and has suggested techniques to safeguard these ecosystems from damage by human activities.

The positive value of integrating local knowledge of the environment with scientific knowledge is becoming increasingly apparent to both local residents and the scientific community.

At the beginning of 1995, the Science Institute of the Northwest Territories was divided and the eastern portion amalgamated with Nunavut Arctic College, becoming SINT- East and, more recently, the Nunavut Research Institute (NRI). The NRI has been reviewing the research licensing process to reflect the concerns of people in Nunavut about the way research is carried out. The review is an attempt to streamline the research permitting process - both for researchers applying for licences and for community and regional organizations that must review the applications. The NRI also wants to ensure that the results of research get back into the communities.

A better consultation process for land use should be developed by government, Inuit organizations, the communities and the scientific community. Residents often feel they are not informed of what is happening on the land. There is a perception that the results of scientific research are not being sufficiently communicated to residents.

Some residents are frustrated with a research agenda that they say has little to do with local needs or priorities. They see the need to understand and use the immense amount of local knowledge that is available.

"[Elders] have passed on the knowledge in total truth to their descendent[s] and therefore we will continue the tradition and pass on our knowledge as well as all we know about the Arctic. It is for that reason that we are now requesting research on management and marketing of our wildlife and for us to run it. It is because, at present, nothing is getting done with the research that has been conducted."²⁵

²⁵ Pond Inlet Hunters and Trappers Organization, Submission to the NPC, May 29, 1997, p. 1.

Issues

Scientific research about the land and resources of the region is recognized as important and is generally welcomed by the communities. Communities have, however, expressed the desire to be more involved in setting priorities for research, in carrying out research, and in sharing the results.

Communities also wish to ensure that they have input into the approval of research permits and that they are well informed about the research activities and results.

For communities to participate effectively in decision making, they need access to an independent assessment of the consequences of proposed policies and projects that address their concerns.

There is a general concern that the greenhouse effect, atmospheric pollution and ozone depletion will adversely affect the northern climate. Rising sea levels and greatly enlarged areas of open water for longer periods of time could significantly alter the Arctic ecology and related land use patterns and activities.

Objectives

- ✓ TO IMPROVE THE ABILITY OF COMMUNITIES TO UNDERSTAND AND PARTICIPATE IN ALL
 ASPECTS OF RESEARCH, AND TO HAVE INFLUENCE IN SETTING RESEARCH PRIORITIES.
- ✓ TO IMPROVE THE INTEGRATION OF TRADITIONAL LOCAL KNOWLEDGE WITH SCIENTIFIC KNOWLEDGE.
- ✓ TO IMPROVE THE QUALITY, COVERAGE AND UNDERSTANDING OF THE NATURAL RESOURCE BASE, INCLUDING INFORMATION ON NON-RENEWABLE RESOURCE POTENTIALS.
- ✓ TO PROVIDE METHODS FOR COMMUNITIES TO OBTAIN INDEPENDENT ASSESSMENTS OF THE CONSEQUENCES OF PROPOSED POLICIES AND PROJECTS FOR THE COMMUNITIES.
- ✓ TO ENCOURAGE LONG-TERM RESEARCH ON CHANGING CLIMATE PATTERNS AND THEIR EFFECTS ON MARINE AND TERRESTRIAL ECOSYSTEMS IN THE REGION.

Terms

The NPC supports researchers in their ongoing efforts to better understand the Arctic

ecosystem. The NPC also supports the efforts of the NRI in maintaining a register of potential field assistants for scientific

research, and supports the hiring of such candidates whenever possible.

- 3.9.1 The approval process for all scientific research, including research conducted by government departments and agencies, shall require the involvement of local residents. [A]
- 3.9.2 The NRI shall consult with the QIA and those CLARCs that have current members to identify community and regional priorities for research, and then inform the scientific community of these priorities. [A]
- 3.9.3 Researchers shall make their best efforts to incorporate, where relevant and available, local and traditional knowledge in their research projects and ensure that it is integrated with the scientific knowledge. [A] [CR]
- 3.9.4 Research programs conducted in the North Baffin region shall, where possible, rely on local services and local employment. [A] [CR]
- 3.9.5 Academic and scientific researchers shall consult the NRI concerning research topics or fields that would be of benefit and interest to local residents. Research that will improve the quality, coverage and understanding of the natural resource base, including the non-renewable resource potentials, shall be conducted with the support of the communities. [A][CR]

- 3.9.6 Applications for scientific research licensing should be sent to local HTOs for review. The HTOs will involve the CIARCs in this review. [A]
- 3.9.7 Communities, through the CLARCs, should work with the NRI, QIA, the NPC, NIRB and other agencies to clarify uncertainties about the consequences of proposed land use projects. [REC]
- 3.9.8 Existing polar research training programs at Nunavut Arctic College, the Arctic Council, and the Polar Continental Shelf Project, as well as the research centres operated by the NRI should receive the support they need to ensure a greater role for northerners in polar scientific research. [REC] These organizations and DIAND shall investigate the possibility of establishing a national polar research training institute in Nunavut. [A]
- 3.9.9 Environment Canada and other representative agencies should conduct more research on climate patterns and related environmental studies to develop models of potential change in the region. [REC]
- 3.9.10 By virtue of the Scientist Act, researchers conducting investigation on ice dynamics and/or marine mammals, with the exception of polar bears, are required to consult the NRI. They are also required to consult with communities when setting priorities for research. [A]

3.10 Sovereignty and Defence

Background

Inuit inhabited the North Baffin region long before the Dominion of Canada was created. As the first residents of this country, Inuit are valued citizens. In the early 1950s, the establishment of the communities of Grise Fiord and Resolute Bay helped to strengthen Canadian sovereignty in the High Arctic. Inuit have a large role to play in affirming Canada's northern presence.

In every community of the region, Inuit participate in the Canadian Ranger Program, which trains them as a local surveillance force. The Rangers, in turn, act as guides for and train members of the Canadian Forces in Arctic survival.

Long-range Aurora aircraft regularly patrol the region, providing a military presence as well as collecting data on non-renewable resource exploration activities, ice movement and wildlife. The Army is also active through periodic small-scale tactical exercises.

There have been major changes in defence priorities since land use planning work first began in the North Baffin region. The threat from the Soviet Union that impelled much of the military buildup in the region throughout the Cold War no longer exists. The North Warning Stations have been upgraded throughout Nunavut (although none exist in the planning region). Canada does not send submarines through the Arctic, and the government has decided not to build a Class A icebreaker because it was too expensive. Some military training continues, however, and DND needs to be aware of the effect of its activities on the environment. The military needs to follow proper procedures and ensure that any mess it makes on the land is cleaned up.

Issues

For the most part, the communities accept current military activities and associated land uses if they are advised in advance, are consulted about the timing and type of activities, and are given the opportunity to benefit whenever possible.

Year-round shipping, with an increased frequency and number of transits, could intensify adverse effects on wildlife and harvesting activities.

Objectives

- ✓ TO IMPROVE COMMUNICATION BETWEEN THE COMMUNITIES AND THE MILITARY TO ENSURE MUTUAL UNDERSTANDING OF NEEDS.
- ✓ TO IDENTIFY WAYS TO MAXIMIZE BENEFITS AND MINIMIZE ADVERSE EFFECTS OF MILITARY DEVELOPMENTS AND ACTIVITIES IN THE REGION.

Terms

The NPC supports the Government of Canada's efforts to involve Inuit and other local residents as much as possible in defining and implementing strategies to strengthen national security and sovereignty in the region.

The NPC believes that Canada has supported its claim to sovereignty over the Canadian Arctic by negotiating, signing, and now implementing the NLCA, which recognizes traditional and existing Inuit land use and occupancy.

The NPC supports DND in involving the communities of Arctic Bay, Pond Inlet and Nanisivik in their Initial Environmental Evaluation for the proposed Northern Training Centre. The NPC welcomes the policy that all major defence-related projects proposed for the region will be subjected to environmental impact assessment procedures. It also notes DND's commitment to "give an undertaking to try to give reasonable notice of its intentions, where it does not compromise its operational requirements." 26

3.10.1 If new military facilities are required in the region, DND should consider existing regional facilities for the establishment of new defence installations. The communities, QIA and other relevant Nunavut bodies, such as the NPC and NIRB, should be consulted before any new construction. [REC]

3.11 Heritage Resources

Background

Inuit are very concerned that heritage sites be preserved. For years, archaeologists from the CMC and the Prince of Wales Northern Heritage Centre have endeavoured to identify archaeological sites in the region, but large numbers remain unrecorded. Proper identification of heritage sites is viewed as the first step toward protecting them. The following section from the NLCA underscores the importance of this effort:

The archaeological record of the Nunavut Settlement Area is of spiritual, cultural, religious and educational importance to Inuit. Accordingly, the identification, protection and conservation of archaeological sites and specimens and the interpretation of the archaeological record is of primary importance to Inuit and their involvement is both desirable and necessary.²⁷

The NLCA also defines an archaeological site as "a site or work within the Nunavut Settlement Area of archaeological, ethnographic or historical importance, interest or significance or a place where an archaeological specimen is found, and includes explorers' cairns..." An archaeological specimen is "an object or specimen found in an archaeological site of archaeological, ethnological or historical importance, interest or significance and includes explorers' documents." ²⁸

^{26 &}quot;Consolidated Federal Comments, Revised Draft North Baffin Regional Land Use Plan - by page and section," July 1998, pg. 5.

²⁷ NLCA, Section 33.2.2, p. 226.

²⁸ NLCA, Section 33.1.1, p. 225.



Visitors ford the glacial run-off. In order to preserve Nunavut's pristine environment, tourists should adhere to the Code of Good Conduct for land users found in this land use plan.

©1997 Andrew McCoy

Issues

Identification of archaeological sites is important both for mapping Inuit heritage resources and developing land use plans. This work has begun in the West Kitikmeot and the Keewatin. Using information from the CMC and from Inuit in the communities, the NPC has created maps and a database of the

archaeological sites in the West Kitikmeot. Similar work is well under way in the Keewatin and beginning in the North Baffin region.

Terms

New information will be added to the database and maps as it is collected. The

Objectives

✓ TO PRESERVE THE NORTH BAFFIN'S RICH INUIT AND NON-INUIT HERITAGE RESOURCES.

gathering of this information will be guided by criteria provided by the CMC and CLEY. These criteria consider any relevant cultural or historic feature made before 1945 to be an archaeological site. In order to analyze the sites in a consistent manner they have been classified according to their type and time period. The site types, time periods and cultural designations used are listed here:

Site Types:

- Campsite
- Trading Post
- Sacred
- Village
- Unknown
- Findspot (a site or a spot where a single tool or artifact was found, or where very few were found)
- Killsite (a site used for killing animals)
- Lookout (a site used to watch for animals)
- Workshop (a site where there is evidence of work to create or repair tools, weapons, etc.)

Time Periods:

- Pre-Contact
- Post-Contact
- European
- Undetermined

Cultural Designation:

- Inuit
- Non-Inuit

It should be noted that it is difficult to establish the exact chronological date for each category, since European influence was not consistent across groups and regions.

Considerable concern has been expressed about the effects of potential development on heritage sites. For that reason, the NPC is recommending an additional level of protection for sites of special historical or cultural importance to Inuit. Such special protection would complement legislative protection that currently applies to the sites, and would not preclude further legislation protection. Through the planning process, and by way of an amendment, it will be possible to designate areas of sufficient size to protect the integrity of the site. This designation will be included in the archaeological site mapping work now being conducted with the assistance of people from the communities.

- 3.11.1 Museums for archaeological artifacts should be established in Nunavut. [REC]
- 3.11.2 The NPC and the communities shall continue to record the locations of heritage and archaeological sites, and shall involve the CMC, the IHT, and CLEY on the documentation of these sites. This information shall be referred to by CLEY when land use proposals are considered. The appropriate communities shall be consulted on the approval of archaeologists' applications before permits are issued. [A]
- 3.11.3 The CMC shall continue to hold a central registry of archaeological sites, and the NPC, in coordination

with the IHT, shall continue to monitor land use activities to protect these sites. Information about the location and identity of archaeological sites in specific areas, and the measures necessary to protect them, shall be included in land use permits. Land users shall report the discovery of all suspected archaeological sites or artifacts to CLEY. [A] [CR]

- 3.11.4 Any review of legislation protecting burial, historical and archaeological sites shall ensure that these sites are more fully protected. [A]
- 3.11.5 The NPC shall consider requests to amend the plan to designate special areas for cultural, traditional or historical reasons. No development activities shall be permitted within such areas or within an area of sufficient size to protect the integrity of the site. [A]

3.12 Cumulative Effects and Ecosystems Monitoring

The identification and monitoring of cumulative environmental effects are important elements of land use planning and environmental management. The NLCA guides the NPC in both of these roles.

Cumulative Effects Assessment

Two articles of the NLCA relate to land use planning provisions and the cumulative environmental effects of development. These two articles refer to a process designed to include the assessment of cumulative effects of projects in relation to other development activities.

