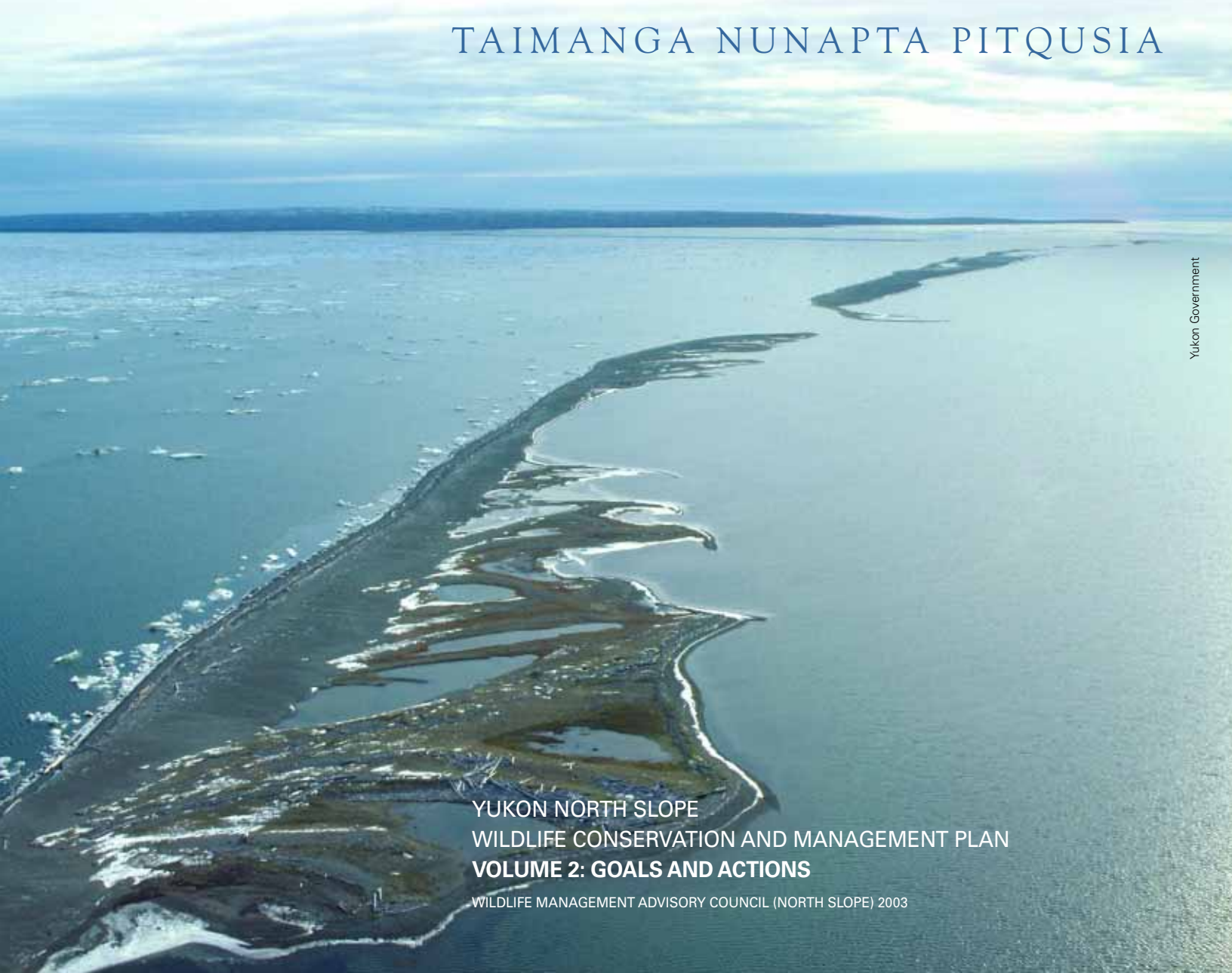




Jim Hawkings

Yukon North Slope
THE LAND AND THE LEGACY
TAIMANGA NUNAPTA PITQUSIA

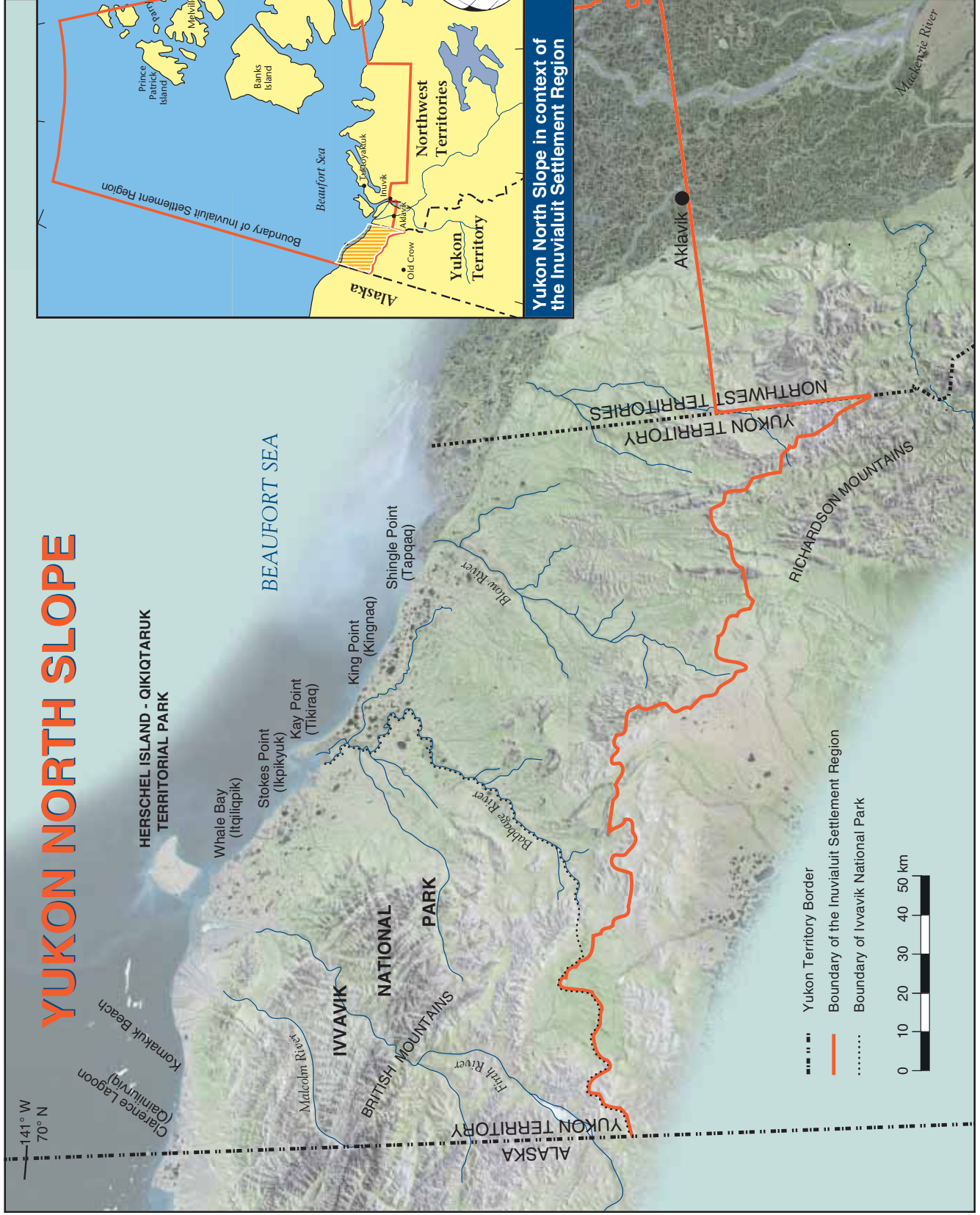


Yukon Government

YUKON NORTH SLOPE
WILDLIFE CONSERVATION AND MANAGEMENT PLAN
VOLUME 2: GOALS AND ACTIONS

WILDLIFE MANAGEMENT ADVISORY COUNCIL (NORTH SLOPE) 2003

YUKON NORTH SLOPE



Yukon North Slope in context of the Inuvialuit Settlement Region

Yukon North Slope
THE LAND AND THE LEGACY
TAIMANGA NUNAPTA PITQUSIA

YUKON NORTH SLOPE
WILDLIFE CONSERVATION AND MANAGEMENT PLAN
VOLUME 2: GOALS AND ACTIONS

WILDLIFE MANAGEMENT ADVISORY COUNCIL (NORTH SLOPE) 2003

**Yukon North Slope Wildlife
Conservation and Management Plan**

Volume 1: Environmental Overview

Volume 2: Goals and Actions

Volume 3: Wildlife Population Status Reports

Volume 4: Implementation Plan

September 2003

The Yukon North Slope is one of Canada's special places.

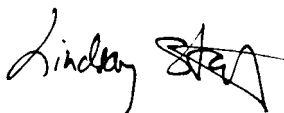
The Inuvialuit Final Agreement, signed in 1984 by the Inuvialuit of the Western Arctic, Canada, Northwest Territories and Yukon, recognizes this simple fact. It established a special conservation regime for the area to ensure that abundant wildlife populations, a diverse arctic environment, and a long tradition of traditional use by Inuvialuit people would be sustainable into a future as distant as we can imagine.

The Inuvialuit Final agreement also called for the development of a plan to support this special conservation regime. The Yukon North Slope Wildlife Conservation and Management Plan consists of four volumes and was prepared by the Wildlife Management Advisory Council (North Slope) — the co-management organization established under the Inuvialuit Final Agreement to provide advice on the maintenance and implementation of the conservation regime on the Yukon North Slope.

Since its inception, over a decade ago, the plan has evolved as a working document that has provided guidance and information to governments, co-management organizations, Inuvialuit and other aboriginal organizations, developers, environmental assessment bodies and the general public. As it has evolved and developed, many of its early priorities have been implemented. Volume Two of the Yukon North Slope Wildlife Conservation and Management Plan now provides a progress report of what has been accomplished and a general work plan for what needs to be done to maintain a conservation regime on the Yukon North Slope.

The development of the plan has benefited from the ideas, interests and concerns of many stakeholders and partners in both the public and private sectors. Its relevance is a feature of their contributions and input; its effectiveness will depend on our collective commitment and cooperation towards the plan's implementation.

The Yukon North Slope Wildlife Conservation and Management Plan works to build on and extend to future generations the legacy that we have inherited for the Yukon North Slope. It is our hope that all people with an interest in this special place can contribute to this important and rewarding effort.