Article 12.3.3 states that the NPC may refer an exempted project to NIRB for screening "where the NPC has concerns respecting the cumulative impact of that project proposal in relation to other development activities in a planning region."²⁹ Article 13.4.4 states that "Where the NPC has concerns respecting the cumulative impact of development activities in a planning region, it may refer water applications to NIRB for screening even though the application falls within Schedule 12-1." ³⁰

General Monitoring

Article 12.7.6 of the NLCA guides the role of the NPC in the establishment of a general monitoring program, stating that there is:

...a requirement for general monitoring to collect and analyze information on the long-term state and health of the ecosystemic and socio-economic environment in the Nunavut Settlement Area. Government, in cooperation with the NPC, shall be responsible for developing a general monitoring plan and for directing and coordinating general monitoring and data collection. The NPC shall:

(a) in accordance with the plan, collate information and data provided by

²⁹ NLCA, Section 12.3.3, p. 106.

³⁰ NLCA, Section 13.4.4, p. 126. (Schedule 12-1 lists project proposals which are exempt from NIRB screening.)

- industry, government departments and agencies, amongst others;
- (b) in accordance with the plan, report periodically on the ecosystemic and socio-economic environment of the Nunavut Settlement Area; and
- (c) use the information collected under Sub-sections (a) and (b) to fulfill its existing responsibilities under Article 11.

As an initial step toward fulfilling this obligation, the NPC and DIAND jointly sponsored a Conceptual Design Workshop in Cambridge Bay in April 1997 to begin developing indicators to be monitored in the West Kitikmeot. The plan is to develop a set of indicators that can be used throughout Nunavut.

Cumulative effects assessment and general monitoring can be seen as two sides of the same coin. The former takes place before a project or projects take place; the latter is conducted on an ongoing basis once projects are in place.

The following comes from the Canadian Environmental Assessment Research Council:

Cumulative effects can be characterized as impacts on the natural and social environments which:

- 1) occur so frequently in time or so densely in space that they cannot be "assimilated," or
- 2) combine with effects of other activities in a synergistic manner.³¹

Environment Canada has a slightly different definition:

The effect on the environment that results from the incremental impact of a proposed action when added to other past, present, and reasonably foreseeable future actions.³²

Cumulative effects assessment grew out of a realization that individual, limited environmental impact assessments could say little about the combined effects of development on the intricate workings of the ecosystem. Traditionally, these assessments looked at "the biophysical and socioeconomic impacts induced directly or indirectly by either small or large scale developments." Assessing cumulative effects requires a different approach.

Instead of on a project-by-project basis, assessment could be part of regional planning, to be done *before* any projects may occur, in the hope that serious environmental problems could be avoided. This approach immediately required the need to look at very large areas and at many projects at the same time.³⁴

The concept of cumulative effects has also made its way into legislation, such as the Canadian Environmental Assessment Act.

Most, if not all environmental effects can be seen as cumulative because they occur in

³¹ Quoted in N.C. Sonntag, et. al. Cumulative Effects Assessment: A Context for Further Research and Development [background paper prepared for the Canadian Environmental Assessment Research Council], (Ottawa: Minister of Supply and Services, 1987), p. 5.

³² Environment Canada, The State of Canada's Environment Infobase.

³³ David Marshall, et. al., Environmental Management and Impact Assessment: Some Lessons and Guidance from Canadian and International Experience, p. 1.

³⁴ GeoNorth Ltd. And Axys Environmental Consulting Ltd. Identifying Research Priorities to Refine the West Kitikmeot Slave Study Research Framework: Final Report, Appendix I, p. 1.

environments already stressed by human activities. Yet cumulative environmental effects are different. The key difference lies not in the effects themselves, but in how they are perceived.³⁵

In order to maintain ecological balance, it is necessary to monitor change over both the short and long term. What follows is a list of potential Ecosystem Indicators for use in a general monitoring program in the West Kitikmeot Planning Region. These indicators can serve not only as the "backbone" for a general monitoring program, but as key elements in a "language" for periodically describing Nunavut's "state of the environment". While this list was developed specifically for the West Kitikmeot, it is likely that many of the indicators will be useful and relevant elsewhere in Nunavut.

The NPC also sponsored a technical workshop in April 1998 at which participants grappled with the list of indicators and selected a number that could be used as a pilot project. The data analysis for the Nunavut General Monitoring Program is under way and a prototype of the project has been accessible via the Internet since early 1999.

The challenge is to find measurable indicators that can be used in impact

predictions and in monitoring. In order to determine the accuracy of impact predictions, and to monitor impacts and cumulative effects, it is necessary to measure change between baseline (or pre-project) conditions and future conditions. A recent study of transboundary river systems within the Mackenzie River Basin provides useful examples of attempts to identify measurable "ecosystem maintenance indicators." Similar work is being conducted in other parts of the Arctic where attempts are being made to assess the potential impact of industrial development on the ecosystem.³⁶

Terms

3.12.1 DIAND, in cooperation with the NPC and other appropriate agencies, shall complete the design and implementation of the monitoring program outlined in Section 12.7.6 of the NICA. [A]

3.13 Clean Up and Monitoring of Waste Sites

Background

A major environmental problem now confronts governments, Inuit land owners and all residents of Nunavut: How can we clean up hundreds of abandoned exploration camps, military installations, outpost camps and other facilities? People also want something done about the dumps in their communities dumps that have been used for years and are thought to contain hazardous waste.

³⁵ Federal Environmental Assessment Review Office, Addressing Cumulative Environmental Effects: A Reference Guide for the Canadian Environmental Assessment Act, p. 2.

³⁶ One such region is the "1002 Lands" in Alaska's Arctic National Wildlife Refuge, which the U.S. Congress is considering opening to oil development. For example, see Thomas R. McCabe, "Assessing values of Arctic wildlife and habitat subject to potential petroleum development" in Landscape and Urban Planning, no.28 (1994), pp. 33-45. Information taken from the U.S. Fish and Wildlife Service, "Preliminary Review of the Arctic National Wildlife Refuge, Alaska Coastal Plain Resource Assessment: Report and Recommendation to the Congress of the United States and Final Legislative Environmental Impact Assessment, August 29, 1995".



An archaeological dig of Thule winter houses near Resolute, conducted by the CMC with the support of the Polar Continental Shelf Project. Proper identification of heritage sites is the first step toward protecting them.

Photo by Lyn Hancock

The problem of abandoned waste is not unique to Nunavut. Cleaning up the Arctic is related to wider issues of environmental protection faced by indigenous peoples throughout the circumpolar region. The importance of the Arctic environment was recognized by eight circumpolar nations, including Canada, that signed the Arctic Environmental Protection Strategy in Rovaniemi, Finland, in 1991.³⁷ This strategy is a wide-ranging declaration on the protection of the Arctic, and it identifies the monitoring and assessment of contaminants as a major priority.

At the review hearing, the NPC heard a great deal of concern about the need to clean up abandoned waste sites throughout the region. Many of these sites appear to be old mining exploration camps; others are outpost camps set up by people from the communities. The NLCA addresses the issue of waste site cleanup:

The NPC shall identify and priorize the requirement to clean up waste sites in the Nunavut Settlement Area, including hazardous waste sites, inactive mining sites, abandoned DEW line sites, and non-hazardous sites near communities. The NPC shall consider waste sites in the Kitikmeot region on a priority basis. To the extent possible, this initiative shall be co-ordinated with the development of land use plans.³⁸

While the NLCA requires that the NPC make the Kitikmeot the priority region for cleanup,

³⁷ The eight nations were: Canada, Denmark, Finland, Iceland, Norway, Sweden, the Union of Soviet Socialist Republics, and the United States of America. The Inuit Circumpolar Conference, Nordic Sami Council and the USSR Association of Small Peoples of the North assisted in preparing the strategy and had observer status at this initiative. Further declarations in Nuuk (1993) and Inuvik (1996) have built on the Rovaniemi Agreement.

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there are long-standing problems in the North Baffin which must also be addressed. As part of its ongoing mapping work, the NPC will conduct a community consultation and information gathering exercise similar to the process that took place in the West Kitikmeot. The goal of this process will be to develop an inventory of cleanup sites in the North Baffin region. The first step will be to gather information from residents on the location of waste sites. Government records will also be used to develop a database. Included will be information on location, kinds of waste, who created the site, who is responsible for cleanup, and whether the site is on Inuit or Crown land. Out of this process will come a revolving list of waste sites on Crown, Inuit Owned or hamlet lands. This inventory will be public and will be continually updated as new information is gathered, and as old sites are cleaned up.

The NPC recognizes that the main responsibility for cleanup lies with government and that there is not a lot of money these days to conduct this work in a systematic fashion. Once the inventory is compiled, the NPC will cooperate with government to ensure the accuracy of the sites and their contents. Once an inventory of the sites is complete, the NPC shall work with government and other interested parties to (i) maintain and update the list and (ii) develop a short list of priority sites for cleanup. It should be pointed out that this inventory will not constitute a systematic analysis of site contents, especially those where hazardous wastes are known or suspected. In cases where hazardous waste is identified, a site analysis requiring specialized training will have to be carried out. The list does not address the issue of who will pay to clean up these sites.

Work has begun on this project and will continue over the next couple of years.

Terms

- 3.13.1 All users of the land shall follow the Code of Good Conduct in Appendix H to ensure that no new waste sites are created. [CR]
- 3.13.2 The principle of "the polluter pays" shall apply to a strategy for cleaning up the environment. Where it is possible to identify the person, company or agency responsible for creating an abandoned or inactive waste site, they shall be made responsible for site cleanup and restoration. [A][CR]
- 3.13.3 When identification is not possible, the government agency (or its successor) that had regulatory responsibility for the site at the time it was active shall be responsible for site cleanup and restoration. [A] [CR]
- 3.13.4 The NPC shall work with communities, QIA, government, industry and other interested parties to develop an inventory of waste sites and a short list of cleanup priorities in keeping with the NPC's responsibilities assigned in NLCA Section 11.9.1.

- a) Once an inventory of the sites is complete, the NPC shall work with all interested parties to (i) maintain and update the inventory and (ii) develop a Nunavut-Settlement-Area-wide short list of priority sites for cleanup. [A]
- b) Community residents in particular, and all land users in general, shall be actively involved in planning and conducting cleanup operations, whenever possible and practicable. [A][CR]
- c) Refuse, such as fuel drums and scrap metal, shall be recycled where possible. [A][CR]
- d) Sites containing toxic materials shall be given priority for cleanup, and the location of these sites shall be widely publicized to warn residents. [A] [CR]
- e) Sites within or near caribou calving grounds, near water and near communities shall also be given priority for cleanup.
 [A][CR]
- f) The short list of cleanup sites for the North Baffin region shall be contained in an amendment to this plan. [REC]
- g) Mining and exploration companies are particularly encouraged to

- report old waste sites they may come across on the land, and which may not be on the inventory list and maps. [A] [REC]
- 3.13.5 DIAND, as the lead agency for Canada in this region, shall review the Priority List of Cleanup Sites and, in consultation with the QIA and the NPC, prepare a remedial action plan to be completed six months following development of the priority list. [A]
- 3.13.6 The DSD, as the lead agency for the Government of Nunavut, shall review the Priority List of Cleanup Sites and, in consultation with the QIA and the NPC, prepare a remedial action plan to be completed six months following development of the priority list. [A]
- 3.13.7 DND and DIAND shall clean up any abandoned military facilities as quickly as possible, ensuring that local people are consulted about cleanup priorities, and prepare a remedial action plan to be completed six months following development of the priority list. [A]
- 3.13.8 New occurrences of pollution, garbage and contamination caused by anyone shall be prevented. Land users shall ensure that all drums are safely recovered. [A][CR]

CHAPTER 4 RESPONSIBILITIES



The NPC works with the people of Nunavut, HTOs, and other community-based groups, government, industry and other stakeholders to develop land use plans.

Photo courtesy of NPC

4.1 The Environment, Renewable Resources and Conservation

QIA is the DIO responsible for the management of IOL within the region. Its role is to safeguard, administer and advance the rights and benefits of Inuit of the Baffin Region.³⁹

QWB is a management board created under the NLCA. It oversees the 13 HTOs in Baffin

communities. It also works closely with DFO, DSD, and the NWMB.⁴⁰

DIAND, on behalf of the federal government, is the manager of Crown land. Commissioner's land - which is mostly within municipal boundaries and does not include the subsurface - has been transferred to the hamlets in the North Baffin.

There are five Institutions of Public Government, or co-management bodies, established under the NLCA. Each has responsibilities when it comes to land use planning.