Lindsay Staples
Chairperson

Recommended to:

Minister of Environment, Canada
Minister of Indian Affairs and Northern Development, Canada
Minister of Fisheries and Oceans, Canada
Minister of Environment, Yukon
Minister of Resources, Wildlife and Economic Development,
Northwest Territories
Minister of Canadian Heritage, Canada

Also advanced to:

Chair, Inuvialuit Game Council
Chair, Inuvialuit Regional Corporation
Chair, Fisheries Joint Management Committee
Chair, Wildlife Management Advisory Council (NWT)
Chair, Porcupine Caribou Management Board
Chair, Environmental Impact Screening Committee
Chair, Environmental Impact Review Board
President, Aklavik Hunters and Trappers Committee
President, Inuvik Hunters and Trappers Committee
President, Arctic Borderlands Ecological Knowledge Co-op
Chief, Vuntut Gwitchin First Nation
Chair, North Yukon Renewable Resources Council
Chair, Gwich'in Renewable Resource Board

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Jim Hawkings



YUKON NORTH SLOPE WILDLIFE CONSERVATION AND MANAGEMENT PLAN

INTRODUCTION

The Yukon North Slope is an area of land and sea stretching from Alaska to the Northwest Territories. It includes all of the Yukon mainland whose waters drain into the Beaufort Sea, Herschel Island, other islands and the nearshore and offshore waters. This Plan was developed to help protect the environment, conserve the wildlife and ensure traditional native use of the area in accordance with the *Inuvialuit Final Agreement*.

The Yukon North Slope is one of Canada's most diverse Arctic environments. It is an area of international importance, home to many species of wildlife. It is the home of the Inuvialuit of the Western Arctic, who have relied on the region's wildlife and environment for many hundreds, if not thousands, of years. In recognition of the international importance of the wildlife and habitat of the area and of the dependency of the Inuvialuit upon it, the *Inuvialuit Final Agreement* was negotiated. The Agreement contains detailed provisions to secure and protect this area and its people.

Negotiated by the governments of Canada, the Yukon, the Northwest Territories and the Inuvialuit, and proclaimed on July 25, 1984, as the Western Arctic (Inuvialuit) Claims Settlement Act, the *Inuvialuit Final Agreement* (IFA) established a broad conservation regime for the Yukon North Slope.

Section 12 of the *Inuvialuit Final Agreement* (Appendix 1) contains those provisions that primarily concern the Yukon North Slope.

"12.(2) The Yukon North Slope shall fall under a special conservation regime whose dominant purpose is the conservation of wildlife, habitat and traditional native use."

The IFA established a co-management council to oversee and maintain this conservation regime for the Yukon North Slope, and to develop a wildlife conservation and management plan to give the regime ongoing practical effect.

"12.(56) The Council shall provide advice to the appropriate minister on all matters relating to wildlife policy and the management, regulation and administration of wildlife, habitat and harvesting for the Yukon North Slope and, without restricting the generality of the foregoing, the Council shall:

- (a) provide advice on issues pertaining to the Yukon North Slope to the Porcupine Caribou Management Board, the Yukon Land Use Planning Commission, the Review Board and other appropriate groups;*
- (b) prepare a wildlife conservation and management plan for the Yukon North Slope for recommendation to the appropriate authorities as a means for achieving and maintaining the principles of conservation set out in subsections (2) and (3);*
- (c) determine and recommend appropriate quotas for Inuvialuit harvesting of game in the Yukon North Slope; and*
- (d) advise on measures required to protect habitat that is critical for wildlife or harvesting including those referred to in subsection 14(3).*

12.(3) Subject to subsections (5) to (15):

- (a) all development proposals relating to the Yukon North Slope shall be screened to determine whether they could have a significant negative impact on the wildlife, habitat or ability of the natives to harvest wildlife;*
- (b) other uses within the Yukon North Slope shall be considered and may be permitted if it is shown that there would be no significant negative impact on wildlife, habitat or native harvesting;*
- (c) other uses within the Yukon North Slope that may have a significant negative impact on wildlife, habitat or native harvesting shall be permitted if it is decided that public convenience and necessity outweigh conservation or native harvesting interests in the area; and*
- (d) development proposals relating to the Yukon North Slope that may have a significant negative impact shall be subject to a public environmental impact assessment and review process."*

The Agreement (including related sections 11, 13, and 14) can be viewed on the Council's web site: www.taiga.net/wmac.

The Yukon North Slope Wildlife Conservation and Management Plan (the Plan), then, is the result of a requirement in the IFA that is entrenched in Section 35 of the Canadian Constitution. The *Inuvialuit Final Agreement* represents the legislative resolution of more than 20 years of debate over the nature and place of conservation and development on the Yukon North Slope. It represents a basic foundation for the treatment of these issues now and in the future. The Plan takes the principles of the IFA as its point of departure and sets out management goals, objectives and actions for the management and conservation of wildlife on the Yukon North Slope.

Prepared by the Wildlife Management Advisory Council (North Slope), the Plan consists of four volumes. Volume One of the Plan provides a general audience with a background to the Yukon North Slope: its natural and historic significance, and the history of conservation, development and Inuvialuit use in the area. Volume Two is intended for those with a management, conservation and resource use interest in the area. It serves as a guide to the implementation of the *Inuvialuit Final Agreement's* Section 12 and other related provisions that affect the management and conservation of wildlife on the Yukon North Slope. It is a frame of reference against which the Council, the governments, the Inuvialuit, and other aboriginal, public and private interests can assess efforts and activities on the Yukon North Slope to uphold IFA principles and objectives. Volume Three consists of Yukon North Slope Wildlife Population Status Reports and Volume Four contains the Implementation Plan. All four volumes can be viewed on the Council's web site at www.taiga.net/wmac/wcandmplans.htm.

Plan Objectives

The Plan's principal objective is to address all of those factors affecting the conservation of wildlife, habitat and traditional native use on the Yukon North Slope. The Plan is intended to assist all parties concerned in meeting the objectives of wildlife conservation under the *Inuvialuit Final Agreement*. However, the Yukon North Slope

Wildlife Conservation and Management Plan is not intended to be a substitute for or to derogate from the IFA. Please refer to the IFA for the purposes, rights, responsibilities and obligations that pertain to the conservation of wildlife, habitat and traditional native use, other resource use and development on the Yukon North Slope.

The Role of the Council

The Council's role is an advisory one to government. In preparing the Plan, the Council consulted with a diversity of interests to identify and address those issues of outstanding concern. This has been a challenging task, given differences in point of view that exist between government agencies, aboriginal organizations, industry, and wildlife and conservation organizations. In recommending the Plan and its proposed actions to the appropriate authorities and organizations, the Council recognizes that it will be required to play a facilitating role in implementing certain aspects of the Plan where differences in view remain.

General Provisions from the *Inuvialuit Final Agreement*

The IFA provides accommodation for conservation and development on the Yukon North Slope, but does so with the conservation of wildlife and habitat and traditional native use as the basis from which development proposals and activities will be viewed and considered. In this important respect, a plan for the conservation and management of wildlife becomes a reference and context from which development can be approached and controlled.

The IFA establishes two parks within which industrial development is precluded – Herschel Island Territorial Park and Ivvavik National Park. Outside the parks, the IFA makes accommodation for development that meets the test of compatibility with the conservation of wildlife, habitat and traditional native use. It also makes allowances for certain unique developments associated with public convenience and necessity where that test need not be met.

If this Wildlife Conservation and Management Plan is to bring a practical focus to important issues, it should help define the test of compatibility between development and conservation and

suggest how it should be administered. In doing so, the Plan should attempt to answer two fundamental questions: how do you maintain a conservation regime alongside modest incremental development activities, and how do you achieve conservation in the face of major development projects?

As a means for maintaining and achieving the principles and objectives of conservation set out in the Final Agreement, the Plan serves to consolidate and integrate efforts that cut across different jurisdictions, peoples and resources.

The Yukon North Slope is abutted on the west by an international boundary with the Arctic National Wildlife Refuge in Alaska, on the north and east by a territorial boundary with the Northwest Territories and to the south by other land claims settlement regions involving the Vuntut Gwitchin of Old Crow. The region includes two parks and a special conservation area. It is of interest to the Gwich'in of Old Crow and the Mackenzie Delta. The region comprises an ecosystem that extends into Alaska and encompasses the lands of the Inupiat and Gwich'in of Alaska. Within Canada, over a dozen departments and agencies of government hold responsibilities affecting the wildlife, habitat and traditional native users of the Yukon North Slope.

Scope

This Plan is broad in scope. This in part reflects the diverse provisions of the IFA that apply to the conservation of wildlife, habitat and traditional native use on the Yukon North Slope. The subject matter that it covers is best served by an approach that is neither exclusive nor restrictive of the interests and concerns that focus on wildlife, habitat and traditional native use. The requirements and means for conserving wildlife on the Yukon North Slope by necessity admit other interests and considerations outside the region and outside a narrow treatment of wildlife

management. For this reason, while the central focus of the plan is on the Yukon North Slope, neighbouring areas and interests like the Arctic National Wildlife Refuge and the Mackenzie Delta are given consideration. This Plan, then, is a means of meeting the challenge of wildlife conservation in a region where wildlife populations extend and travel across domestic and international borders, traditional territories and a wide range of administrative jurisdictions.

The Wildlife Policy for Canada recommends a broad approach to wildlife conservation: one that is considerate of international interests and effects; one that is mindful of the impacts associated with development; one that recognizes that the conservation of wildlife is dependent on the conservation of habitat; and one that recognizes that wildlife conservation is fundamentally about biodiversity and biological productivity. This treatment of wildlife is as consistent and all-encompassing as that of the *Inuvialuit Final Agreement*, and the Plan adopts this meaning.

The *Inuvialuit Final Agreement* makes a strong link between the management of wildlife and the conservation of habitat. Consistent with this approach and the meaning attached to wildlife, the Plan also treats habitat as referring to the whole or any part of the biosphere upon which wildlife depends, including all the land, water and air that it inhabits, crosses or utilizes at any time. In this perspective the Plan takes a holistic approach to managing the Arctic ecosystem, one that requires input from traditional knowledge, scientific knowledge, current research and ongoing monitoring of the ecosystem.

Just as the Arctic environment must be managed for the health of the whole, each of its component parts must be managed as well. This means managing species on an individual basis. Volume Three of the Plan provides Wildlife Population Status Reports for a number of species found on the Yukon North Slope.

THE NORTH SLOPE

In order to help distinguish the geographical areas where different issues within the Plan apply, the convention of using "North Slope" to mean the larger area comprising the

ecological unit that embraces land and sea in both Canada and Alaska is employed. The "Yukon North Slope" is the area defined in the *Inuvialuit Final Agreement*, which includes just

those areas of land within the Yukon political boundaries and those areas of the sea that are within an extension of those political boundaries along meridians of longitude.

The *Inuvialuit Final Agreement* requires the integration of wildlife and habitat management for migratory species whose ranges extend across the Yukon, Northwest Territories and adjacent offshore. The Yukon North Slope is just one part of a circumpolar Arctic environment. In the case of migratory species that cross international boundaries, it compels Canada to enter into cooperative management agreements designed to maintain acceptable wildlife populations in all jurisdictions affected. International management agreements and plans have been achieved for the Porcupine Caribou Herd and polar bears of the Western Arctic. The international Inuvialuit-Inupiat Beluga Whale Agreement will encourage sharing and international cooperation between the Inuit people of the Western Arctic. These agreements and plans are highlighted within the respective wildlife population status reports of the Plan (Volume Three).

Canada's commitment to pursuing cooperative management between jurisdictions was reaffirmed in 1992 when Canada was one of the first countries to sign the *United Nations Convention on Biodiversity* at the Earth Summit at Rio de Janeiro. In that same year Canada became the first industrialized country to ratify it and so agree to implement its provisions. Article 14 of the Convention calls upon states to cooperate in the protection of biodiversity, especially where the actions taken within one state affect biodiversity in another. The Canadian Biodiversity Strategy is the implementation of Canada's commitment to maintaining biodiversity. This commitment means that the maintenance of species diversity is now a management objective. The Plan recognizes and attempts to build on such commitments.