- The **NPC** works with the people of Nunavut, the HTOs and other community-based groups, government, industry and other stakeholders to develop land use plans that guide resource use and development in Nunavut. The NPC recommends land use plans to the Ministers of DIAND and DSD. It also determines whether project proposals conform to approved regional land use plans. Members of the NPC are nominated by Inuit organizations and the governments of Canada and Nunavut. The size and makeup of the membership of the NPC may vary, but the federal government and the territorial government each recommend at least one member and the DIO nominates a number of members equal to the total number recommended by government. A member appointed further is Chairperson from nominations provided by the NPC.
- Under the NLCA, the **NWMB** is the main instrument of wildlife management in the Nunavut Settlement Area and the main regulator of access to wildlife, subject only to the government for wildlife management. As a co-management body, the NWMB is dedicated to enabling and protecting the beneficial use of Nunavut's wildlife for and by the beneficiaries of the NLCA, and other residents, consistent with the sound principles of conservation, sustainability and integrity of the ecosystem. The NWMB consists of four members appointed by DIOs, four members appointed by government, and a Chairperson appointed from internal nominations. The NWMB has

- discretionary powers related to the management and protection of wildlife and wildlife habitat and the direction of wildlife research. Under the NLCA, Section 5.2.34, the NWMB may approve the establishment of wildlife reserves and protection programs.
- NIRB is responsible for environmental assessment in the Nunavut Settlement Area. The mandate of the NIRB is to use both traditional Inuit knowledge and recognized scientific methods in ecosystem analysis to assess and monitor, on a site-specific and regional basis, the environmental, cultural and socio-economic impacts of those proposals over which it has responsibility. The task of the board is to determine whether proposals should proceed to development and, if so, under what conditions. NIRB is required to: screen project proposals; define the extent of regional impacts; review environmental and socio-economic impacts of project proposals; and determine whether or not projects should proceed and under what conditions. NIRB also attaches specific terms and conditions to land use permits. NIRB is composed of nine members, four appointed by the DIO, four from government, and a Chairperson appointed from nominations provided by NIRB.
- The NWB has responsibilities and powers over the use, management and regulation of water in the Nunavut Settlement Area. According to the NLCA, all water uses and waste disposal, except for domestic or emergency purposes, are to be approved by

the NWB. The NWB holds a public hearing before approving any water licence application, but it may waive this requirement when there is no public concern expressed. The NWB issues and administers water licenses in Nunavut. The NWB seeks advice from government agencies, including DIAND, the Government of Nunavut, and Aboriginal organizations when it drafts water licences. DIAND also provides inspection services to the NWB. The NWB is composed of nine members, four appointed from nominations submitted by the DIO, four from government, and a Chairperson appointed from nominations provided by NWB.

- The Nunavut Surface Rights Tribunal is a dispute-resolution body that is activated upon application when the parties cannot agree on access to the surface of the land or on compensation for wildlife. The Tribunal's role is one of an arbitrator of disputes. It is a quasi-judicial body, independent of the influence of any party, including government, Inuit organizations and industry. Its responsibilities include:
 - (a) issuing entry orders subject to the payment of an entry fee;
 - (b) holding hearings to determine compensation payable to surface rights holders;
 - (c) periodically reviewing the level of compensation payable under an entry order;
 - (d) terminating an entry order, after a hearing, where lands are no longer being used for the purpose authorized; and

(e) settling disputes for claims for wildlife compensation.

DIAND uses a number of tools to manage Crown land, including land use permits, quarrying permits and surface leases. DIAND issues mineral rights on Crown land, and on IOL where the Crown retains ownership of the subsurface. DIAND also administers the beds of waterbodies. DIAND is responsible for conducting land use inspections as an important element of monitoring and environmental management. The Department's waste management program is responsible for the cleanup of abandoned wastes. DIAND seeks advice from other federal government departments, from the Government of Nunavut and from Aboriginal groups. The Arctic Waters Advisory Committee, which has members from the federal and territorial governments and Aboriginal groups, provides advice as requested to DIAND on the environmental consequences of marine industrial activities in Arctic waters. The **Government of** Nunavut similar uses tools on Commissioner's land.

Environment Canada has a general mandate to preserve and enhance the quality of the natural environment.

The **Environmental Protection Branch** is responsible for the protection of the environment both through legislation and through a number of programs. The Branch is responsible for the administration of the Canadian Environmental Protection Act, including ocean disposal provisions, and section 36 of the Fisheries Act. Environmental

protection programs include enforcement, assessment and pollution prevention, as well as environmental emergency protection, preparedness and response.

CWS oversees wildlife matters that are the responsibility of the federal government. protection These include the management of migratory birds, nationally significant habitat and endangered species, as well as work on other wildlife issues of national and international importance. In addition, CWS does research in many fields of wildlife biology. The CWS is also responsible for protecting other migratory animals, such as polar bear and caribou. It cooperates with the provinces, territories, and Parks Canada in carrying out wildlife research and management within projects their jurisdictions.

The **Environmental Conservation Branch** is responsible for conserving migratory birds and endangered wildlife in Canada and managing migratory bird sanctuaries and national wildlife areas.

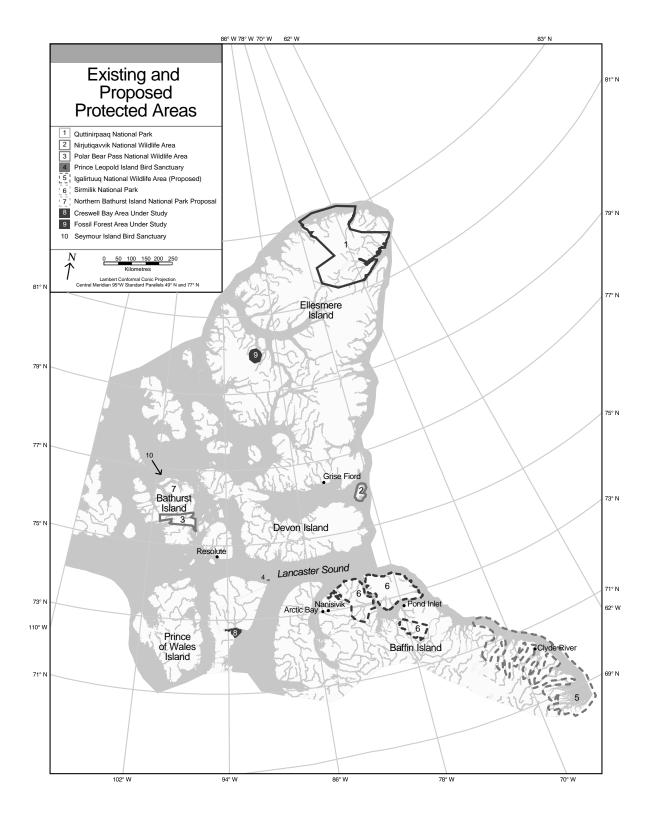
The **Atmospheric Environmental Branch** is responsible for providing climatological and hydrometric data for planning purposes, and observations and forecasts of weather, ice, sea state and air quality.

CEAA is responsible for the Canadian Environmental Assessment Act. This is a self-assessment process that requires the federal government to complete an environmental assessment where projects involve federal lands, money or regulatory authorities, or where the federal government is a proponent

itself. Environment Canada, DIAND and other licensing/reviewing agencies meet their environmental assessment obligations through close consultation with NIRB, and they provide advice in a technical capacity to ensure comprehensive environmental screenings of all projects are conducted.

DFO, which now includes the CCG, manages Canada's oceans and navigable waterways. It also ensures the sustainable use of fisheries resources and facilitates marine trade and commerce. The management and protection of fish and marine mammals and their habitats is achieved primarily through the Fisheries Act. This act contains provisions to protect fish habitat and to prevent pollution of habitat (the latter responsibility is administered by Environment Canada on through behalf of DFO), and environmental assessment process described above. Under the NLCA, DFO co-manages fish, marine mammals and marine resources through the NWMB. The department is responsible for the protection of marine ecosystems under the new Canada Oceans Act. This includes the establishment of marine protected areas.

Although Environment Canada is responsible for managing migratory birds, and DFO is responsible for fish and marine mammals, **DSD** manages, regulates and encourages the sustainable use of all other wildlife species. Several federal agencies are responsible for regulating pollution of Arctic waters through the Arctic Waters Pollution Prevention Act. These include DFO for



shipping activities and DIAND for non-shipping activities.

The Geological Survey of Canada is part of Natural Resources Canada. It maps bedrock and surface geology, conducts research on the natural environment, permafrost, mineral technology and the impact of development on northern ecosystems. It is also responsible for carrying out Mineral and Energy Resource Assessments, in consultation with other government departments, when withdrawals of federal Crown lands for national parks are being seriously considered.

The **NEB** issues authorizations for oil and gas drilling and controls pollution from offshore oil and gas exploration and development. The NEB also ensures that onshore operations are safe and environmentally sound, including technical approvals of drilling programs, seismic surveys, and pipeline construction. It is responsible for making sure that the requirements of the NLCA and the CEAA are fulfilled prior to making regulatory decisions.

Transport Canada is responsible for regulating the transport of dangerous goods. A number of federal and territorial agencies have responsibilities for preventing, containing and cleaning up spills of hazardous substances on land and in water. These include CCG, DIAND, DFO, Environment Canada and the NEB on federal lands, and the Government of Nunavut on Commissioner's land.

DSD is responsible for three inter-related aspects of healthy community life in Nunavut.

DSD directs its efforts through its programs and services to:

- provide the support needed for *people* and Inuit organizations to use their capacities and participate fully in decisions on development;
- provide the support needed for people to pursue sustainable livelihoods both in the traditional and wage *economy*;
- ensure the wise use of our resources in a manner that will protect and enhance our environment now and for future generations.

DSD's responsibilities include:

- 1. Working in partnership with industry, government and non-government agencies to foster sustainable economic activities in our communities in sectors that include:
 - community economic development;
 - parks and tourism;
 - mining (oil and gas);
 - fisheries:
 - arts and crafts;
 - manufacturing;
 - trade and services;
 - wildlife harvesting and household production;
 - transportation, communications and information technologies;
 - construction:
 - public sector; and
 - third sector.
- 2. Co-managing our wildlife and habitat with Institutions of Public Government through a balanced effort of monitoring, good science, Inuit qaujimajatuqangit and

agreements with those with whom we share our wildlife.

- 3. Providing and maintaining a quality system of parks and conservation areas.
- 4. Managing the environment through public education and the Environmental Protection Act and Environmental Rights Act.
- 5. Providing leadership when there is conflict over resource use.

DSD legislation includes:

- Wildlife Act
- Nunavut Development Corporation Act
- Nunavut Business Credit Corporation Act
- Environmental Protection Act
- Environmental Rights Act
- Travel and Tourism Act
- Co-operative Associations Act
- Credit Unions Act

4.2 Mineral Development

DIAND currently has the major responsibility for managing mineral exploration and development on Crown lands, subject to the environmental protection responsibilities outlined above. NTI manages mineral exploration and development on subsurface IOL NTI is responsible for issuing exploration licences, concession agreements and leases on subsurface IOL. The Qikiqtani Inuit Association is responsible for issuing Inuit land use permits, leases and other surface instruments as they pertain to the surface estate of IOL.

DIAND is responsible for issuing prospecting permits, for registering mineral

claims and mineral leases on Crown land, and for granting exploration rights for oil and gas.

4.3 Transportation and Regional Infrastructure

The Government of Nunavut Department of Public Works and Services took over Arctic sealift operations from the CCG, an agency of DFO, in 2000. However, the CCG is still responsible for providing marine services in Arctic waters including ice-breaking, navigational aids, search and rescue, boating safety, vessel traffic management, the Arctic ports infrastructure program, environmental response. Transport Canada and the CCG share responsibility for coordinating response to marine spills. **Environment Canada** chairs the Arctic Regional Environmental Emergencies Team, which provides co-ordinated information and advice concerning environmental impacts, sensitivities. environmental resource cleanup techniques, forecasting, priorities for responding to environmental emergencies.

Transport Canada is responsible for the development and regulation of a safe and efficient national transportation system, and it has a particular mandate to regulate air and sea transportation in the North.

The Government of Nunavut Department of Community Government and Transportation has the mandate to plan, design, build, operate and maintain public transportation infrastructure in Nunavut. This includes community airports, docks and roads. DIAND retains

responsibility for the construction of highway systems outside of municipal boundaries.

Nunavut Power Corporation is responsible for providing power to communities.

4.4 Heritage Resources

Archaeological sites are protected in a number of ways. The NWT Archaeological Sites Regulations apply throughout the territories. The Territorial Land Use Regulations apply on federal Crown lands. The Historical Resources Act pertains to Commissioner's land.

CLEY issues archaeological permits to qualified individuals to conduct investigations of archaeological sites that may include the systematic recovery of artifacts. It is also responsible for ensuring that sites are investigated, recorded and salvaged prior to any development. CLEY also reviews all project proposal applications and advises NIRB on conditions necessary to preserve archaeological sites within the permit area.

Parks Canada is responsible for establishing and managing national parks and

national historic sites and monuments. It consults and gets advice from the Institutions of Public Government, especially NWMB and NPC.

DSD has the mandate to establish territorial parks. **Parks Canada** administers the national secretariat for the **Canadian Heritage Rivers Board**, while responsibility for the Heritage Rivers program falls jointly to **DIAND** and **DSD**.⁴¹

4.5 Scientific Research

All researchers require permits before conducting research. **CLEY** issues permits to archaeologists under the NWT Archaeological Sites Regulations. **DSD** issues permits to scientists researching wildlife (except for research into migratory birds, which is regulated by **Environment Canada**, and fish and marine mammals, which is regulated by **DFO**).

The **NRI** licenses all other researchers. Permits are also required for nonbeneficiaries who want access to national wildlife areas or migratory bird sanctuaries.

⁴¹ Responsibilities assumed by the Government of Nunavut Department of Sustainable Development after April 1, 1999.