The passage of the federal Species at Risk Act, and the proposed Yukon Species at Risk Act, also furthers Canada's and the Yukon's commitments to the Canadian Biodiversity Strategy. Both of these new legislative initiatives will require, again, unprecedented cooperation across jurisdictions in order to effectively protect wildlife and wildlife habitat that is rare, threatened or endangered. An important challenge to the implementation of this legislation on the Yukon North Slope will be that of maintaining the integrity of IFA-based wildlife management institutions and the protection of Inuvialuit harvesting rights while achieving Yukon-wide and Canada-wide cooperation in assessing the status of shared wildlife species and populations and in developing wildlife management and recovery plans when they are required.

Both the Canadian Environmental Assessment Act and the Yukon development assessment process require consideration of the cumulative effects of development in project assessments. Establishing thresholds for development activities on the Yukon North Slope is an important feature of the special conservation regime for the area. The Plan's goal of "development within environmental limits" addresses this consideration and the requirements of the IFA for the future conservation of the area.

The 2003 Plan

This plan replaces all earlier versions of the Yukon North Slope Wildlife Conservation and Management Plan. The principal goals of the Plan remain the same. The Plan's objectives are consistent with past ones; however, they have been revised, where appropriate, to reflect changing interests and circumstances affecting the Yukon North Slope. Many actions have been revised from the 1994 Plan: a number of actions

WILDLIFE POPULATION STATUS REPORTS

For the purpose of providing information relevant to the environmental screening and review of development activities potentially affecting the Yukon North Slope and wildlife management in the area, WMAC(NS) has prepared Yukon North Slope Wildlife Population Status Reports, as

a companion document to this Plan (Volume Three). For many of the wildlife species identified, these reports include: the estimated population size; the population distribution and range; unique characteristics of the population; management concerns and information gaps;

and the management regime of the population through plans, agreements, legislation, regulations and responsible agencies. These reports can be viewed at www.taiga.net/wmac/consandmanagementplan_volume3/index.html.

that have been completed have either been eliminated or revised; others have been introduced to meet new objectives or to more effectively meet existing ones. A status report on the actions recommended by the Council in the 1994 Plan, prepared for the Yukon North Slope Conference in 2000, can be viewed at the Council's web site: www.taiga.net/wmac/.

Since 1994, many priority actions have been started or completed. Information boxes throughout the Plan describe some of those that have been carried out to date. It is the view of the Council that the 2003 Plan updates and carries forward from where its predecessor left off, and is appropriate to addressing wildlife conservation and management issues on the Yukon North Slope as we move forward in the new millennium.

Methodology

The Plan has taken substantial direction and focus from the ideas, comments and concerns raised by a broad range of government and non-government organizations and individuals with an interest in the Yukon North Slope. The proceedings of all the past North Slope conferences have contributed significantly to the preparation and amendment of the Plan. Additionally, direct discussions with various governments, public and private interests and organizations, and review comments on drafts of the Plan have all been given careful consideration. Critical questions of interpretation affecting wildlife conservation and management and environmental protection and development in the Yukon North Slope were circulated by the Wildlife Management Advisory Council (North Slope). The responses by individuals, government agencies and non-government organizations to these questions have proved extremely helpful in determining the scope and orientation of the Plan.

In preparing the Plan, the Council has attempted to base its approach on four basic questions:

- What is required to conserve wildlife and habitat and protect traditional native use on the Yukon North Slope?
- What policies, programs and legislation are currently in place to assist in meeting these requirements?

- What additional mechanisms and activities are required to meet these requirements?
- What is the present state of knowledge and status of wildlife species on the Yukon North Slope for management purposes?

The Council has taken great care to utilize to the greatest extent possible existing government programs and legislative instruments to meet the conservation requirements it has set out for the Yukon North Slope. The federal and territorial governments have established legislation and programs that address increased public concern and expectations over wildlife conservation and environmental protection. The Yukon Environment Act, the Canadian Environmental Assessment Act, the Wildlife Policy for Canada, the Report of the Beaufort Sea Steering Committee, the Arctic Environmental Protection Strategy, the Canadian Environmental Protection Act and the United Nations Convention on Biodiversity are illustrative of this direction¹. Additionally, northern land claim agreements offer a new legislative and institutional footing for better managing wildlife and habitat. Many of the actions proposed in the Plan attempt to focus and apply existing commitments, obligations and responsibilities of government to the requirements for conservation in the North Slope.

Where actions require new or amended legislation, policies or practices, the Plan has given explicit recognition to those areas of deficiency that fall short of the necessary requirements or that compromise the conservation regime established for the area.

Companion Conservation and Management Plans

The Council also has the responsibility of recommending management plans for Ivvavik National Park and Herschel Island Territorial Park to the appropriate ministers. These plans stand in their own right in establishing management regimes for special areas that preclude development, pursuant to the requirements of the *Inuvialuit Final Agreement*. These park management plans are viewed as companion and complementary to the Plan and supplement the objectives and actions set out here. Their importance cannot be understated. Both are important contributors

¹ See Appendix 2 for an explanation of these initiatives.

to the maintenance of ecosystem health on the North Slope.

Ivvavik National Park, and its management plan, cover approximately one-half of the entire area of the Yukon North Slope. As a consequence, the Park is a very important mechanism for the implementation of the principles and objectives of the IFA and the special conservation regime that applies there. The objectives of the Ivvavik National Park of Canada Management Plan are explicitly derived from the IFA. The protection provided by the Canada National Parks Act to critical areas and resources of the North Slope ecosystem, such as the Porcupine Caribou Herd and archaeological sites, is essential to realizing the special conservation regime provided for by the IFA.

In order to include the shared conservation objectives of Ivvavik National Park, which covers much of the Yukon North Slope, Ivvavik's Ecosystem Conservation Plan has been integrated into this Plan. The purpose of the Ecosystem Conservation Plan is to outline specific goals for the maintenance of park ecological integrity and management of the park's ecosystem. It defines needed resource management actions and presents a documented, prioritized plan to prepare and implement them. By integrating the two plans, priorities will be set for the entire Yukon North Slope for environmental protection, research, monitoring and management. Bringing the two together allows for enhanced interjurisdictional cooperation and streamlining of research and monitoring programs that benefit the entire Yukon North Slope. In addition, the more general Ivvavik National Park of Canada Management Plan has been integrated with this Plan.

The management plan for Herschel Island Territorial Park is intended to perform a similar function and to provide a management regime that is no less stringent than that of the Ivvavik National Park. The IFA provides for the involvement of the Inuvialuit in the operation and management of these parks.

In addition, the Aklavik Inuvialuit Community Conservation Plan is a community-based planning

document that is supplementary to this Plan. It documents the specific conservation interests that the Inuvialuit of Aklavik hold with respect to the Yukon North Slope as well as the area they have traditionally used and occupied in the Northwest Territories. The Aklavik Inuvialuit Community Conservation Plan can be viewed at: www.fjmc.ca/conservation_plns.htm.

The 1990 Regional Land Use Plan for the Mackenzie Delta - Beaufort Sea Region was the result of extensive public and community consultations. Although it has not been adopted by the Minister of DIAND, areas identified in the land use plan and the importance attached to them have been considered in the recommendations of this Plan.

The Yukon government has conducted work through the Yukon Protected Areas Strategy that may contribute to the development of a network of protected areas to safeguard critical wildlife habitats, significant wetlands, known heritage sites and representative portions of the Yukon's 23 ecoregions. Further planning and assessment work is required to identify, evaluate and manage designated areas across the territory, including the Yukon North Slope. The Yukon Historic Resources Act provides a complementary mechanism for identifying and protecting heritage sites.

Implementation and Monitoring

The Plan has provided for its future public review and amendment through the forum of the North Slope Conference. The *Inuvialuit Final Agreement* establishes the requirement for the conference, and the Council views it as an integral part of the conservation regime established for the Yukon North Slope. Past conferences have reaffirmed this view, and participants have recommended that future conferences review the Plan and its implementation.

Unless otherwise identified in the Plan, recommended actions will be assigned priority largely on the basis of discussion at future conferences. Unless otherwise identified, responsibility for implementing them will be discussed and agreed to by the relevant agencies and organizations following these conferences.

The total cost of achieving the goals and objectives stated in the Plan is too great to be borne by any one agency or government alone. The responsibilities for implementation will fall across different agencies and organizations. These responsibilities in turn are limited by serious financial constraints. It must be understood that this Plan is not a commitment by government agencies, aboriginal organizations or non-government organizations who support it to expend funds beyond what they have available or beyond their area of jurisdiction and responsibility. Rather it is a challenge to all of those with an interest in the conservation of wildlife, habitat and traditional native use on the Yukon North Slope to work diligently within their means and to contribute their share towards this end.

GUIDING PRINCIPLES AND MANAGEMENT GOALS

Guiding Principles

The guiding principles that form the basis of the *Inuvialuit Final Agreement*² generally and the Yukon North Slope regime specifically, and thus this Plan, are:

“(a) to preserve Inuvialuit cultural identity and values within a changing northern society;

(b) to enable Inuvialuit to be equal and meaningful participants in the northern and national economy and society; and

(c) to protect and preserve the Arctic wildlife, environment and biological productivity.”

Management Goals

The Plan has been organized into six management goals, each responding to one or more requirements of the *Inuvialuit Final Agreement*. They are:

A. Conservation of Wildlife and Habitat

“14.(1) A basic goal of the Inuvialuit Land Rights Settlement is to protect and preserve the Arctic wildlife, environment and biological productivity through the application of conservation principles and practices.”

B. Protection of North Slope Environment

“12.(2) The Yukon North Slope shall fall under a special conservation regime whose dominant purpose is the conservation of wildlife, habitat and traditional native use.”

C. Enhanced Interjurisdictional Cooperation

“14.(2) In order to achieve effective protection of the ecosystems in the Inuvialuit Settlement Region, there should be an integrated wildlife and land management regime, to be attained through various means, including the coordination of legislative authorities.

14.(39) Canada undertakes to ensure that wildlife management and habitat management produce an integrated result with respect to migratory species within the Yukon Territory, the Northwest Territories and the adjacent offshore. In respect of migratory species that cross international boundaries, such as the Porcupine Caribou Herd, Canada shall endeavour to include the countries concerned in cooperative management agreements and arrangements designed to maintain acceptable wildlife populations in all jurisdictions affected, including safe harvesting levels within each jurisdiction. Canada shall endeavour to have included in any such agreements provisions respecting joint research objectives and related matters respecting the control of access to wildlife populations”

D. Involvement of User Groups in Management Decisions

“14.(4) It is recognized that one of the means of protecting and preserving the Arctic wildlife, environment and biological productivity is to ensure the effective integration of the Inuvialuit into all bodies, functions and decisions pertaining to wildlife management and land management in the Inuvialuit Settlement Region.

14.(5) The relevant knowledge and experience of both the Inuvialuit and the scientific communities should be employed in order to achieve conservation.”

² *Inuvialuit Final Agreement*, section 1.

E. Development Within Environmental Limits

“12.(20) The parties agree that the area east of the Babbage River extending to the jurisdictional boundary between the Yukon Territory and the Northwest Territories, but not including the adjacent nearshore and offshore waters, shall be designated as an area in which controlled development may take place, subject to the provisions of this Agreement and to laws of general application.

13.(1) The objectives of this section [wildlife compensation] are:

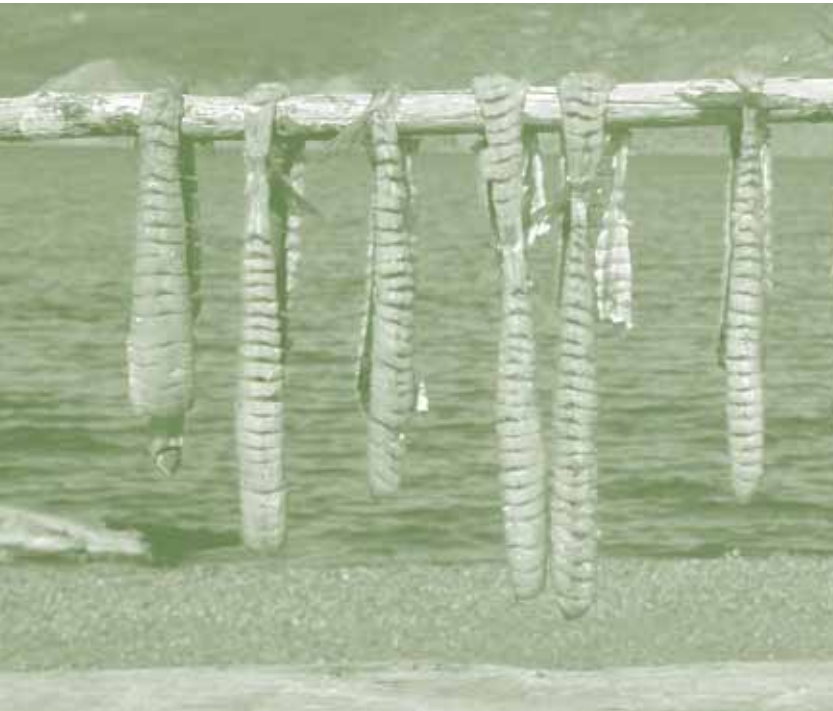
- (a) to prevent damage to wildlife and its habitat and to avoid disruption of Inuvialuit harvesting activities by reason of development; and*
- (b) if damage occurs, to restore wildlife and its habitat as far as is practicable to its original state and to compensate Inuvialuit hunters, trappers and fishermen for the loss of their subsistence or commercial harvesting opportunities.”*

F. Implementation of the Plan

“12.(56) ...the Council shall:

- (b) prepare a wildlife conservation and management plan for the Yukon North Slope for recommendation to the appropriate authorities as a means for achieving and maintaining the principles of conservation set out in subsections (2) and (3).”*

For each of these goals, several objectives have been defined. A series of recommended action items accompanies each objective, providing detail and direction to government agencies, to Inuvialuit organizations and to co-management groups with management responsibilities in the Yukon North Slope.



CONSERVATION OF WILDLIFE AND HABITAT

GOAL A

Ensure that management of wildlife, habitat and harvesting occurs according to conservation principles.

In the *Inuvialuit Final Agreement*
 “12.(2) The Yukon North Slope shall fall under a special conservation regime whose dominant purpose is the conservation of wildlife, habitat and traditional native use.”

In the *Inuvialuit Final Agreement*
 “ ‘conservation’ means the management of the wildlife populations and habitat to ensure the maintenance of the quality, including the long term optimum productivity, of these resources and to ensure the efficient utilization of the available harvest;”

In the *Inuvialuit Final Agreement*
 “14.(1) A basic goal of the Inuvialuit Land Rights Settlement is to protect and preserve the Arctic wildlife, environment and biological productivity through the application of conservation principles and practices.”

Achieving the conservation of wildlife and habitat is one of the primary goals of the *Inuvialuit Final Agreement* for the Yukon North Slope. In a remote Arctic area that is largely undeveloped,

the achievement of this goal would appear to be straightforward and easily attainable. However, achieving an integrated result will be challenging, given the number of agencies with responsibilities for wildlife management on the Yukon North Slope and the fact that some of the wildlife populations for which they are responsible are migratory.

Since many important wildlife species on the Yukon North Slope are migratory, effective population management requires cooperation among jurisdictions. In some instances this will require wildlife management arrangements between jurisdictions that share wildlife populations across international, state and territorial borders. International agreements exist for the Porcupine Caribou Herd and polar bear. Other joint plans have been developed for grizzly bear and North Slope muskox in the Inuvialuit Settlement Region.

The state of knowledge about wildlife populations on the Yukon North Slope, their natural population dynamics, their interrelationships with other wildlife species and their habitat use should be

ACTION IMPLEMENTED:

Database of Documented YNS Traditional Knowledge

WMAC(NS) has compiled a database of sources of documented Yukon North Slope Traditional Knowledge. This annotated bibliography includes reports, videos and transcripts. This database can be found at yukon.taiga.net/northslope.

DEFINITION OF WILDLIFE

The *Inuvialuit Final Agreement* defines wildlife to mean all fauna in a wild state. Therefore fish, including whales and seals, under the jurisdiction of the Department of Fisheries and Oceans, migratory birds, primarily under the jurisdiction of the Department of the Environment, and land mammals under Yukon and Northwest Territories’ jurisdictions are all considered wildlife under the *Inuvialuit Final Agreement*.

ACTION IMPLEMENTED: The Yukon North Slope Long-term Research and Monitoring Plan

The Plan is a simple, useable, web-based document that identifies the needs and priorities for environmentally-related research and monitoring on the Yukon North Slope. It presents current issues and concerns along with proposed actions in order to direct and support the planning and research activities

of researchers and resource managers. It also addresses the information needs of the people who live in the region and rely on its resources. The section on issues and actions is organized into the following areas of focus: coastal and marine ecosystems, land and freshwater ecosystems, traditional knowledge, human

use and impact, cultural resources, contaminants, coastal and marine wildlife, land and freshwater ecosystems wildlife, data management and mapping. The Research Plan can be viewed at www.taiga.net/wmac/researchplan.

enhanced if it is to support reliable and scientifically-sound management in all circumstances. This state of knowledge would benefit significantly from incorporating the traditional ecological knowledge of Inuvialuit and other harvesters using North Slope wildlife populations. WMAC(NS) has prepared the Yukon North Slope Long-term Research and Monitoring Plan to help clarify gaps in research and to identify research issues and priorities. A set of research guidelines, also developed by WMAC(NS), is intended to guide the conduct of researchers on the Yukon North Slope and to facilitate cooperation between researchers and communities.

The IFA commits to managing wildlife populations in association with their habitat. The two are inextricably linked and management of one without the other would not serve the needs of wildlife conservation for the future. The *Inuvialuit Final Agreement* requires that the Yukon North Slope is managed into the future in accordance with the area's dominant conservation objectives. This demands a greatly improved understanding of ecosystem relationships and dynamics, particularly in the event of potential large-scale commercial developments.

Since the 1970s there has been considerable research to establish baseline information for many wildlife populations of the Yukon North

Slope. The Yukon North Slope Wildlife Population Status Reports illustrate this (see www.taiga.net/wmac/consandmanagementplan_volume3/index.html). Today the information database is extensive and comprehensive in many respects. Determining the adequacy of existing information sources for ecosystem management will require further consideration and attention.

Over half of the *Inuvialuit Final Agreement* is dedicated to provisions dealing with the maintenance of wildlife, its habitat and the Inuvialuit's use of it. The sheer volume of provisions is an indication of the importance the Inuvialuit attach to ensuring the continuation of their traditional way of life and wildlife harvesting. This requires that wildlife populations, and the habitats upon which they depend, continue to be healthy. It requires a holistic approach to managing the ecosystem.

Recent legislative initiatives support these conservation objectives. The passage of the federal Species at Risk Act provides new measures for identifying, conserving and protecting rare, threatened and endangered species on the Yukon North Slope. Proposed Yukon legislation will do the same once it is enacted. Protection of Inuvialuit rights to harvest and participate in the management of wildlife are important requirements in the development and implementation of this legislation.

ACTION IMPLEMENTED:

Database of Information Sources

The Arctic Borderlands Ecological Knowledge Co-op has created a web-based database of information sources. This is an annotated listing of sets of ecological information, including reports, map series and databases for the northern Yukon and adjacent areas. It can be found at yukon.taiga.net/borderlands.

ACTION IMPLEMENTED:

NatureServe Yukon

The Yukon Department of Environment and Canadian Wildlife Service have partnered in setting up an information/data library on species and ecological communities of conservation concern found in the Yukon. NatureServe Yukon is one of 80 worldwide Conservation Data Centers that handle information in a common way. The purpose is to track rare species and ecological communities.

Information in this library will be used in conservation planning, and in environmental assessment of the potential impacts of oil, gas and other development projects in the territory. NatureServe Yukon will also include the Yukon Government's Wildlife Key Areas Program that maps places important for moose, caribou, sheep, raptors and other animals that are not necessarily rare.

OBJECTIVE 1

Conserve the Yukon North Slope's wildlife and maintain the natural biodiversity.

A goal of the *Inuvialuit Final Agreement* is:
"1 (c) to protect and preserve the Arctic wildlife, environment and biological productivity."

The maintenance of the Yukon North Slope's natural biodiversity is the region's most important wildlife management objective. This objective should guide the management of wildlife species and habitat on the Yukon North Slope.

So that biodiversity can be used as an effective indicator of the health of the Yukon North Slope ecosystem, the Arctic Borderlands Ecological Knowledge Co-op, an ecosystem monitoring system, has been established for the area.

The work of the Arctic Borderlands Ecological Knowledge Co-op includes compiling the results of monitoring done by Parks Canada, the Yukon Government and community organizations. Parks Canada has established a monitoring program for Ivvavik National Park. Annual reports are produced and information shared through the Arctic

Borderlands Co-op. The Yukon Government does monitoring on Herschel Island. Observations by people out on the land are also gathered and synthesized by the Co-op. Interviews with local experts are conducted annually by community researchers. Ecological monitoring will assist in the management of the Yukon North Slope as an ecosystem, as well as detect threats to it, monitor natural trends in wildlife and improve baseline data for the assessment of future development.

Until such time as ecosystem management is in full effect and supported by databases that incorporate both scientific research and traditional knowledge of the Yukon North Slope, the development and integration of individual species management plans will be an important step. These management plans should be consistent with the conservation of biodiversity for the Yukon North Slope ecosystem and coordinated between the species in order to eliminate any conflicts or incompatibilities between plans and to recognize species' interrelationships.

These plans must be reviewed and updated periodically as knowledge and circumstances change.

The passage of the federal Species at Risk Act and provisions in the Yukon's proposed Species at Risk Act provide new impetus and means for the

BIODIVERSITY

Biodiversity is the web of life. It refers to the variety of life on earth – to the number of plants and animals and organisms that exist on our planet and the variety within these species and the ecosystems they inhabit.