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CHAPTER 5 PLAN IMPLEMENTATION, MONITORING, AMENDMENT AND REVIEW

Upon approval by Cabinet and the Executive Council, the plan shall be implemented on the basis of jurisdictional responsibility. All federal and territorial government departments and agencies shall conduct their activities and operations in accordance with the plan as approved.

NLCA Section 11.5.9

5.1 Plan Implementation

Plan implementation is largely the responsibility of government departments and Inuit of detailed organizations. **Preparation** implementation plans will follow approval of the land use plan. Implementation plans should be prepared by DSD, on behalf of all Government of Nunavut departments and agencies, and DIAND, on behalf of all federal departments and agencies, QIA and NTI. Implementation plans should include the implications of the plan, clearly defined roles and responsibilities, and cost estimates. This will not only aid in the approval process, but will hasten actual implementation. Industry will implement the

plan by developing project proposals and undertaking land uses that conform to the plan.

Communities will implement the plan, in general, by increasing their involvement and capabilities in land use and resource management decision making, and by increasing community awareness and understanding of land use activities and their implications. Specific actions require implementation by community governments.

The NPC's role in implementing the plan will be to publicize it and to review land use proposals for conformity with the land use plan. Where proposed land use activities do not conform to the plan, and in the event that the proponent has applied to the appropriate



Studying maps in Resolute. By virtue of their increased involvement in land use and resource management decision making, communities play a key role in implementing this plan.

Photo by Jayko Alooloo

minister for an exemption, the NPC will ensure that the project proposal is screened, where required, by NIRB.⁴²

It will also review the implementation plans of DIAND, DSD, QIA and NTI as well as fulfilling the functions outlined below.

5.2 Monitoring

The NPC will monitor the implementation of the plan and issue annual reports to the Ministers of DIAND and DSD and to the DIO (Section 11.4.4[m]). The report will include information on the status of the plan's implementation, identify problems and

successes, and provide recommendations to the Ministers on possible improvements.

5.3 Plan Amendment and Review

Article 11, Part 6 of the NLCA governs amendment and review of land use plans. The NPC will consider all recommendations for amendments and will recommend those that it considers suitable to the Minister of DIAND and the Minister of DSD. Such recommendations for amendments to this plan can come from the federal and territorial governments, QIA, NTI, the communities, industry or land users. The section referred to above provides for public review of proposed amendments to the plan.

Reviews of land use plans will normally take place every five years, unless circumstances warrant more or less frequent review.

⁴² Section 11.5.11 of the NLCA reads:

Where the NPC has determined that a project proposal is not in conformity with the plan, the proponent may apply to the appropriate Minister for exemption. The Minister may exempt the project proposal from conformity with the plan and shall, subject to Sections 12.3.2 and 12.3.3, refer it to NIRB for screening. Nonconforming project proposals shall not be sent to NIRB until such exemption is obtained or a variance has been approved. See also Article 12, Part 3: Relationship to the Land Use Planning Provisions.

CHAPTER 6 REVIEW OF PROJECT PROPOSALS



Skipping ice pans in Grise Fiord. Any project proposal in the North Baffin region must meet conformity requirements that safeguard the land and its people.

Photo by Jennifer Headley

6.1 Introduction

Under the NICA, the NPC has the authority and responsibility to review any project proposal within the region to ensure that it conforms to this plan and to make a determination accordingly. Section 11.5.10 states:

The NPC shall review all applications for project proposals. Upon receipt and review of a project proposal, the NPC or members thereof or officers reporting to the NPC shall:

- (a) determine whether the project proposals are in conformity with plans;
- (b) forward the project proposals with its determination and any recommendations to the appropriate federal and territorial agencies.

Under the NICA, proposals that do not conform to an approved land use plan and that are neither approved pursuant to a minor variance nor exempted from the plan's requirements by the Minister responsible may not be forwarded to NIRB for screening (s.11.5.11). Water licences, in particular, may not be issued respecting such proposals (s. 13.4.2).

It is important to note that this plan incorporates requirements for government action pursuant to s. 11.5.9 of the NLCA, in addition to conformity criteria applicable to project proponents. (In Chapter 3, requirements for government action are identified by the designation "[A]".)

A project proposal will be determined to conform to this plan if it meets the conformity criteria set out below. Principally, these are the specific requirements concerning conservation, communications, renewable resource use, conservation areas, transportation, mineral and oil and gas development, research, heritage resources and waste cleanup that flow from the NPC's analysis in Chapter 3. It bears emphasizing that any transportation corridor requires the specific approval of the NPC pursuant to Chapter 3, following the process, and in accordance with the guidelines, set out in Appendices J and K.

6.2 Conformity Criteria

A project proposal conforms to this plan if:

- 1. it satisfies the "conformity requirements" identified in Chapter 3; and
- 2. it involves land use of a type
 - a) engaged in or previously contemplated by the communities and land use authorities in the North Baffin region, or
 - b) not previously engaged in or contemplated, yet the proposal is consistent with the principles identified under heading 6.3.

A proposal not meeting these criteria does not conform to the plan.

6.3 Principles and Factors Guiding Interpretation

The foregoing conformity criteria will be interpreted by the NPC in accordance with the principles that have guided development of this plan. These principles are described in full in Chapter 1. For convenience, they may be summarized as:

- the planning principles stated in the NLCA, including promotion of the well-being of Nunavut residents and consideration for other Canadians, as well as protection and, where necessary, restoration of environmental integrity;
- the requirement of compliance with the NLCA;
- special attention to protecting and promoting the well-being of Inuit and IOL;
- compatibility of this plan with municipal land use plans;
- the principle of sustainable development;
- support for regional economic development;
- encouragement of multiple land uses, subject to the principle of sustainable development; and
- consideration for the overlapping planning interests of other regions.

In addition to these principles, the goals and objectives specific to each topic of conformity requirements addressed in Chapter 3 will also guide the NPC's interpretation of the criteria.

APPENDIX A

List of Acronyms

List of Acronyms Sorted by Abbr	eviation
CCG	Canadian Coast Guard
CEAA	Canadian Environmental Assessment Agency
CLARC	Community Land and Resources Committee
CLEY	Department of Culture, Language, Elders and Youth, Government of Nunavut
CMC	Canadian Museum of Civilization
CWS	Canadian Wildlife Service
DFO	Department of Fisheries and Oceans
DIAND	Department of Indian Affairs and Northern Development
DIO	Designated Inuit Organization
DSD	Department of Sustainable Development, Government of Nunavut
GNWT	Government of the Northwest Territories
HTO	Hunters and Trappers Organization
IHT	Inuit Heritage Trust
IIBA	Inuit Impact and Benefit Agreement
IOL	Inuit Owned Land
NEB	National Energy Board
NIRB	Nunavut Impact Review Board
NLCA	Nunavut Land Claims Agreement
NPC	Nunavut Planning Commission
NRI	Nunavut Research Institute
NTI	Nunavut Tunngavik Incorporated
NWB	Nunavut Water Board
NWMB	Nunavut Wildlife Management Board
NWT	Northwest Territories
QIA	Qikiqtani Inuit Association
QWB	Qikiqtaaluk Wildlife Board
RIA	Regional Inuit Association
TFN	Tungavik Federation of Nunavut

List of Acronyms Sorted by Full Name Canadian Coast Guard CCG CEAA Canadian Environmental Assessment Agency Canadian Museum of Civilization CMC **CWS** Canadian Wildlife Service Community Land and Resources Committee CLARC Department of Culture, Language, Elders and Youth, Government of Nunavut CLEY Department of Fisheries and Oceans DFO Department of Indian Affairs and Northern Development DIAND Department of Sustainable Development, Government of Nunavut DSD DIO Designated Inuit Organization Government of the Northwest Territories **GNWT Hunters and Trappers Organization** HT0 IHT Inuit Heritage Trust Inuit Impact and Benefit Agreement IIBA Inuit Owned Land 10L NEB National Energy Board **Northwest Territories** NWT Nunavut Impact Review Board NIRB NLCA Nunavut Land Claims Agreement Nunavut Planning Commission NPC Nunavut Research Institute NRI NTI Nunavut Tunngavik Incorporated NWB Nunavut Water Board **NWMB** Nunavut Wildlife Management Board QWB Qikiqtaaluk Wildlife Board Qikiqtani Inuit Association QIA **Regional Inuit Association** RIA TFN Tungavik Federation of Nunavut

APPENDIX B

List of Definitions

List of Definitions

CONSFRVATION A way of managing renewable, non-renewable and heritage resources so that long-term benefits can be

enjoyed by present and future generations.

CONSERVATION AREA Refers to any conservation area or protected area established by legislation and in existence at the date

of the ratification of the NLCA, and listed in Schedule 9-1 of the NLCA, as well as any other area of particular significance established for ecological, cultural, archaeological, research or similar reasons.

DEVELOPMENT Defined by the World Conservation Strategy as "the modification of the biosphere (thin covering of the

planet that contains and sustains human life) and the application of human, financial, living and

non-living resources to satisfy human needs and improve the quality of human life."

ECOSYSTEM A community of organisms, and the environment in which they live.

HAZARDOUS WASTE The term "hazardous" usually means waste that has at least one dangerous property. It can be flammable;

> corrosive (acids); reactive or explosive when combined with other substances; or toxic or poisonous, even in small doses. Also describes other substances, such as asbestos, PCBs and some heavy metals that do not

fall into these categories, but which pose special hazards to the environment or human health.

ENVIRONMENT The total biosphere including ecological, physical, and human systems. Social, economic, legal, political,

institutional and cultural endeavours are therefore part of the total environment.

LAND Includes land, inland waters and the offshore.

LAND USE The human use of any natural resources in the planning region.

LAND USE ACTIVITY Any human activity that uses the land or is associated with use of the land.

LAND USE PLANNING Land use planning is a systematic process of decision making relating to the conservation, development,

management and use of land and resources, including inland waters and the offshore. The land use planning process includes implementation of land use plans and the monitoring of land use conflicts. Social,

cultural and economic interests of people are central to policies that guide land use planning.

NON-RENEWABLE

RESOURCE

Finite (limited) resources that cannot be replaced or renewed once they have been extracted, including

all minerals, aggregates and fossil fuels.

PLANNING REGION The area for which a planning process is carried out and for which a land use plan is made.

POLICY A series of statements and a process providing a definitive direction for decision making, which specifies

courses of action for achieving goals and objectives. Policy is a way of defining a problem so that it can

be solved. Policy principles, goals, objectives and actions are therefore part of an ongoing process.

PRESERVATION A form of conservation that involves minimal levels of environmental manipulation, so that existing

features and processes are safeguarded for the future.

RENEWABLE RESOURCE

Natural resource that comes from an essentially inexhaustible source (such as solar energy) or that

can be replenished by natural or human-devised cyclical processes if it is not used faster than it is renewed.

SUSTAINABLE DEVELOPMENT The management of human relationships to the natural resources and the environment in such a way

that economic, social and cultural needs are met and ecological processes and natural diversity are main-

tained.

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APPENDIX C

Summary of Conformity Requirements

Note to Readers: This Appendix contains specific conformity requirements listed in Chapter 3: A Plan for Stability, Growth and Change. The heading numbers correspond to headings in that chapter, and the number of individual conformity requirements is the number by which they are listed in the document. The numbers are not sequential because not all of the listed terms in Chapter 3 constitute conformity requirements.

3.2 Turning the Vision into Action

- 3.2.1 All land users shall refer to the land values and concerns in Appendix G, and to the *Areas of Importance* map, to determine important land values and concerns in areas where they plan to work, as well as to adjust their work plans to conserve these values.
- 3.2.8 Research carried out in the North Baffin shall be translated into Inuktitut and made available to the people of the region as soon as possible. Reports shall be translated in a format that will be understood by a non-technical person, but not simplified to the point where meaning is lost. At a minimum, researchers shall include a translated summary of their work. Researchers should also endeavour to present their findings orally in communities affected by their work. They shall also consult with the CLARCs to determine

what other information needs the community might have, and ensure that any additional materials, including final reports, are translated into Inuktitut.

3.3 Renewable Resource Use

- All land uses shall be conducted in 3.3.1 keeping with the policy of sustainable development in order to protect the opportunities for domestic harvesting. All land users shall avoid harm to wildlife and wildlife habitat and damage to community travel routes through the timing of their operations, through careful selection of the location of their main camps and travel routes, and through other mitigative measures. In order to achieve these ends, all land users shall follow the Code of Good Conduct contained in Appendix H.
- 3.3.7 Development activities shall be prohibited within all caribou calving

areas during calving season, as well as caribou water crossings in the North Baffin region. The QIA and DIAND shall implement caribou protection measures on Inuit Owned and Crown lands respectively.

3.3.8 Development activities shall be restricted near polar bear denning areas and walrus haul-outs.

3.4 Conservation Areas

- to guide the establishment of conservation areas in Nunavut. Any agency proposing to create a new or modify an existing conservation area shall do so in accordance with the provisions of the NLCA. Proponents are directed to Appendix N of this document. Any proposed conservation or protected area strategy shall involve a thorough community consultation process. The NPC endorses important community-based criteria for any protected area system, such as:
 - maintaining wildlife harvesting patterns;
 - protecting wildlife and wildlife habitat; and
 - preserving cultural identity and traditional use of the land

3.5 Marine and Terrestrial Transportation

3.5.11 All parties wishing to develop a transportation and/or commu-

- nications corridor shall submit to the NPC a detailed application for an amendment. This application must include an assessment of alternative routes, plus the cumulative effects of the preferred route. It shall provide reasonable options for other identifiable transportation and utility facilities.
- 3.5.12 The NPC, and either NIRB or a panel acting under section 12.4.7 of the NLCA, shall publicly review the proposed corridor to determine whether the proposal adequately meets the guidelines set out in Appendices J and K. Once it is determined that a proposal does meet the guidelines, the NPC may request the ministers to amend the plan to include the new transportation corridor.

3.6 Mineral Exploration and Production

- 3.6.5 All proposals for mining developments shall include plans, complete with financial guarantees, for the eventual abandonment and restoration of the site. As a priority, waste sites where risks to human health, safety, the environment or legal obligations exist shall be addressed. Toxic waste shall be removed where possible.
- 3.6.6 Mining exploration companies and mine operators shall continue to

- minimize the negative effects of their activities on the environment.
- 3.6.9 Special hunting restrictions at mine sites and along transportation routes shall be strictly enforced by mine operators and land managers to prevent over harvesting of wildlife.

3.7 Oil and Gas Exploration and Production

- 3.7.5 Prior to further exploration or development, the oil and gas industry and DIAND shall demonstrate to the communities most likely to be affected how industry and government would respond to oil spills in ice-infested waters and in strong ocean currents.
- 3.7.7 Oil and gas exploration companies shall continue to minimize the negative effects of their activities on the environment.

3.9 Research

- 3.9.3 Researchers shall make their best efforts to incorporate, where relevant and available, local and traditional knowledge in their research projects and ensure that it is integrated with the scientific knowledge.
- 3.9.4 Research programs conducted in the North Baffin region shall, where possible, rely on local services and local employment.
- 3.9.5 Academic and scientific researchers shall consult the NRI concerning research topics or fields that would be of benefit and interest to local

residents. Research that will improve the quality, coverage and understanding of the natural resource base, including the nonrenewable resource potentials, shall be conducted with the support of the communities.

3.11 Heritage Resources

3.11.3 The CMC shall continue to hold a central registry of archaeological sites, and the NPC, in coordination with the IHT, shall continue to monitor land use activities to protect these sites. Information about the location and identity of archaeological sites in specific areas, and the measures necessary to protect them, shall be included in land use permits. Land users shall report the discovery of all suspected archaeological sites or artifacts to CLEY.

3.13 Cleanup and Monitoring of Waste Sites

- 3.13.1 All users of the land shall follow the Code of Good Conduct in Appendix H to ensure that no new waste sites are created.
- 3.13.2 The principle of "the polluter pays" shall apply to a strategy for cleaning up the environment. Where it is possible to identify the person, company or agency responsible for creating an abandoned or inactive waste site, they shall be made

- responsible for site cleanup and restoration.
- 3.13.3 When identification is not possible, the government agency (or its successor) that had regulatory responsibility for the site at the time it was active shall be responsible for site cleanup and restoration.
- 3.13.4 The NPC shall work with communities, QIA, government, industry and other interested parties to develop an inventory of waste sites and a short list of cleanup priorities keeping with the NPC's responsibilities assigned in NLCA Section 11.9.1.
 - b) Community residents in particular, and all land users in general, shall be actively involved in planning and conducting cleanup operations, whenever possible and practicable.

- c) Refuse, such as fuel drums and scrap metal, shall be recycled where possible.
- d) Sites containing toxic materials shall be given priority for cleanup, and the location of these sites shall be widely publicized to warn residents.
- e) Sites within or near caribou calving grounds, near water and near communities shall also be given priority for cleanup.
- 3.13.8 New occurrences of pollution, garbage and contamination caused by anyone shall be prevented. Land users shall ensure that all drums are safely recovered.

APPENDIX D

Summary of Recommendations

Note to Readers: This Appendix contains recommendations listed in Chapter 3: A Plan for Stability, Growth and Change. The heading numbers correspond to headings in that chapter, and the number of individual recommendations is the number by which they are listed in the document. The numbers are not sequential because not all of the listed terms in Chapter 3 constitute recommendations.

3.2 Turning the Vision into Action

- 3.2.4 The QIA shall continue to use CLARCs to dispense land use-related information in the communities.
- 3.2.6 Provided that a significant and relevant amount of activity has occurred, organizations such as the Canadian Petroleum Association and the NWT and Nunavut Chamber of Mines shall hold annual information sessions in the region, or provide yearly updates on their activities within the region to each community.
- 3.2.7 Industry and other interested parties should use the latest Internet and other communications media as they become available to speed up the acquisition and distribution of information between CIARCs, HTOs, the QIA, industry, government and other interested parties.
- 3.2.10 Land managers should refer all land use permits for activities on IOL to the CLARCs for review before being approved.

3.2.12 Community representatives, appointed by the CLARCs, should be included in DIAND inspections of resource projects on Crown land and report to their home communities the results of these inspections. DIAND should continue working with QIA to train staff to carry out similar inspections on IOL.

3.3 Renewable Resource Use

- 3.3.3 The QWB is coordinating research into sustainable yields and the life cycles and habitat requirements of harvested species. This work should continue and should be supported by DSD, the NWMB, DFO, and Environment Canada.
- 3.3.5 The NWMB, in conjunction with the QWB, DFO, and the communities, should ensure that research is conducted into migration, winter distributions and habitat of marine mammals that use the region. This work should involve the HTOs and other community representatives. An example of such work is the NWMB's

- *Inuit Bowhead Knowledge Study,* released in 2000.
- 3.3.6 The QWB and the communities should carry out research on caribou in the region, particularly with regard to calving grounds and migration patterns. This work should involve the HTOs and other community representatives in order to ensure the best combination of local and scientific knowledge.
- 3.3.7 The caribou protection measures to be implemented by the QIA and DIAND on Inuit Owned and Crown lands respectively should follow the proposed measures found in Appendix I of this document.

3.4 Conservation Areas and Parks

- 3.4.3 Visitors to the region, and local residents, shall adhere to the Code of Good Conduct contained in Appendix H.
- 3.4.5 The NPC, the NWMB, NIRB, DIAND, Inuit land managers and DSD should work together to monitor the effectiveness of the caribou protection measures and compliance, and to determine whether special protected areas for caribou are required.

3.5 Marine and Terrestrial

3.5.1 The Nunavut Marine Council should address the need for regional Inuit shipping advisory committees and an

improved communications system to reduce interference with people and wildlife. It should encourage the use of Inuit monitors on board any ship travelling through the region.

3.6 Mineral Exploration and Production

- 3.6.1 The mining industry and government should continue to support the development of a local industry to service the needs of exploration companies and any future mining ventures.
- 3.6.2 The NWT and Nunavut Chamber of Mines, on behalf of the mining industry and with all other land users, should adopt a Code of Good Conduct, as a guide to good land use practices, at least equal to that suggested in Appendix H.
- 3.6.3 Raising the level of security deposits and increasing the minimum and maximum fines under the Territorial Lands Act would help ensure that the sites of exploration camps are properly restored.
- 3.6.5 Management of waste sites should follow the Northern Environmental Risk Assessment Strategy and risk assessment/risk management principles.
- 3.6.7 Mining companies should hire locally and purchase local goods and services when possible. Mineral exploration parties should hire

- qualified local residents as field assistants.
- 3.6.8 The mining industry is encouraged to assist in identifying local carvingstone deposits. Mineral exploration parties should report any carvingstone locations they discover to the CLARC and land owner.

3.7 Oil and Gas Exploration and Production

- 3.7.2 The oil and gas industry should conduct further research on oil spill cleanup in ice-infested waters and in strong ocean currents.
- 3.7.6 The oil and gas industry, the communities and the federal and territorial governments should develop and implement programs to assist the communities to take advantage of economic opportunities. These opportunities developed through could be benefit packages, training programs and local hire, joint venture arrangements, and funding programs.
- 3.7.7 Oil and gas exploration companies should be aware of the rights and benefits accorded Inuit through IIBAs as established in the NLCA.

3.8 Tourism

3.8.1 Communities, with the continuing assistance of Nunavut Tourism and the DSD, should identify specific tourism facilities and packages that

- take advantage of both local and regional features and values.
- 3.8.2 Communities should identify sites and resources in the vicinity of the communities that would be most suitable for tourists to visit, either by themselves or accompanied by outfitters and guides.
- 3.8.3 Visits by tourist ships should be coordinated by individual communities,
 with the help of Nunavut Tourism.
 Arrivals and departures in the region,
 as well as details of community visits,
 should be discussed in advance
 between the vessel operators and the
 particular community. Operators of
 tourist ships should ensure that the
 necessary licences and permits are
 obtained from the DSD and that all
 other requisite permits and licences
 are also obtained.
- 3.8.4 Tourists should adhere to the Code of Good Conduct for land users found in Appendix H.

3.9 Research

- 3.9.7 Communities, through the CLARCs, should work with the NRI, QIA, the NPC, NIRB and other agencies to clarify uncertainties about the consequences of proposed land use projects.
- 3.9.8 Existing polar research training programs at Nunavut Arctic College, the Arctic Council, and the Polar Continental Shelf Project, as well as the research centres operated by the

- NRI should receive the support they need to ensure a greater role for northerners in polar scientific research.
- 3.9.9 Environment Canada and other representative agencies should conduct more research on climate patterns and related environmental studies to develop models of potential change in the region.

3.10 Sovereignty and Defence

3.10.1 If new military facilities are required in the region, DND should consider existing regional facilities for the establishment of new defence installations. The communities, QIA and other relevant Nunavut bodies, such as the NPC and NIRB, should be consulted before any new construction.

3.11 Heritage Resources

3.11.1 Museums for archaeological artifacts should be established in Nunavut.

3.13 Clean Up and Monitoring of Waste Sites

- 3.13.4 The NPC shall work with communities, QIA, government, industry and other interested parties to develop an inventory of waste sites and a short list of cleanup priorities in keeping with the NPC's responsibilities assigned in NLCA Section 11.9.1.
 - f) The short list of cleanup sites for the North Baffin region shall be contained in an amendment to this plan.
 - g) Mining and exploration companies are particularly encouraged to report old waste sites they may come across on the land, and which may not be on the inventory list and maps.

APPENDIX E

Summary of Actions

Note to Readers: This Appendix contains actions listed in Chapter 3: A Plan for Stability, Growth and Change. The heading numbers correspond to headings in that chapter, and the number of individual actions is the number by which they are listed in the document. The numbers are not sequential because not all of the listed terms in Chapter 3 constitute actions.

3.2 Turning the Vision into Action

- 3.2.1 [With reference to the conformity requirement that "All land users shall refer to the land values and concerns in Appendix G, and to the Areas of Importance map, to determine important land values and concerns in areas where they plan to work, as well as to adjust their work plans to conserve these values,"]...those who regulate the areas shall ensure through the project approval process that these values are conserved.
- 3.2.2 DSD shall continue to develop the Nunavut Sustainable Development Policy for the land and water areas of Nunavut, currently still in the drafting stages, and shall implement the policy when complete. Further, DIAND shall implement its Sustainable Development Strategy and ensure that the interests of the residents of Nunavut are considered before it is submitted to Parliament for approval.
- 3.2.3 Community Land and Resources Committees (CLARCs) have been appointed for each community. The

- CIARCs shall continue to provide input to regulatory processes and to disseminate information on land uses outside the community boundary.
- 3.2.4 DIAND shall continue to use CIARCs to dispense land use-related information in the communities.
- 3.2.5 The CLARCs shall regularly use community radio and other local media to inform residents of activities in the region.
- Provided that a significant and relevant 3.2.6 amount of activity has occurred, lands managers and government resource managers shall hold annual information sessions in the region, or provide yearly updates on their activities within the region to each community. Delegates from CLARCs attending such sessions must inform their home communities of the results of these meetings over community radio and other local media, and through presentations to regular hamlet council, HTO and other meetings.

- 3.2.7 The CIARCs, HTOs, QIA and the NPC should use the latest Internet and other communications media as they become available to speed up the acquisition and distribution of information between CIARCs, HTOs, the QIA, industry, government and other interested parties.
- 3.2.8 Research carried out in the North Baffin shall be translated into Inuktitut and made available to the people of the region as soon as possible. Reports shall be translated in a format that will be understood by a non-technical person, but not simplified to the point where meaning is lost. At a minimum, researchers shall include a translated summary of their work. Researchers should also endeavour to present their findings orally in communities affected by their work. They shall also consult with the CLARCs to determine what other information needs community might have, and ensure that any additional materials, including final reports, are translated into Inuktitut.
- 3.2.9 When development is being planned for the region, a member of the CIARC from each community near the proposed development shall participate in regulatory approval to the fullest extent possible. The NPC, NIRB, NWB, NWMB, QIA, DIAND and other key agencies will provide information to CIARCs on an ongoing basis.

- 3.2.10 All land use permits for activities on Crown land should be reviewed by the CIARCs prior to DIAND approval of a permit.
- 3.2.11 The QIA shall be responsible to invite and send members of the CIARCs to regional training sessions held by DIAND and the territorial government to learn resource management techniques. DIAND and the Nunavut Government shall give QIA notice of such training; QIA shall provide the resources for the members' travel and participation.