ACTION IMPLEMENTED: The Arctic Borderlands Ecological Knowledge Co-op

The work of the Arctic Borderlands Ecological Knowledge Co-op was begun in 1995. Today, members of the Co-op include representatives of co-management bodies, Inuvialuit and First Nations organizations, Canadian and U.S. federal and territorial government agencies, and academic and research institutions in Canada and the U.S. The Co-op brings together scientific and local/traditional knowledge to aid in ecological monitoring. The

focus of the monitoring is on three main issues: climate change, contaminants and regional development. Key elements of the Yukon North Slope environment, such as snow depth, plant growth, caribou birth rate, river break-up and freeze-up, and the abundance and distribution of coastal birds, are among the indicators used to monitor environmental health. The Co-op's Community-based Monitoring Program was begun

in 1997. Participant communities currently include Aklavik and Fort McPherson, NWT, Old Crow, Yukon and Arctic Village, Alaska.

The Arctic Borderlands Ecological Knowledge Co-op has a website that is a forum where government, Inuvialuit, other native organizations, co-management bodies and the general public can access observations and the results of scientific investigations. The web address is www.taiga.net/coop.

identification, conservation and protection of wildlife species that may be vulnerable to becoming rare, threatened or endangered. The challenge of effectively implementing this legislation on the Yukon North Slope is largely tied to the recognition of and integration with the wildlife management regime and Inuvialuit harvesting rights established under the *Inuvialuit Final Agreement*. Species at Risk legislation, regulations and administrative procedures must give explicit recognition to the participation of the Wildlife Management Advisory Councils, the Fisheries Joint Management Committee and the Inuvialuit Game Council in the development of species listings and recovery plans, especially for harvested wildlife. This will require special efforts in the areas of information-sharing and management planning. Both the federal and territorial legislation provide a means for better integrating wildlife management planning in the Yukon North Slope with that of other jurisdictions, as well as bringing enhanced attention to plant and wildlife species that are not harvested.

SPECIES MANAGEMENT PLANS

Species management plans contributing towards ecosystem management on the Yukon North Slope should include the following elements:

- a definition of the management objective required under the definition of “conservation” in the *Inuvialuit Final Agreement*, specifically the aspect of

- “ quality, including the long-term optimum productivity;”
- a description (including any interjurisdictional aspects) and status of the population;
- habitat requirements;
- effects of and interrelationships with other wildlife species;
- the population model that is being employed;

- the status of the harvest;
- monitoring requirements and techniques;
- current management issues;
- steps identified to find solutions; and
- action items and schedule for implementation.

Recommended Actions

A.1.1. Wildlife management agencies and harvesters should cooperate to develop, refine and implement integrated species management plans beginning with those wildlife populations that are most important from a harvesting perspective or as indicators of ecological health. The plans must be consistent with the principle of biodiversity applicable to the Yukon North Slope ecosystem. Each must be coordinated and consistent with other species’ management plans.

A.1.2. Government, Inuvialuit and other aboriginal organizations and co-management bodies should continue to work cooperatively to coordinate and maintain the Arctic Borderlands Ecological Knowledge Co-op as an ecosystem monitoring system for the Yukon North Slope to understand ecosystem dynamics, integrity and health, and to determine threats to it and to human health.

A.1.3. WMAC(NS), WMAC(NWT) and the Fisheries Joint Management Committee should develop an agreement on the frequency with which population, habitat or vegetation surveys are conducted, for key species.

ACTION IMPLEMENTED: Species Management Plans

Management plans have been prepared for Porcupine caribou (www.yfwmb.yk.ca/comanagement/mgmtplans/index.html), grizzly bear (www.taiga.net/wmac/consandmanagementplan_volume3/grizzly.html#management) and muskox (www.taiga.net/wmac/species/muskox/man-

[agement.html](http://www.taiga.net/wmac/species/muskox/management.html)) populations on the Yukon North Slope and beluga whales (www.fjmc.ca/management_plans.htm) of the Beaufort Sea. They are available from the Wildlife Management Advisory Councils, the Inuvialuit Game Council, and the Joint Secretariat. The DFO, FJMC and

Aklavik HTC are in the early stages of developing a North Slope Integrated Fisheries Management Plan. More information on the Porcupine Caribou Herd can also be found at www.pcmb.yk.ca.

A.1.4. The Yukon North Slope Wildlife Population Status Reports should be reviewed with the Aklavik Hunters and Trappers Committee to reflect community knowledge and input.

A.1.5. WMAC(NS) will develop working relationships with the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and with groups in Environment Canada who will be implementing the federal Species at Risk Act to facilitate the participation of co-management bodies and Hunters and Trappers Committees, and the use of traditional knowledge.

A.1.6. WMAC (NS) will meet the requirements under the federal Species at Risk Act (SARA) in commenting on draft Status reports forwarded from COSEWIC for comment and in providing input to recovery strategies for listed Species at Risk.

A.1.7. WMAC (NS) will participate in the development and implementation of Yukon Species at Risk legislation.

A.1.8. WMAC (NS) will directly participate in the Yukon Species at Risk Advisory Committee upon its establishment.

OBJECTIVE 2

Ensure that harvesters continue to have access to an adequate supply of high-quality food from local wildlife populations.

Under the IFA, Inuvialuit harvesting rights are restricted by conservation, placing a responsibility on wildlife managers to justify such restrictions and to manage wildlife so as to optimize long-term productivity. Across the Yukon North Slope, Inuvialuit seasonally harvest Dolly Varden charr, Arctic cisco, beluga, caribou, moose, furbearers, grizzly bear, polar bear, Dall's sheep and waterfowl, among other species, in addition to berries and roots and other plant parts. Cultural and

nutritional needs of Inuvialuit appear to be sufficiently met by current wildlife populations. Government agencies have gathered baseline data sufficient to manage most wildlife populations, given current wildlife populations and harvesting levels. Additional basic and management research will be required from time to time when harvest or harvest demand approaches or exceeds the conservation limits of wildlife populations. The IFA makes provision for a harvest monitoring study within each Inuvialuit community.

The harvest information that is collected can contribute to species population management models and aid in the monitoring of the quality of species harvested for human consumption. This information may also be critical to the assessment of habitat restoration and wildlife compensation to the Inuvialuit in the event of an environmental impact from industrial development in the Settlement Region. To ensure that this level of understanding is maintained, and thereby to ensure sufficient food for users in the future, the following actions are recommended.

Recommended Actions

A.2.1. Government, in cooperation with the Inuvialuit, should continue monitoring populations of those species that are important to meeting the needs of the Inuvialuit, species that are important as indicators of ecological health, or species and populations that may be particularly susceptible to industrial disturbance.

A.2.2. Inuvialuit organizations, with the assistance of government, should continue to monitor harvest levels across the Yukon North Slope. Harvest monitoring of shared wildlife populations by adjacent user groups must be included in the assessment of Yukon North Slope wildlife population harvest levels.

CONSERVATION AND THE IFA

Under the *Inuvialuit Final Agreement*, harvesting rights are restricted by conservation. The IFA defines conservation as

the management of wildlife populations and habitat to ensure the maintenance of the quality, including the long-term optimum

productivity, of these resources and to ensure the efficient utilization of the available harvest.

A.2.3. Harvest levels should be regularly assessed to determine whether recommended harvest quotas are adequate to meet the projected needs of user groups.

A.2.4. Inuvialuit harvesters should provide information on the quality of harvested wildlife to the Aklavik HTC, the WMACs, the FJMC, the Inuvialuit Game Council and the Arctic Borderlands Ecological Knowledge Co-op.

A.2.5. When circumstances indicate a need, government agencies with user groups should develop reliable and cost-effective population monitoring techniques. These must be reviewed periodically.

A.2.6. When circumstances indicate a need, government agencies with user groups should conduct basic research on selected species to refine population models in order to ensure that they are reliable predictive tools for management and will contribute significantly to the confidence of any environmental assessment associated with commercial development on the Yukon North Slope.

OBJECTIVE 3

Ensure better understanding of ecological relationships between plants, wildlife and the natural environment.

Scientists are only beginning to understand ecological relationships between wild animals and plants and their physical environment. Ecosystems in the Arctic are made up of very delicate interrelationships of plant and animal species. Natural and human environments around the world are being degraded at an increasingly rapid rate, leading to a decline in biodiversity. The emerging science of conservation biology

was developed in response to issues associated with the endangerment of species, habitat loss and fragmentation, and public use or development of lands. Conservation biology involves the scientific study of the phenomena that affect the maintenance, loss, and restoration of biological diversity.

Research into the habitat and energy requirements of Porcupine caribou offers a good example of how similar research for other North Slope species could proceed. Without the necessary understanding of these dynamic ecological relationships, the value and importance of the Yukon North Slope as both a wilderness area and a traditional harvesting area for the Inuvialuit may be diminished. This is of particular concern should development proposals proceed in the absence of this understanding. Careful consideration should be given to these relationships in reviewing any development proposals for the area. Traditional knowledge can make an important contribution to the understanding of relationships within the ecosystem through first-hand observations.

Although there may be no shortage of suggestions for valuable ecological research and monitoring relevant to the Yukon North Slope, the Council believes that one priority is those studies that will contribute to our ability to assess the effects of and manage any potential large-scale development in, or affecting, the Yukon North Slope. The Arctic Borderlands Ecological Knowledge Co-op focuses on development as one of three areas of interest that should be monitored. Another initiative that is using local knowledge and research studies to understand and shape changes in the North is the Sustainability of Arctic Communities project.

ACTION IMPLEMENTED: The Sustainability of Arctic Communities Project

This project focuses on the complex relationships among oil development, climate change, tourism and government spending and their effect on the sustainability of Arctic

communities. The communities of Aklavik, Fort McPherson, Old Crow and Arctic Village are participating in the study. The project was renewed in 2000.

It will now have a marine component and will include the community of Kaktovik. More information on the Sustain Project can be found at www.taiga.net/sustain.

Government agencies, co-management groups and universities are urged to allocate some of their research effort toward research established as relevant and important to the understanding of the North Slope ecosystem. This can best be done by consulting the Yukon North Slope Long-term Research and Monitoring Plan.

Recommended Actions

A.3.1. The Yukon North Slope Long-term Research and Monitoring Plan should be used as a tool to help identify research priorities. The Plan should be reviewed and updated periodically.

A.3.2. Continue to maintain and update the two existing databases (the Arctic Borderlands Ecological Knowledge Co-op Database of Information Sources and the Sources of Documented Yukon North Slope Traditional Knowledge) as comprehensive computerised databases of research material and other relevant information, including scientific data and traditional ecological knowledge, for the Yukon North Slope.

A.3.3. WMAC(NS) will cooperate with Yukon NatureServe to develop a database that provides accurate, permanent, and continually updated information on species at risk or of conservation interest on the Yukon North Slope.

A.3.4. Yukon NatureServe should work with the appropriate wildlife management agencies and organizations to develop a database that reflects their wildlife management interests and needs on the Yukon North Slope.

OBJECTIVE 4

Ensure that important habitats are identified and protected.

In the *Inuvialuit Final Agreement*
"14.(3) It is recognized that in the future it may be desirable to apply special protective measures under laws, from time to time in force, to lands determined to be important from the standpoint of wildlife, research or harvesting. The appropriate ministers shall consult with the Inuvialuit Game Council from time to time on the application of such legislation."