3.3 Renewable Resource Use

- 3.3.2 DSD shall continue to assist the communities in the development of economic opportunities that are compatible with the renewable resource-based lifestyle and within the limits of sustained use. These opportunities include initiatives such as:
 - environmental protection and enhancement;
 - parks and tourism;
 - community harvester assistance;
 - sealing industry initiatives;
 - fur price program; and
 - commercial fisheries assistance.

This assistance must take into consideration the training required by the communities and the necessary funding, recognizing that Government of Nunavut funding may not be the only appropriate funding source. In meeting this requirement, appropriate eligibility

- criteria for the assistance may continue to be applied.
- 3.3.4 DIAND and the NPC shall complete the design and implementation of the monitoring program outlined in section 12.7.6 of the NLCA. Such a monitoring program shall include the Sverdrup Basin and Lancaster and Jones Sounds.
- 3.3.7 Development activities shall be prohibited within all caribou calving areas during calving season, as well as caribou water crossings in the North Baffin region. The QIA and DIAND shall implement caribou protection measures on Inuit Owned and Crown lands respectively.
- 3.3.8 Development activities shall be restricted near polar bear denning areas and walrus haul-outs.
- 3.3.9 When a land use permit is issued, land users shall be given details by DIAND or the QIA of the important renewable resource values in the area of land in which they operate. Government shall ensure their assistance in maintaining and reporting on these values.

3.4 Conservation Areas and Parks

3.4.1 The NLCA sets out procedures to guide the establishment of conservation areas in Nunavut. Any agency proposing to create a new - or modify an existing - conservation area shall do so in accordance with the provisions of the NLCA. Proponents are directed to Appendix N of this

document. Any proposed conservation or protected area strategy shall involve a thorough community consultation process.

The NPC endorses important community-based criteria for any protected area system, such as:

- maintaining wildlife harvesting patterns;
- protecting wildlife and wildlife habitat; and
- preserving cultural identity and traditional use of the land.
- 3.4.2 Government resource managers shall continue to recommend seasonal or temporary protection of areas wherever possible. At present, seasonal protection is used in CWS Migratory Bird Sanctuaries.
- 3.4.4 Caribou protection measures, based on those suggested in Appendix I and further developed by DIAND and the QIA Inuit land managers in consultation with NWMB, local HTOs and DSD shall be implemented for all caribou herds in the North Baffin Planning Region by DIAND and by the QIA.

3.5 Marine and Terrestrial Transportation

3.5.2 The CCG shall meet with the Nunavut Marine Council prior to the shipping season to exchange information about ship movements and community concerns.

- 3.5.3 CCG operations staff shall meet with community representatives in the region at least once a year to discuss topics of mutual concern.
- 3.5.4 Whenever safe and practical to do so, all ships shall remain at least 10 kilometres from all coastlines in the region, unless approaching or leaving port. This zone will be plotted on the maps to be contained in the Arctic Sailing Directions.
- 3.5.5 Whenever safe and practical to do so, all ships shall remain at least 20 to 25 kilometres from the coasts of Lancaster Sound unless approaching or leaving port to avoid direct contact with concentrations of marine wildlife. This zone will be plotted on the maps to be contained in the Arctic Sailing Directions.
- 3.5.6 Ship traffic through and around the floe edges in April, May and June shall be minimized. Possible ways to protect the edges (such as having ships travel in convoys), shall be discussed by community representatives and the Canadian Marine Advisory Committee (Northern).
- 3.5.7 Ships travelling to and from the Polaris Mine shall avoid the floe edge between Griffith Island and Cornwallis Island whenever it is safe and practical to do so.
- 3.5.8 The shipping industry, the CCG, DFO, and the communities shall continue to monitor the effects of ship passages. New information on appropriate ways

- to reduce adverse effects shall be distributed by the CGG to the shipping industry through the Canadian Marine Advisory Committee (Northern), and to the communities through the CIARCs.
- The CCG shall devise a formal method 3.5.9 of informing ships travelling through Essential Areas as shown on the *Areas* of Importance map, and through and around floe edges in the spring, about knowledge current including harvesting activities, the known distribution of marine mammals, and local ice conditions. This formal communication system shall also allow for ships to provide the communities with information on ship schedules and location, particularly in the spring.
- 3.5.10 While ensuring the respect of applicable Canadian international obligations in the region, the NPC shall implement the concept of a transportation and/or communications "corridor" as a land use policy having general application, and applying to land and water routes throughout the region, based on the processes outlined in Appendices J and K.
- 3.5.11 All parties wishing to develop a transportation and/or communications corridor shall submit to the NPC a detailed application for an amendment. This application must include an assessment of alternative routes, plus the cumulative effects of the preferred route. It shall provide reasonable options for other

- identifiable transportation and utility facilities.
- 3.5.12 The NPC, and either NIRB or a panel acting under section 12.4.7 of the NLCA, shall publicly review the proposed corridor to determine whether the proposal adequately meets the guidelines set out in Appendices J and K. Once it is determined that a proposal does meet the guidelines, the NPC may request the ministers to amend the plan to include the new transportation corridor.

3.6 Mineral Exploration and Production

- 3.6.3 DIAND shall ensure that, in the future, it has adequate funds to properly restore abandoned exploration camps, following, where possible, the principle of "the polluter pays".
- 3.6.4 The NPC is encouraged that DIAND and the NWB have adopted the Guidelines for Abandonment and Restoration Planning for Mines in the NWT that were originally published by the NWT Water Board. At the time of writing, DIAND was consulting on an updated policy on mine reclamation in the NWT and Nunavut.
- 3.6.5 All proposals for mining developments shall include plans, complete with financial guarantees, for the eventual abandonment and restoration of the site. As a priority, waste sites where risks to human health, safety, the environment or legal obligations exist

- shall be addressed. Toxic waste shall be removed where possible.
- 3.6.9 Special hunting restrictions at mine sites and along transportation routes shall be strictly enforced by mine operators and land managers to prevent over harvesting of wildlife.

3.7 Oil and Gas Exploration and Production

- 3.7.1 Holders of existing rights in Lancaster Sound and Baffin Bay may submit a proposed drilling program, for approval to the National Energy Board and carry out this exploration program involving the communities at all stages. If, at the conclusion of this program, no significant discovery has been made, then no additional exploration licences shall be issued in these areas without prior community consultation.
- 3.7.3 Where budgets permit, the CCG shall continue to install oil spill cleanup equipment in the communities and ensure that people are trained to use it properly. Equipment shall be stored in an accessible, well-marked location.
- 3.7.4 DIAND and relevant departments of the Government of Nunavut shall provide the communities with the best information available concerning the risks and benefits of oil and gas exploration and production. DIAND and DSD shall encourage the exchange of information between local residents and others who have knowledge of or experience in drilling, in ice-infested

waters and in strong ocean currents (e.g., residents, researchers, drilling operators in the Beaufort Sea and the east coast regions). DIAND and DSD shall ensure that communities help set research priorities and participate in research; that they have access to independent, as well as government and industry, sources of information; and that they understand the research results.

3.7.5 Prior to further exploration or development, the oil and gas industry and DIAND shall demonstrate to the communities most likely to be affected how industry and government would respond to oil spills in ice-infested waters and in strong ocean currents.

3.9 Research

- 3.9.1 The approval process for all scientific research, including research conducted by government departments and agencies, shall require the involvement of local residents.
- 3.9.2 The NRI shall consult with the QIA and those CIARCs that have current members to identify community and regional priorities for research, and then inform the scientific community of these priorities.
- 3.9.3 Researchers shall make their best efforts to incorporate, where relevant and available, local and traditional knowledge in their research projects

- and ensure that it is integrated with the scientific knowledge.
- 3.9.4 Research programs conducted in the North Baffin region shall, where possible, rely on local services and local employment.
- 3.9.5 Academic and scientific researchers shall consult the NRI concerning research topics or fields that would be of benefit and interest to local residents. Research that will improve the quality, coverage and understanding of the natural resource base, including the non-renewable resource potentials, shall be conducted with the support of the communities.
- 3.9.6 Applications for scientific research licensing should be sent to local HTOs for review. The HTOs will involve the CIARCs in this review.
- 3.9.8 Existing polar research training programs at Nunavut Arctic College, the Arctic Council, and the Polar Continental Shelf Project, as well as the research centres operated by the NRI, and DIAND shall investigate the possibility of establishing a national polar research training institute in Nunavut.
- 3.9.10 By virtue of the Scientist Act, researchers conducting investigation on ice dynamics and/or marine mammals, with the exception of polar bears, are required to consult the NRI. They are also required to consult with communities when setting priorities for research.

3.11 Heritage Resources

- 3.11.2 The NPC and the communities shall continue to record the locations of heritage and archaeological sites, and shall involve the CMC, the IHT, and CLEY on the documentation of these sites. This information shall be referred to by CLEY when land use proposals are considered. The appropriate communities shall be consulted on the approval of archaeologists' applications before permits are issued.
- 3.11.3 The CMC shall continue to hold a central registry of archaeological sites, and the NPC, in coordination with the IHT, shall continue to monitor land use activities to protect these sites. Information about the location and identity of archaeological sites in specific areas, and the measures necessary to protect them, shall be included in land use permits. Land users shall report the discovery of all suspected archaeological sites or artifacts to CLEY.
- 3.11.4 Any review of legislation protecting burial, historical and archaeological sites shall ensure that these sites are more fully protected.
- 3.11.5 The NPC shall consider requests to amend the plan to designate special areas for cultural, traditional or historical reasons. No development activities shall be permitted within such areas or within an area of sufficient size to protect the integrity of the site.

3.12 Cumulative Effects and Ecosystems Monitoring

3.12.1 DIAND, in cooperation with the NPC and other appropriate agencies, shall complete the design and implementation of the monitoring program outlined in Section 12.7.6 of the NICA.

3.13 Clean Up and Monitoring of Waste Sites

- 3.13.2 The principle of "the polluter pays" shall apply to a strategy for cleaning up the environment. Where it is possible to identify the person, company or agency responsible for creating an abandoned or inactive waste site, they shall be made responsible for site cleanup and restoration.
- 3.13.3 When identification is not possible, the government agency (or its successor) that had regulatory responsibility for the site at the time it was active shall be responsible for site cleanup and restoration.
- 3.13.4 The NPC shall work with communities, QIA, government, industry and other interested parties to develop an inventory of waste sites and a short list of cleanup priorities in keeping with the NPC's responsibilities assigned in NICA Section 11.9.1.
 - a) Once an inventory of the sites is complete, the NPC shall work with all interested parties to (i) maintain and update the inventory and (ii) develop a Nunavut-Settlement-Area-

- wide short list of priority sites for cleanup.
- b) Community residents in particular, and all land users in general, shall be actively involved in planning and conducting cleanup operations, whenever possible and practicable.
- Refuse, such as fuel drums and scrap metal, shall be recycled where possible.
- d) Sites containing toxic materials shall be given priority for cleanup, and the location of these sites shall be widely publicized to warn residents.
- e) Sites within or near caribou calving grounds, near water and near communities shall also be given priority for cleanup.
- g) Mining and exploration companies are particularly encouraged to report old waste sites they may come across on the land, and which may not be on the inventory list and maps.
- 3.13.5 DIAND, as the lead agency for Canada in this region, shall review the Priority List of Cleanup Sites and, in consultation with the QIA and the NPC, prepare a remedial action plan to be completed six months following development of the priority list.

- 3.13.6 DSD, as the lead agency for the Government of Nunavut, shall review the Priority List of Cleanup Sites and, in consultation with the QIA and the NPC, prepare a remedial action plan to be completed six months following development of the priority list.
- 3.13.7 DND and DIAND shall clean up any abandoned military facilities as quickly as possible, ensuring that local people are consulted about cleanup priorities, and prepare a remedial action plan to be completed six months following development of the priority list.
- 3.13.8 New occurrences of pollution, garbage and contamination caused by anyone shall be prevented. Land users shall ensure that all drums are safely recovered.

APPENDIX F

Information Resources

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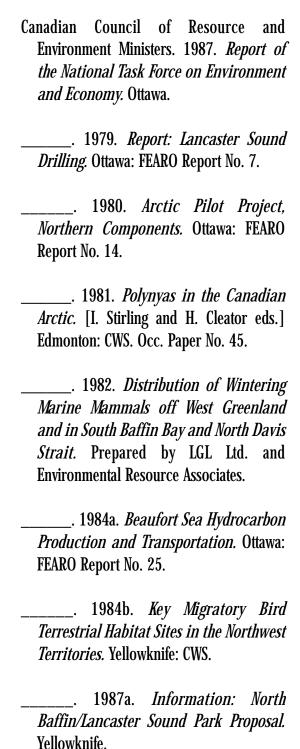
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APPENDIX G

Land Values and Concerns

This Appendix corresponds to Appendix B in the original Lancaster Sound Regional Land Use Plan.