The environmental regime developed in the *Inuvialuit Final Agreement* is based upon a recognized need for special protection across the Yukon North Slope's land, water and sea. This protection is vital to wildlife conservation. As stated in the Wildlife Policy for Canada, wildlife and its habitat are inseparable. Loss or degradation of habitat means the loss of wildlife, so the future of wildlife cannot be ensured without the conservation of habitat. Some areas of the Yukon North Slope, such as the two parks, have received wilderness designation ensuring the greatest level of protection from development.

The Yukon Government has conducted work through the Yukon Protected Areas Strategy that may contribute to the development of a network of protected areas to safeguard critical wildlife habitats, significant wetlands, known heritage sites and representative portions of the Yukon's 23 ecoregions. Further planning and assessment work is required to identify, evaluate and manage designated areas across the territory, including the Yukon North Slope.

There are parts of the Yukon North Slope, most notably the marine area, which have not received wilderness designation and remain vulnerable. The need for legislation to conserve and to protect marine areas has been long recognized. Parks Canada has identified the Beaufort Sea as one of 29 marine regions that should be represented by a marine conservation area and prepared a report identifying a potential national marine park within the Yukon North Slope planning area. The Canada Oceans Act and the National Marine Conservation Strategy speak to the need for coastal zone planning and management. Emphasis is placed on a healthy marine ecosystem as an essential precondition for healthy marine economies and communities. The Strategy recommends management plans be developed for permitting and excluding specific activities in different regions.

The Canada Oceans Act allows for the creation of Marine Protected Areas. The Canada Wildlife Act, amended in July 1994, now provides for the establishment of marine protected areas (Marine Wildlife Areas) out to the 200-nautical-mile limit.

There is work being done towards the definition of a pilot Marine Protected Area in the Mackenzie Estuary, in support of the Beaufort Sea Beluga Management Plan. This work is proceeding in collaboration with industry, Inuvialuit organizations and the Department of Fisheries and Oceans.

Parks Canada is charged with establishing a national system of marine protected areas, the National Marine Conservation Areas Program, to represent the full range of marine ecosystems found in Canada's Atlantic, Arctic and Pacific oceans, and the Great Lakes. This region is not yet represented in the national marine conservation areas system—a system that will be formally established through proposed federal legislation. The Yukon North Slope has been included among three representative marine areas that have been identified as candidates. The selection of the preferred site for consideration as a possible national marine conservation area is the next step.

As knowledge of wildlife and habitat interrelationships increases, new areas needing ongoing protection or special conservation measures, such as seasonal land use exclusions or designated mitigative and remedial actions, may be identified. Some new areas have been suggested for special conservation management through other plans such as the Beluga Management Plan, the Regional Land Use Plan for the Mackenzie Delta – Beaufort Sea Region, the Aklavik Inuvialuit Community Conservation Plan and various public discussions and consultations (Appendix 4). These are identified in action A.4.2.

Too often, attention is focused on habitats that are documented over relatively short periods of time and defined as critical. While these critical habitats do require special protection, it does not hold that all remaining habitat is therefore expendable or available for other uses without any conservation requirements. Habitats considered of lower value often occupy large areas and, in aggregate, support large populations. Arctic wildlife populations appear to require large areas within which certain areas are utilized seasonally, periodically or perhaps even on long-term cycles. Measures to protect these areas must be mindful

of the long regenerative times required for habitats if they are consumed or degraded. As wildlife alter their use of habitats to permit regeneration, this will require flexibility in the designation of special conservation areas and the use of appropriate conservation measures.

Recommended Actions

A.4.1. Together with user groups, government agencies should continue to revise, monitor and gather new baseline information to identify and understand habitat characteristics and their significance for species that are important to meeting the needs of the Inuvialuit, are important as indicators of ecological health, or may be particularly susceptible to industrial disturbance.

A.4.2. Government, Inuvialuit organizations and co-management bodies should work together to identify, evaluate and establish conservation requirements for important land and marine habitat areas in the Yukon North Slope. The Yukon Protected Areas Strategy, the Federal Marine Protected Areas Program, the National Marine Conservation Areas Program and the Ivavik National Park Management Plan are instruments, as appropriate, that can guide the process of the study work. Candidate areas for study include the following:

- a) **Workboat Passage/Shallow Bay** – The Yukon North Slope coastal zone extending from Herschel Island east to the Mackenzie River Delta and Tent Island is of key importance to sea ducks, shorebirds, Snow Geese, and dabbling ducks for moulting, migrations and feeding. It is also an important area for feeding, reproduction and rearing of fish, beluga whales and bowhead whales. **Identified by:** CWS as Key Migratory Bird Terrestrial Habitat (Occasional Paper #71), Regional Land Use Plan for the Mackenzie Delta – Beaufort Sea Region; Aklavik, Inuvik and Tuktoyaktuk Inuvialuit Community Conservation Plans; Beaufort Sea Beluga Management Plan; National Marine Conservation Areas Program.
- b) **Eastern Babbage River Watershed** – This

area is traditionally used by bulls and non-productive female caribou in late spring. This component of the Porcupine Caribou Herd relies upon the early-spring plant growth in this area when their fat reserves are at a minimum. The Babbage River is also important for Dolly Varden charr spawning and overwintering.

Identified by: Regional Land Use Plan for the Mackenzie Delta – Beaufort Sea Region; Aklavik Inuvialuit Community Conservation Plan; Ivvavik National Park Ecosystem Conservation Plan.

c) **North Richardson Mountains** – In late July and early August, caribou seek relief from insects on the ridge tops of the North Richardson Mountains. Cool, humid temperatures that reduce fly activity and an abundance of high quality food make this a critical summer area for the Porcupine Caribou Herd.

Identified by: International Porcupine Caribou Board in their report Sensitive Habitats of the Porcupine Caribou Herd; Regional Land Use Plan for the Mackenzie Delta – Beaufort Sea Region; Gwich'in Land Use Plan.

d) **Black Mountain/Sheep Creek** – This region, near the Yukon/NWT border, is an important area for Dall's sheep lambing and rutting. Several key mineral licks are also found in the area. Peregrine falcons and gyrfalcons nest on the cliffs, and Dolly Varden charr spawn and overwinter in the waters of Fish Creek.

Identified by: Yukon Parks System Implementation Plan for the Porcupine/Peel Landscape; Regional Land Use Plan for the

Mackenzie Delta – Beaufort Sea Region; Aklavik Inuvialuit Community Conservation Plan; Gwich'in Land Use Plan.

e) **Firth River** – The corridor from below Sheep Creek to the upper part of the delta is rich in cultural artifacts and is important ecologically. Along this part of the river are several archaeological sites relating to the Western Arctic Tradition, notably in the Engigstciak area.

The river is important fish habitat, the canyon is important to nesting birds of prey and Dall's sheep use the river side. As it is part of Ivvavik National Park, the Firth River is protected.

However, this sensitive area may require special management measures and designation.

Identified by: Ivvavik National Park Ecosystem Conservation Plan.

A.4.3. The remaining area of the Yukon North Slope should be examined to determine if special conservation and management is required in other areas.

A.4.4. Maps should continue to be developed, and updated as required, at a regional scale to identify and recognize significant habitat areas. Regional maps should transcend jurisdictional interests and boundaries and identify overlapping issues.

A.4.5. Environmentally sensitive areas of the Yukon North Slope should be identified and digitally mapped, and the information be made available to wildlife managers, EISC and EIRB to assist in decision-making.

ACTION IMPLEMENTED: Mapping

WMAC(NS) has completed a Yukon North Slope Land Use and Wildlife Atlas. This atlas was designed to provide co-management bodies, environmental assessment processes, government agencies and industry with a wide range of land use and wildlife maps. The atlas contains over 40 maps, including maps of vegetation and terrain, geopolitical areas,

wildlife habitat, coastal areas, and cultural and traditional land use. Copies of the atlas can be found in the offices of the Aklavik Hunters and Trappers Committee, the Parks Canada office and the Joint Secretariat in Inuvik, Yukon Department of Environment and Yukon Archives in Whitehorse, and the Freshwater Institute in Winnipeg. Digital archives and mapping (both GIS and RS)

capacity is maintained at the Joint Secretariat. The Department of Fisheries and Oceans, Oceans Sector is building a digital database to support Integrated Resource Management Planning/ Marine Protected Areas Planning. Parks Canada (Western Arctic) has committed a staff person to GIS.

A.4.6. Coastal Zone management planning should be initiated for the marine and coastal areas of the North Slope.

OBJECTIVE 5

Ensure that federal and territorial legislation, departmental policies and operating procedures are modified to reflect the Inuvialuit Final Agreement.

The task of modifying government wildlife legislation, regulations, policies, management plans and operating procedures to implement the *Inuvialuit Final Agreement* is a legal consequence of the Western Arctic (Inuvialuit) Claims Settlement Act. As a first step, the Yukon Government and Parks Canada have amended their legislation to enable their conservation managers and officers to function fully within the provisions and entitlements of the IFA. The next step is to draft specific regulations that will govern the conduct of activities on the Yukon North Slope, consistent with the *Inuvialuit Final Agreement*. Meaningful involvement with the Inuvialuit Game Council throughout this process is an obligation of government under the IFA. Similar consultations with the co-management groups should be considered as a means for facilitating this action. Changes to

departmental policies and operating procedures, as with all of the other wildlife management agencies, would benefit from institutionalizing procedures for implementing the *Inuvialuit Final Agreement*.

Recommended Actions

A.5.1. The Yukon Government's Department of Environment and the Inuvialuit Game Council should identify, define, and develop the appropriate regulatory changes pursuant to the Yukon Wildlife Act and Regulations to ensure that the provisions of the *Inuvialuit Final Agreement* are in full effect on the Yukon North Slope.

A.5.2. Parks Canada and the Inuvialuit Game Council should identify, define, and develop the appropriate regulatory changes pursuant to the *Canada National Parks Act and Regulations* that are required to ensure that Ivvavik National Park management and operations are consistent with the provisions of the *Inuvialuit Final Agreement*.

A.5.3. Ensure that the federal *Species at Risk Act* recognizes the significant contribution that traditional ecological knowledge can make to wildlife conservation and the active role that northern wildlife co-management organizations can play in reviewing the status of northern wildlife populations.

ACTION IMPLEMENTED: Yukon Wildlife Act Amendments

In December 1998 the Yukon Government amended the Yukon Wildlife Act to bring it into conformity with the *Inuvialuit Final Agreement*. When the IFA was signed in 1984, it brought into law a number of provisions that conflicted with the Yukon Wildlife Act. These were a source of frustration to Inuvialuit hunters for a number of years and caused difficulties in the implementation of the wildlife management regime established for the Yukon North Slope. The Yukon Government undertook a legal analysis in 1996 and discovered over 100

conflicts between the IFA and the Act. These issues were addressed by amendment of the legislation. A Working Group was established consisting of representatives of the Inuvialuit Game Council, the Yukon Government and WMAC(NS). The Aklavik HTC also participated in the discussions and review. What remains is for the Working Group, in consultation with the Aklavik HTC and others with an interest in wildlife management on the Yukon North Slope, to update the Yukon's Wildlife Regulations.

ACTION IMPLEMENTED: Canada National Parks Act Amendments

The Canada National Parks Act was amended in 2000 to recognize the entitlement of aboriginal people to harvest wildlife in national parks where this right has been established in land claims legislation. Consistent with the IFA, Canada also amended the legislation to include Komakuk within Ivvavik National Park to enable the formal transfer from DIAND to Parks Canada to proceed.

Jim Hawkings



PROTECTION OF THE NORTH SLOPE ENVIRONMENT

GOAL B

Ensure a healthy North Slope environment by maintaining its natural state, including its biological diversity and productivity.

The establishment of Ivvavik National Park and Herschel Island Territorial Park pursuant to the *Inuvialuit Final Agreement* was an important step in providing the highest level of legislative protection available. In addition, a number of federal and territorial laws and programs as well as several international agreements directly and indirectly address environmental protection within the North Slope³. These include the Yukon Government Protected Areas Strategy and the Canadian Environmental Protection Act, which has recently been revised and updated. However, additional instruments and rigorous application are required to continue protecting the Yukon North Slope's environment.

Protecting the health and integrity of the environment of the Yukon North Slope is fundamental to ensuring that wildlife and habitat are conserved and harvesting opportunities sustained. At present, there are few visible intrusions on the natural and pristine characteristics of the area. However, in recent years there has been increasing concern about global impacts that may be affecting ecosystems of the Yukon North Slope. These concerns include the long-range transport of contaminants and global climate change.

Contaminants can come from local sources, such as landfills, fuel drums, spilled oils and sewage lagoons, or be transported over long distances from cities in North America and other continents. Pesticides sprayed on crops or released from industries outside the region fall on the North Slope as rain or snow or are borne north by water currents. They then enter the local food chain, where they can reach high concentrations in some species. Aboriginal people were among the first to draw attention to contaminants when they noted changes in the animals and fish they hunt. They now seek involvement at all levels of decision-making, from local to international, in working towards the elimination of pollution at source and the clean-up of existing contaminants.

There are several kinds of contaminants associated with global industrial activities that enter Arctic ecosystems through long-range transport by air or sea. Organochlorine pesticides and contaminants are 'man-made' compounds that can bioaccumulate or biomagnify in plants and animal tissues. They are also called 'persistent organic pollutants' or POPs. They are toxic at fairly low concentrations.

THE NORTHERN CONTAMINANTS PROGRAM

The Northern Contaminants Program is managed by the Department of Indian Affairs and Northern Development in partnership with other federal departments (Health, Environment, Fisheries and Oceans), three territorial government departments, Aboriginal organizations (Council of Yukon First Nations, Dene Nation, Inuit Tapiriit Kanatami, Inuit Circumpolar Conference and Métis Nation-NWT) and university researchers. The goal of the Northern Contaminants Program is to work towards reducing contaminants in traditionally-harvested foods, and provide information to assist informed

decision-making by individuals and communities on their food use. The program provides funding for contaminants research and distributes information on contaminants to communities. The Northern Contaminants Program has completed Phase I and was renewed for a second phase, from 1998 – 2003. For more information on the Northern Contaminants Program, go to www.inac.gc.ca/ncp.

The results of the Northern Contaminants Program are being used in international negotiations to control contaminants. POPs and Heavy Metals Protocols were

signed in June 1998 by 34 countries, including Canada, under the United Nations Economic Commission for Europe (UN ECE) Convention on Long-range Transboundary Air Pollution (LRTAP). A global legally-binding agreement on POPs has recently been negotiated under the United Nations Environment Programme (UNEP). A treaty called the Stockholm Convention on Persistent Organic Pollutants was signed by 151 governments in 2001. Each government must take the next formal step of ratifying before the Convention comes into force. More information can be found at www.pops.int.

³ See Appendix 2

Metals such as mercury, cadmium, lead and arsenic can also accumulate in northern species. Metals have both natural and 'man-made' sources, and may cause harmful effects at high levels. They can build up in the liver, kidneys and bone of animals. Mercury is a main concern because natural levels of mercury in fish and marine mammals can sometimes approach or exceed the levels considered by Health Canada to be safe.

Mercury levels in the fish and marine mammals of the Beaufort Sea tend to be among the highest observed in the Canadian north.

Radionuclides such as cesium-137 and uranium are also a source of concern. Radionuclides decay over time and release energy that can cause changes in biological tissue. Most of the radionuclides present in wildlife are natural and come from the breakdown of uranium, which is present in rocks, soil and water. The only major 'man-made' nuclide generally found in the north is cesium-137, which reached maximum concentrations in the early 1960s and has declined steadily since then.

Health Canada, a department of the Government of Canada, judges the safety of contaminants and recommends levels of safe consumption. They have determined that most contaminants found at present on the Yukon North Slope are not at high enough concentrations to cause harm to people. According to Health Canada, there is no reason at this time to avoid specific foods on the basis of contaminants levels. However, monitoring must continue for most contaminants

to ensure that they are not increasing to levels where they may impair health, and further research is required.

There are several initiatives working to monitor and understand the effects of contaminants in the north. These include the Northern Contaminants Program, which was started through the Arctic Environmental Strategy, the international Arctic Environmental Protection Strategy, and the Arctic Council.

The Arctic Council's Arctic Monitoring and Assessment Programme (AMAP) is a cooperative program among the eight Arctic countries, Arctic Aboriginal organizations and a number of organizations working to monitor and assess pollution in the circumpolar Arctic. The results of the Northern Contaminants Program projects represent the main Canadian contribution to AMAP, and formed an integral part of the AMAP Assessment Report: Arctic Pollution Issues, published in 1998. A Canadian Arctic Contaminants Assessment Report was released in 1997, summarising the results of research conducted over six years by the Northern Contaminants Program in the Canadian north.

Climate change is another growing concern for people across the North Slope. Global warming trends could have serious effects on Arctic ecosystems. Higher winter snowfall, earlier snowmelt and slightly warmer summer temperatures could have large effects on wildlife, wetlands and migratory birds, among others. There is evidence that global warming has lowered lake levels and thawed permafrost. It has caused

THE NORTHERN CLIMATE EXCHANGE

The Northern Climate Exchange is a Yukon-based centre that serves as an exchange point for climate change study in the circumpolar north. It is working to provide public education and outreach programs on the impacts of, and adaptations to, climate change in the north. It also hopes to create a path for circumpolar indigenous

peoples to contribute to the climate change knowledge base through traditional knowledge and aboriginal expertise. The Northern Climate Exchange will advance knowledge on the impacts of climate change on the north, facilitate adaptation to these potential changes, and increase science and research capacity

among northerners. The Northern Climate Exchange has been funded by the federal government's Climate Change Action Fund. For more information on the Climate Change Action Fund, go to www.climatechange.gc.ca. For more information on the Northern Climate Exchange, go to www.taiga.net/nce.

thinner sea ice and affected the life cycles of marine mammals and fish and the harvesting patterns of those who depend on them. Other impacts include increased erosion and landslides.

Coastal erosion is already occurring at a rapid rate along some parts of the North Slope's coastline. Spits and lagoons are constantly changing and there is concern that some spits and coastal land forms may completely erode into the ocean. Some of the areas at risk are cultural resources of the Inuvialuit, important hunting and fishing areas and summer settlements. The Pauline Cove Settlement Area, for example, is suffering the loss of prehistoric archaeological resources and historic resources are threatened.

Canada has played a key role in international negotiations to reduce the use of ozone-depleting substances and is involved in discussions with respect to global climate change. It is important for Canadian governments to enhance these efforts and for Inuvialuit organizations and communities whose residents depend on the Yukon North Slope to be kept informed about research results and about government efforts at the international level. The involvement of the Inuvialuit and co-management bodies in these international and circumpolar discussions should be recognized and encouraged.

Protecting the natural attributes of the Yukon North Slope requires recognition of the value of the natural environment and continued attention and commitment to environmental protection. The following management objectives and actions are recommended to enhance the management regime and thereby fulfill the objectives established for the Yukon North Slope in the *Inuvialuit Final Agreement*.

OBJECTIVE 1

Ensure that surface water and groundwater on the Yukon North Slope remain in a natural state.

Aquatic environments must remain healthy if biological diversity and wildlife productivity on the Yukon North Slope are to be maintained. The watersheds of the Firth, Babbage and Blow rivers, and the smaller rivers, creeks, lakes and ponds are of obvious significance to the wildlife and people using the area. Groundwater is especially important on the Yukon North Slope. Upwellings of relatively warm groundwater keep areas in some rivers ice-free, allowing fish to overwinter. These groundwater discharges are also important to charr spawning habitat. For people living and travelling on the Yukon North Slope and maintaining camps at places like Shingle Point, drinkable water is also needed.

THE MACKENZIE BASIN IMPACT STUDY

The Mackenzie Basin Impact Study was a six-year project researching the effects that a change in climate might have on people, communities, land, waters and economies. Environment Canada initiated the Mackenzie Basin Impact Study in 1990, as part of its environmental action plan. The Study involved 25 technical studies on various aspects of climate change and the possible impacts on the Mackenzie Basin Region, and a final "workshop" which included six round-table discussions

among scientists, Aboriginal people, industry and government representatives. The results of the Mackenzie Basin Impact Study indicate that the region may well be going through the beginning of significant changes to its climate as a result of global warming.

The Mackenzie Basin Impact Study projected future climate conditions for the area under a doubling of carbon dioxide concentrations in the atmosphere. The findings of the study suggest that there may be some positive results on

the Mackenzie Basin from a change in climate, such as a longer growing season, but most of the study's results indicate potential damage to the region, including more erosion due to thawing permafrost; lower minimum water levels in the region's waterways; an increase in the number of forest fires and landslides; and a reduction in the yields of forests. The results of the Mackenzie Basin Impact Study were published in a Final Report in 1997, available in libraries across Canada.

Drinking water is collected in colder months from snow and from freshwater ice at sea for use by Inuvialuit and for those at the facilities of Herschel Island Territorial Park.

As stated in the Wildlife Policy for Canada, the discharge of pollutants that threaten ecosystems or the accumulation of unacceptable levels of pollutants in wildlife should be prevented. Contaminated waters can lead to reduced harvesting, habitat changes, nutrient loading and toxic contamination throughout the food chain. Symptoms of excessive concentrations of pollutants are not evident at this time on the Yukon North Slope. However, potential sources of pollution include oil and gas drilling, oil spills, well blowouts, sewage and waste disposal and long-range transport of heavy metals, industrial chemicals and pesticides carried to the Yukon North Slope by atmospheric and marine currents, rivers and streams. All of these require preventative measures. With respect to heavy metals, natural and local sources may be just as important as long-range transport. High metal concentrations associated with undeveloped ore bodies (natural seeps) may occur. Without mitigating measures, development may exacerbate these sources.

Although spawning areas of Firth River stocks are adequately protected by restrictive land use designations on both sides of the Alaska-Yukon border, groundwater contamination or depletion could accompany development elsewhere without proper safeguards. As well, winter water

withdrawal from spawning or overwintering areas to support industrial activities can be as much of a threat to fish stocks as potential contamination.