Appendix B of the original Lancaster Sound plan contains tables presenting in detail the four categories of Areas of Importance described in this Appendix and shown on the Areas of Importance Map. Those tables are not reproduced in this Appendix. The reader is referred to Appendix B of the Lancaster Sound plan for the Land Values and Concerns that apply within each Area. The Reader is also referred to the original Areas of Importance Map accompanying Appendix B of the Lancaster Sound plan for the location corresponding to each Value and Concern. Copies of the Lancaster Sound plan can be obtained from the Nunavut Planning Commission, as can information regarding the Values and Concerns that apply at these locations.

1.0 Land Values in Areas of Importance

Land values are elements of the Planning Region identified by communities and/or wildlife managers as being important; for instance, wildlife species harvested by a community, travel routes, types of wildlife habitat, or archaeological sites.

As part of the consultation process during preparation of the original *Lancaster Sound Regional Land Use Plan*, the NPC asked each community, as well as wildlife managers, to map areas that are important to that community and/or to wildlife (see the Areas of Importance Map).

An area falls into one of four possible categories of importance:

1. Essential Areas

Criteria

 a) The area is essential to the community for hunting, fishing and/or trapping. The community cannot survive without the area.

- b) The area is essential to the biological productivity of wildlife because:
 - wildlife needs the habitat to survive, and alternative habitat (e.g. calving areas, nesting areas, polynyas or migration routes) is not available;
 - the habitat supports rare, threatened or endangered species, or concentrations of wildlife; and/or
 - the habitat is scarce.
- c) The area is either protected by legislation or has been proposed by government, other agencies, or communities for formal protection.

In most cases, these areas have a high diversity of values and meet more than one criterion.

2. Important Areas

Criteria

a) The area is of great importance to the community for hunting, fishing and/or trapping. Much of the harvest comes from the area.

b) The area is of great importance to wildlife; however, alternative habitat could be used, if it were available - e.g., fox denning areas or caribou winter grazing areas.

Generally, there is a greater diversity of values in these areas than in the General Use Areas, but not as great a diversity as in the Essential Areas.

3. General Use Areas

Criteria

- a) The area is of general use to the communities for hunting, fishing and/or trapping. A smaller proportion of the harvest comes from these areas than from the Essential Areas and Important Areas.
- b) The area may be used by only one or two wildlife species for general purposes such

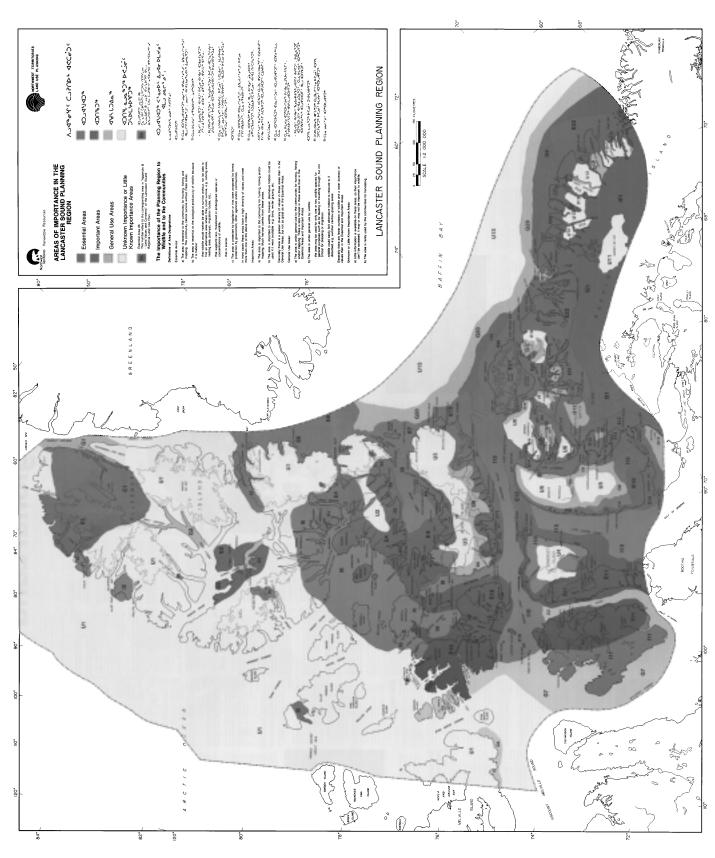
as feeding, and wildlife could find alternative habitat to which to relocate if disturbed - e.g., summer caribou grazing areas.

Generally, there are fewer numbers of wildlife and a lower diversity of values in these areas than in the Essential or Important Areas.

4. Areas of Unknown or Little Known Importance

Criteria

- a) The area is not used much by the community.
- b) Little information is available on these areas, so their importance cannot be assessed; the area may, or may not, be important to wildlife.



Reference only. Original map is available from the NPC.

Code of Good Conduct for Land Users

- 1. The landscape of each camp and other land use sites will be restored to its original condition to the greatest degree possible. Water quality will be preserved, and no substances that will impair water quality will be dumped in water bodies. When possible and feasible, old sites will be restored to the natural state.
- 2. All land users shall assist communities and government(s) in identifying and protecting archaeological sites and carving-stone sites, as required by law.
- 3. Generally, low-level flights by aircraft at less than 300 metres should not occur where they will disturb wildlife or people. If such flights are necessary, they should only take place after consultation with the appropriate communities. All land users are responsible for reporting to the land managers any illegal or questionable low-level flight.
- 4. All activities on the land will be conducted in such a fashion that the renewable resources of the area in question are conserved.
- 5. Whenever practicable, and consistent with

- sound procurement management, landusers will follow the practice of local purchase of supplies and services.
- 6. Land users will establish working relationships with local communities and respect the traditional users of the land.
- 7. During the caribou calving, post-calving and migrating seasons, land use activities should be restricted to avoid disturbing caribou, in general, and activities will be governed more specifically by caribou protection measures such as those contained in Appendix I.
- 8. Artifacts must be left where they are found.
 All land users are responsible for reporting the location of, or any removal or disturbance of artifacts, to CLEY.
- 9. The mining industry is encouraged to assist in identifying local carving-stone deposits and report any discoveries to the QIA. Industry is also encouraged to identify and report old waste sites that need to be cleaned up.
- 10. All land users shall obey the laws of general application applying to land use.

APPENDIX I

DIAND Caribou Protection Measures

- 1. (a) The Permittee shall not, without approval, conduct any activity between May 15 and July 15 within the Caribou Protection Areas depicted on the map certified by the Engineer as the "Caribou Protection Map" and annexed to this Land Use Permit.
 - (b) A Permittee may, upon approval by the Land Use Inspector, operate within the said Caribou Protection Areas beyond the May 15 deadline set out in 1(a), provided that, when monitoring information indicates that caribou cows are approaching the area of operation, the Permittee will implement 1(c).
 - (c) On cessation of activities pursuant to 1(a) or 1(b), the Permittee will remove from the zone all personnel who are not required for the maintenance and protection of the camp facilities and equipment, unless otherwise directed by the Land Use Inspector.
 - (d) The Permittee may commence or

- resume activities prior to July 15 within those parts of the Caribou Protection Areas released by the Land Use Inspector for the reason that caribou cows are not expected to use those parts for calving or post-calving (note 1).
- 2. (a) In the event that caribou cows calve outside of the Caribou Protection Areas, the Permittee shall suspend operations within the area(s) occupied by cows and/or calves between May 15 and July 15.
 - (b) In the event that caribou cows and calves are present the permittee shall suspend:
 - (i) blasting;
 - (ii) overflights by aircraft at any altitude of less that 300 meters above ground level; and
 - (iii) the use of snowmobiles and ATVs (all-terrain vehicles) outside the immediate vicinity of the camp.

NOTE

- 1. The Land Use Inspector's decision will be based on the existing caribou information.
- 2. Concentrations of caribou should be avoided by low-level aircraft at all times.

- 3. (a) During migration of caribou, the Permittee shall not locate any operation so as to block or cause substantial diversion to migration.
 - (b) The Permittee shall cease activities that may interfere with migration, such as airborne geophysics surveys or movement of equipment, until the migrating caribou have passed.
- 4. (a) The Permittee shall not, between May 15 and September 1, construct any camp, cache any fuel, or conduct any blasting within 10 kilometres of any "Designated Crossing" as outlined on

- the map certified by the Engineer as the "Caribou Protection Map" and annexed to this Land Use Permit.
- (b) The Permittee shall not, between May 15 and September 1, conduct any diamond drilling operation within 5 kilometres of any "Designated Crossing" as outlined on the map certified by the Engineer as the "Caribou Protection Map" and annexed to this Land Use Permit.

APPENDIX J

Marine and Terrestrial Transportation/Communications Corridor Alternative Route Assessment

Applicants wishing to develop a transportation and/or communications corridor in the North Baffin region are required to provide the NPC with the following information:

- 1. A description of the proposed corridor, including its use, its general routing, the possible environmental and social impacts, and any seasonal considerations that may be appropriate.
- 2. A comparison of the proposed route with alternative routes in terms of environmental and social factors as well as technical and cost considerations.

- 3. An assessment of the suitability of the corridor for the inclusion of other possible communication and transportation initiatives (roads, transmission lines, pipelines, etc.). This assessment should include:
 - the environmental, social and terrain engineering consequences, and the cumulative impacts of the project, and
 - the environmental and social impact of the project on nearby settlements or on nearby existing and proposed transportation systems.

Marine and Terrestrial Transportation/Communications Corridor Guidelines

The following planning guidelines will be used in the assessment of a new transportation / communications corridor proposal:

- 1. The corridor width shall be a function of:
 - the number and type of identified facilities within the corridor;
 - physical and biophysical conditions;
 - availability of detailed engineering data for one or more transportation modes within the corridor;
 - safe distances between different facilities within the corridor; and
 - aesthetics.
- 2. Corridors shall:
 - minimize negative impacts on community lifestyles;
 - improve access to other resources having high potential for development, while still maintaining the shortest practicable distance between the primary resource areas and the trans-shipment location;

- be designed in accordance with existing and prospective land use capability including topography, soil, permafrost and wildlife; and
- be designed in accordance with the availability of granular supplies.
- 3. In keeping with existing legal and legislative requirements, including the NLCA, corridors shall not negatively impact:
 - community business, residential and projected expansion areas;
 - important fish and wildlife harvesting areas;
 - key habitat for fish and wildlife species, especially areas used by endangered species;
 - areas of high scenic, historic, cultural and archaeological value.

APPENDIX L

NPC Policy on Translation

All materials submitted to the NPC, including letters, formal submissions, reports and any other written material used in the land use planning process, shall be translated into the appropriate dialect of Inuktitut.

The cost of translation shall be borne by the party submitting the information.

This policy applies to federal and territorial government departments and agencies, Crown corporations, DIOs and any other legally constituted body wishing to participate in the land use planning process.

Translations shall be provided at the same time as English versions.

This policy does not apply to individuals.

APPENDIX M

Ecosystem Indicators

The following list of indicators is taken from a draft workshop report entitled *Nunavut General Monitoring Program: Ecosystem Indicators for the West Kitikmeot Planning Region*. This report is part of the development of an ecosystemic and socioeconomic monitoring pilot project being conducted in the West Kitikmeot. It is expected that this project will operate throughout the Nunavut Settlement Area.

According to the NLCA, the general monitoring program must include indicators of all "environmental" components - air, land, water and wildlife - as well as the social and cultural environment and heritage resources. The following focus areas have been identified:

Natural Environment

Landscape

- eskers / landforms
- wetlands
- "important" calving/denning areas
- contaminated sites
- presence of contaminants from long-range atmospheric transport

Fresh Water

- surface water flow
- surface water quality
- lake/river ice: break-up / freeze-up

- presence of contaminants from long-range atmospheric transport
- contaminant spills

Marine

- sea ice: break-up / freeze-up
- underwater contaminated sites
- contaminant spills

Atmosphere

- weather
- climate change
- stratospheric ozone (UV damage)
- deposition of contaminants from longrange transport

Biota

for each species below: population size, health, reproduction rates, habitat, etc.

- polar cod
- char
- seals
- wolves
- wolverines
- fox
- rabbit
- polar bear
- caribou
- muskox
- waterfowl, migratory birds
- raptors
- endangered species

 presence of contaminants from long-range atmospheric transport

Economic Environment

As specified in the NLCA, the general monitoring program is to include indicators of the social environment. This is presumed to include economic factors. Four focus areas are outlined below: (i) natural resource harvesting, (ii) employment, (iii) commercial and industrial activity, and (iv) consumption.

Natural Resource Harvesting

- catch statistics
- hunter support programs
- resource availability near communities (link with environmental indicators)

Employment

- employment rates
- average weekly earnings

Commercial and Industrial Activity

- retail sales
- mineral activity
- marine shipping
- industry, by type

Consumption

- energy use
- household expenditures

Community Environment

Seven focus areas have been selected to address issues of community environment: (i) demographics, (ii) services, (iii) health care, (iv) education, (v) public participation, (vi) culture, heritage, and recreation and (vii) environmental protection. The main focus of this theme area is on attributes of the communities themselves.

Demographics

- historical population trends
- net migration
- number of households
- · birth and death rates

Services

- water supply, sewage and waste disposal
- public transportation (airlines) and infrastructure (roads, airports, piers/docks)
- information (telephone, radio, TV, newspapers, Internet)
- housing
- law enforcement (RCMP, fish/wildlife)
- social services

Health Care

- number of doctors and nurses
- number of hospital beds
- rural health care

Education

- basic education level
- enrollment rates (school, training programs)
- what happens to graduates

Public Participation

- community institutions and participation
- community "control" of government funds

Culture, Heritage, Recreation

- heritage sites
- Aboriginal language(s) in active use
- traditional knowledge
- recreation facilities and programs

Environmental Protection

- protected areas
- wildlife management
- waste management
- (additional indicators could be provided by NIRB or DIAND)

Cultural Environment

The NLCA does not specifically call for the general monitoring program to include indicators of what life is like for an individual living in Nunavut. However, this is a natural extension of the other areas described above, and an important facet to be included if the monitoring program is to adopt a holistic, ecosystemic approach. In this context, four focus areas have been selected within this theme: (i) individual health, (ii) social equity, (iii) personal safety and (iv) quality of life.

Individual Health

- consumption of traditional foods
- quality of country foods (presence of contaminants)
- mental health
- reportable diseases
- drug and alcohol consumption

Social Equity

- number of people on social assistance
- female average wages and unemployment
- residents living below low-income cut-off

Personal Safety

- crime rate
- child abuse

Quality of Life

- participation in traditional pursuits (hunting, fishing)
- use of Aboriginal language(s)
- suicide rate
- number of people per residence
- drug and alcohol abuse

APPENDIX N

Guidelines to Establish, Assess and Review Conservation Areas in Nunavut Through the Land Use Planning Process

Definition of Conservation Area

In this land use plan, "Conservation Area" means any conservation area or protected area established by legislation and in existence at the date of the ratification of the NLCA and listed in Schedule 9-1 of the NLCA, as well as any other area of particular significance established for ecological, cultural, archaeological, research or similar reasons.

These guidelines apply to conservation areas in marine areas, as outlined in NLCA sections 15.2.1 and 15.2.2.

Purpose

These guidelines will be used by the NPC to:

- determine whether to recommend the creation of new conservation areas as part of the development of new regional land use plans;
- review the status of conservation areas during the periodic review of regional land use plans or the preparation of new plans; and

 determine whether to recommend the creation of new conservation areas as amendments to existing plans.

Guidelines

- 1. The establishment of new conservation areas shall follow the procedures outlined in the NLCA. The NLCA defines the contents of a land use plan in Section 11.3.1 as
 - ... a document containing text, schedules, figures and maps for the establishment of objectives and guidelines for short-term and long-term development, taking into account factors such as the following:
 - ...(g) environmental considerations, including Parks and Conservation Areas, and wildlife habitat. ...
- 2. When a conservation area involves wildlife, the approval of the NWMB is required, as outlined in Section 9.3.2.
- 3. Existing conservation areas listed in NLCA Schedule 9-1 shall be incorporated into

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existing or draft land use plans as they are developed.

- 4. The NPC shall consider proposals for new conservation areas once it has been demonstrated that the proposal:
 - has been initiated by, or is supported by, local community and regional organizations;
 - blends traditional and local knowledge of ecosystems with scientific information;
 - considers economic and social values;
 - considers existing land use planning and wildlife management regimes; and
 - provides interim protection, preferably for no more than five years.
- 5. For the purposes of these guidelines, a sponsor is deemed to be a DIO, other Inuit

- organization, government department or agency, non-governmental organization, industry or individual.
- 6. Sponsors of proposed conservation areas shall ensure that candidate sites:
 - focus on a representative sample of northern lands and waters which can conserve the processes needed to maintain healthy ecosystems;
 - consider other areas with outstanding natural and cultural features important for conservation, tourism, recreation, heritage, research and education;
 - recognize land claim agreements, traditional Aboriginal uses and thirdparty interests; and
 - fully take into account access to mineral resources and, through the use of mineral and energy resource assessments (MERA), development potential.

From the NLCA, Article 9: Conservation Areas

Part 1: Definition

- 9.1.1 In this Article:
 - "Conservation Area" means any Conservation Area in existence at the date of ratification of the Agreement listed in Schedule 9-1, and any of the following areas when established under legislation:
 - (a) National Wildlife Areas;
 - (b) Migratory Bird Sanctuaries;
 - (c) International Biological Program Ecological Sites/Ecological Areas;
 - (d) Man and the Biosphere Reserves;

- (e) World Heritage Convention/Natural and Cultural Sites;
- (f) Wildlife Sanctuaries;
- (g) Critical Wildlife Areas;
- (h) National Historic Sites;
- (i) National Historic Parks;
- (j) Wetlands of International Importance for Waterfowl (Ramsar);
- (k) Canadian Landmarks;
- (l) Canadian Heritage Rivers;
- (m) Historic Places; and
- (n) other areas of particular significance for ecological, cultural, archaeological, research and similar reasons.

NLCA Schedule 9-1: Existing Conservation Areas (Section 9.1.1)

Part I

Migratory Bird Sanctuaries established pursuant to the Migratory Birds Convention Act, migratory bird sanctuary regulations:

- 1. Bylot Island Bird Sanctuary
- 2. Dewey Soper Bird Sanctuary
- 3. East Bay Bird Sanctuary
- 4. Harry Gibbons Bird Sanctuary
- 5. McConnell River Bird Sanctuary
- 6. Queen Maud Gulf Bird Sanctuary
- 7. Cape Dorset Bird Sanctuary
- 8. Seymour Island Bird Sanctuary

Part II

National Wildlife Areas established pursuant to the

Canada Wildlife Act, wildlife area regulations:

1. Polar Bear Pass National Wildlife Area

Part III

Territorial Game Sanctuary established pursuant to the territorial Wildlife Act:

1. Bowman Bay Game Sanctuary

Part IV

Canadian Heritage Rivers, designated by the Minister of Environment. Canada, the Minister of Indian Affairs and Northern Development, Canada, and the Minister of Sustainable Development, Government of Nunavut:

- 1. Kazan River (Lower Reaches only)
- 2. Thelon River (Lower Reaches only)

NLCA Article 15: Marine Areas

Part 1: Principles

- 15.1.1 This Article recognizes and reflects the following principles:
 - (a) Inuit are traditional and current users of certain marine areas, especially the landfast ice zones;
 - (b) the legal rights of Inuit in marine areas flowing from the Agreement are based on traditional and current use:
 - (c) Canada's sovereignty over the waters of the Arctic archipelago is supported by Inuit use and occupancy;
 - (d) Inuit harvest wildlife that might migrate beyond the marine areas;
 - (e) an Inuit economy based in part on marine resources is both viable and desirable:

- (f) there is a need to develop and co-ordinate policies regarding the marine areas; and
- (g) there is a need for Inuit involvement in aspects of Arctic marine management, including research.

Part 2: Application

- 15.2.1 If a Park or Conservation Area is established and that Park or Conservation Area partially extends beyond the marine areas, Article 8 or 9, as the case requires, shall apply to that entire Park or Conservation Area.
- 15.2.2 Articles 5, 6, 8, 9, 11, 12, 23, 24, 25, 27, 33, and 34 shall apply to marine areas subject to any qualifications contained in those Articles.

APPENDIX O

Developing a Cleanup Priority List

The following process was developed, in the mid-1990s and through community consultation, to assign cleanup priorities to more than 190 sites mapped in the West Kitikmeot. A similar approach is proposed for mapping sites in the North Baffin region. The maps that are developed will be based on information provided by people in the region, as well as from data available from various government agencies.

Site Identification

Sites containing waste are first mapped based on general information gathered from local informants. Once these sites are plotted, the maps are taken back to the communities for validation. This mapping continues as new sites are identified.

Site Status

To determine cleanup priorities, all known sites are divided into three parallel "streams": Assessment, Monitoring, and Hazardous.

The Assessment Stream includes all sites that are not suspected of containing hazardous waste and which are not under active land use permits. The majority of sites typically fall into this category. If a site is unoccupied, abandoned or "orphaned," it is included in the cleanup database and

proceeds through the steps in this stream. An abandoned site can enter the Hazardous Stream immediately should hazardous waste be suspected.

The *Monitoring Stream* includes sites that have active and valid land use permits. The permit-granting agency, either government or a DIO, monitors activities at these sites.

These are not cleanup sites per se, although they are included in an overall cleanup database. Sites in this stream re-enter the Assessment Stream should the license holder abandon them or not clean them up properly.

The *Hazardous Stream* includes any site suspected of containing hazardous waste. Placing a site in the Hazardous Stream automatically pushes it into the "urgent" range of the priority list. Its final ranking on the list depends on the relative ranking of other sites on the list in general, and within that range in particular. Hazardous waste identified at any stage of the classification process is grouped in this stream.

An annual review of the database will be conducted in order to track any sites which have changed status.

Type of Waste

The purpose here is to document the kind(s) of waste at a site. As noted above, general

information about the content of these sites is provided by people in the region who know the land and what is on it. Since the most common form of hazardous waste is fuel, it is possible, on the basis of information gathered from local informants and without further investigation, to classify those sites where this substance is known to be present. When the information is incomplete or unclear, however, a follow-up environmental analysis is done.

When hazardous waste is identified, government regulators should be informed. It is important to note that once hazardous materials are removed, the site may still require cleanup and would thus re-enter the classification process.

Information Gathering

Detailed information is gathered for all sites in both the Assessment and Hazardous Streams. However, the level of technical detail required for classification is not as great for the former. The following parameters have been identified by workshop participants as important in information gathering:

- What kind of waste is at the site (chemicals, fuel, buildings, old machinery, etc.)?
- Who is responsible for the site?
- Is there a land use permit?
- What area is affected?
- What was the land used for? What will it be used for?
- How close is waste to water sources (surface, drinking water, other)?
- What animal populations use the area (caribou feeding areas or calving grounds, migration routes, etc.; bird habitat; other)?

- How much waste is at the site?
- Is the site in an area of frequent, regular or irregular Inuit land use?
- Is the area close to a community or within a hamlet boundary?
- Are there aesthetic concerns (i.e. are people complaining about the mess)?
- Are there other community concerns?
- Have there been previous cleanup efforts or containment measures?
- Other information.

Besides community informant reports and surveys, this information is gathered from:

- Owner files
- Regulatory agency files, including those held by institutions of public government in Nunavut
- Land use history
- Aerial photography
- Archival records
- Site plans and drawings
- Insurance plans
- Review of industrial practices
- Anecdotal reports from past employees
- Other sources.

Site Assessment

An assessment may be carried out to assist in the development of the cleanup priority list. Wastes in the Hazardous Stream require technical analysis. A methodology has been developed by the Canadian Council of Ministers of the Environment and used by DND to assess DEW Line sites for cleanup. NTI has used the same methodology to prioritize DEW Line sites.

The following section outlines the method the NPC has developed for classifying potential cleanup sites. The categories have been developed based on public input and are designed to assist people in the North Baffin in developing a cleanup priority list.

Each category is subdivided and a numerical value is attached. These values will be totaled and the sum attributed to the site. All sites are then organized based on this ranking. The numbering system will assist further discussions about assigning priority to the sites. (This assessment will also result in hazardous waste being put at the top of the priority list.)

Potential cleanup sites will be assessed using the following criteria:

- **Degree of Human Use (US)** refers to how often a site is used. A scale of continuous (3), seasonal (2), infrequent (1) or none (0) is estimated based upon information collected from the communities.
- Risk to Human Health (LI) is another factor that has to be estimated. Risks to health are rated according to the following scale:
 - The presence of hazardous materials (3)
 - No hazardous materials, but extensive debris (2)
 - No significant risk to human health (1).
- **Degree of Site Contamination (CN)**. Significant Contamination (3) refers to sites that are already seriously contaminated, or where there is a significant potential for future contamination based on an initial assessment. Moderate Contamination (2) is

- said to occur when some localized contamination is present. The final two categories are Low Contamination (1) and No Contamination (0).
- Status of Contaminants (ST) refers to the condition of the various substances at the site. If a contaminant is known to be present, or it is strongly suspected that it is migrating into the food chain, drinking water, etc., then the site is assigned the most serious rating (3) for this criterion. If no one is sure about what is happening to the contaminants, the site is assigned a value of (2) in this category. If the contaminants are stable and are not likely to enter water sources, the site is evaluated as (1).
- Proximity to Community (PR). During a meeting about cleanup sites in Cambridge Bay in May 1996, participants said they were more concerned about sites closer to their communities than about those farther away. Each site is assigned a value of (3) if it is close to the community, a value of (2) if it is at an intermediate distance and a value of (1) if it is far away.
- Level of Public Concern (CO). This category deals with the degree of concern a site creates. In this category, any site that creates Nunavut-wide concern is given a value of (3). Those causing concern throughout the planning region are assessed as (2), while local concerns get a (1).

Total of Assigned Values

Once all of the sites have been given numbers for each of the criteria previously described, the values assigned to each site are totaled, and the sums are used to rank the sites.

$$US + LI + CN + ST + PR + CO = R$$

Since this is an initial assessment, there may be a number of sites with equal priority. However, this total will be enough to "weigh" the sites and place them in one of three broad categories. Each sum is then used to place a site in a range (R), which, in turn, is used to determine the cleanup priority. The ranges are:

- (13-18) Urgent
- (7-12) Serious
- (6 or less) Moderate