Efforts must be continued to monitor contaminants and appropriate action taken to protect Yukon North Slope waters to ensure that contamination induced by humans does not occur. Parks Canada has initiated a water quality monitoring program within Ivvavik National Park, and one water gauging station is being operated by Parks Canada on the Firth River. There is a need for adequate monitoring of water quality and quantity in other areas of the Yukon North Slope. The following actions specific to the Yukon North Slope should be undertaken to implement a water management regime for the future.

Recommended Action

B.1.1. The federal government should establish and maintain several water-quality and water-quantity monitoring stations on the Yukon North Slope. Water monitoring on the Yukon North Slope should measure groundwater upwellings as well as surface water quality and quantity. Consideration of where to collect water quality samples should include those waters adjacent to where people camp. These actions should be developed in cooperation with the Inuvialuit with a view to training and involving them in the work.

THE NORTHERN RIVER BASIN STUDY

The Northern River Basin Study was established in 1991 by the governments of Canada, Alberta and Northwest Territories to examine how development affects the Peace, Slave and Athabasca river basins in Alberta and the NWT. These waters eventually become part of the Mackenzie River system that drains into the Beaufort Sea.

These basins are subject to considerable development pressure from pulp and paper, oil, agriculture, and municipal growth. At the same time they are home to a large number of residents who depend upon a traditional lifestyle. The study was organized into eight components: contaminants, nutrients, food chain, drinking

water, aquatic uses, hydrology, traditional knowledge and synthesis/modelling. The study was managed by a 25-member board drawn from representatives of many interests in the basins. The study was completed in 1996, and a report was released. For more information and to view the report, go to www.gov.ab.ca/env/water/nrbs.

OBJECTIVE 2

Ensure that country foods, from plants and wildlife, are edible and free of health warnings.

Wildlife and edible plants on the Yukon North Slope must remain safe for human consumption. Through the processes of bioaccumulation and biomagnification, low levels of contaminants in water and air can result in high, even dangerous, levels in plants, fish, other wildlife and the people who eat them. Careful monitoring of contaminant levels in wildlife and research into human health impacts of specific contaminants, as well as of mixtures of contaminants, are required. Inuvialuit and other communities must be kept informed as scientific data is gathered and assessed.

A regional contaminants coordinator was hired by the Inuvialuit Regional Corporation from 1999 to 2003 to work on contaminants issues. The coordinator's role was to improve communication between communities and researchers. Meetings were held in communities to share new information on contaminants and to hear community concerns.

Community surveys were completed under the Arctic Environmental Strategy to determine health risks associated with exposure to contaminants by eating country foods. The Northern Contaminants Program has taken over from the Arctic Environmental Strategy, and is working to reduce and, wherever possible, eliminate contaminants in traditionally harvested foods. This federal program provides funding for contaminants research, while providing information that assists informed decision-making by individuals and communities in their food use. Work on contaminants issues is also being done by territorial contaminants committees, regional health boards, and others.

Recommended Actions

B.2.1. Through the Northern Contaminants Program, federal and territorial agencies should continue to work cooperatively with the Inuvialuit to continue to develop a formal testing program to measure trace organic contaminants, heavy metals, radioactive elements and other toxic substances in human and wildlife populations and plants in the Yukon North Slope area and to conduct tests regularly. Information from this program should be distributed to affected communities as it becomes available.

B.2.2. Maintain an Inuvialuit Settlement Region contaminants coordinator position to work on contaminants-related issues.

B.2.3. Federal and territorial agencies should work cooperatively to identify contaminant sources and how they affect wildlife on the Yukon North Slope.

B.2.4. Government, Inuvialuit and co-management bodies should work cooperatively to educate Yukon North Slope community residents on the effects local pollution may have on wildlife and habitat.

B.2.5. Efforts should continue to eliminate contaminants being carried to the Canadian Arctic through the negotiation of international control agreements and the implementation of existing agreements such as the Arctic Environmental Protection Strategy (Finnish Initiative). Support the Canadian Government's lobbying efforts in relation to regulation or stopping of long-range contaminants by gathering information and fully utilizing the Arctic Council and its working groups.

ACTION IMPLEMENTED: Contaminants Studies

The Arctic Borderlands Ecological Knowledge Co-op has completed a report on the Status of Contaminants in the Arctic Borderlands, which was presented at the Co-op's Fifth	Annual Gathering in February 2000. It can be viewed at: www.taiga.net/coop/synth/contaminants .	comprehensive review titled 'Status of Contaminants in Fish and Marine Mammals in the ISR' (May 2000). This report can be viewed at www.fjmc.ca/publications/contaminants.htm .
	The Fisheries Joint Management Committee commissioned a	

OBJECTIVE 3

Eliminate non-biodegradable wastes from the Yukon North Slope.

Not all non-biodegradable wastes are necessarily contaminants, although they may be unsightly and pose hazards to wildlife. Persistent materials such as plastics and metal drums occur in some places on the Yukon North Slope. Some of these wastes are remnants of early development activities; others have been deposited recently. Drift waste, originating from a variety of places across the north and beyond, frequently washes up on the shore. Plastics are regularly used by travellers and are often haphazardly discarded. In some areas, even when contamination is not a concern, non-biodegradable wastes should be removed to enhance the visual integrity of the Yukon North Slope as wilderness. Of particular note are the huge offshore drilling caissons at Pauline Cove, which severely intrude on the wilderness and historic character of Herschel Island Territorial Park, and carry the potential threat of shifting location and deterioration.

Special efforts should continue to clean up abandoned DEW Line sites along the coast.

Other types of solid waste, such as fuel drums that wash up on the beach and garbage left behind in old camps, are also present. Parks Canada has removed the majority of solid waste from coastal and other areas of Ivvavik National Park, and maintains a database of locations of solid waste that require removal. In some cases, inert large waste may need to be disposed of on site. The Aklavik Hunters and Trappers Committee has initiated a clean-up of Shingle Point.

The need for cleanup and abandonment programs, more rigid enforcement and the development of local management strategies has been recognized in the Yukon Conservation Strategy, and the *Yukon Environment Act*. The clean-up of hazardous waste sites, abandoned DEW Line sites and non-hazardous wastes near communities has begun. The following actions are proposed for the Yukon North Slope to supplement initiatives under existing strategies.

ACTION IMPLEMENTED: DEW Line site clean-up

The clean-up of the DEW Line site at Komakuk Beach began in 1999 and was completed in 2001. Shingle Point DEW Line station clean-up began in 2000. The majority of the clean-up at Shingle Point was completed in 2001. A contract is currently in place for 2002 to repair the USAF landfill and repack "sea-can" containers with PCB-laden paint materials. Baseline monitoring has been completed by the Department of National Defence for both sites and the process for the development of long-term site monitoring programs is underway. The Stokes Point DEW Line station was cleaned up initially in the 1960s and then again in the early 1990s when the North Warning System site was constructed. Prompted by community concerns raised

about the quality of the clean-up, a preliminary contaminated site investigation of the Stokes Point site was initiated by Parks Canada in 2000, with follow-up work conducted in 2001. Results of testing indicated that contamination remains at the site. Discussions will be initiated by Parks Canada with the Departments of National Defence and Indian & Northern Affairs about the need for detailed waste assessment at the site and the development of a clean-up plan with a post clean-up monitoring component.

Landfills also remain at both Komakuk and Stokes sites. The Komakuk landfills were constructed using modern techniques and technology and are part of an ongoing DEW Line

monitoring system. A large hydrocarbon spill occurred during the Komakuk clean-up. Some of the hydrocarbons were removed from the substrate; however, much of it remains trapped at depth in the peat layer of soil. The Komakuk DEW Line Committee, which included a Parks Canada representative, concluded that the best approach for dealing with this spill was to leave it in situ. In 2003, the Department of National Defence is expected to open the bid process for the development of a hydrocarbon monitoring program for this spill area. The origin of the Stokes Point landfill is not clear and it is currently not part of the formal Department of National Defence landfill monitoring program.

Recommended Actions

B.3.1. The clean-up of all non-biodegradable waste sites on the Yukon North Slope identified as hazardous or of significant negative impact to wildlife, harvesters and the Yukon North Slope environment should continue. Initiatives should be undertaken to identify and stabilize sites of historic significance containing non-biodegradable materials to ensure that environmental degradation does not occur due to the persistence of potentially hazardous materials.

B.3.2. Review as appropriate the adequacy and effectiveness of existing standards for the removal of non-biodegradable materials and waste management controls on the Yukon North Slope.

B.3.3. Government, Inuvialuit organizations, co-management bodies and community organizations, including the Aklavik HTC, should cooperatively develop a program to educate community residents and visitors about waste management standards and appropriate disposal practices.

STATE OF THE ENVIRONMENT REPORTING

Information related to the Yukon State of the Environment Report can be viewed at www.environmentyukon.gov.yk.ca/epa/soe.shtml. A northern Yukon web report prepared for the Canadian Environmental Monitoring and Assessment Network can also be found at [this website](#).

Parks Canada's State of the Parks report can be viewed on the Parks Canada website at www.parkscanada.gc.ca.

OBJECTIVE 4

Inform the Canadian public of the need for a healthy North Slope environment.

Maintenance of a healthy Yukon North Slope environment requires a broad base of support. This support can be best garnered through public awareness and understanding of the importance and vulnerability of this region, as well as an appreciation of its value as a wilderness area. Several government strategies, including the Yukon Conservation Strategy and the *Yukon Environment Act*, recognize these factors, stress the need for increased public awareness, and promise continued and enhanced involvement in wildlife and habitat conservation. Pursuant to the *Yukon Environment Act*, status reports on the environment are required. A Yukon State of the Environment Report was updated in 1999. The next comprehensive report will be published in 2003. The following actions build upon these commitments.

Recommended Actions

B.4.1. Education and communication packages on the significance and status of the Yukon North Slope environment, its importance as a wilderness area and to the Inuvialuit, and the need for continued environmental protection should continue to be developed and targeted appropriately for user communities, schools and southern audiences.

ACTION IMPLEMENTED: Educational Materials

WMAC(NS) produces educational materials on an ongoing basis. These include the Council's community newsletter 'Wildlife Watch' which provides information on Yukon North Slope research as well as on the Council's activities. Fact sheets

have been produced to provide information on specific topics. A poster of the Yukon North Slope, which includes a satellite image of the entire region, was developed to educate school children and the general public. The Council's Term Report, produced

every two years, provides a comprehensive summary of activities in which its members have been involved. Many of the Council's publications and educational materials can be viewed at www.taiga.net/wmac/publications.html.

B.4.2. The Arctic Borderlands Ecological Knowledge Co-op, Parks Canada's State of the Parks Report, Parks Canada's Ecological Monitoring Report and the Yukon's State of the Environment reports should continue to report on the status of wildlife, habitat and the North Slope environment.

OBJECTIVE 5

Monitor the significance and effects of climate change on the Yukon North Slope.

Northern areas such as the Yukon North Slope may be dramatically affected by global climate changes. There are many impacts that a warmer climate could have on Yukon coastal, marine and land ecosystems. Monitoring of the climate along the Yukon North Slope, using science and local knowledge, may help determine if and how the climate is changing, and what the effects are on local ecosystems. Parks Canada has two weather stations in Ivvavik National Park. The data gathered here is summarized in Parks Canada's ecological monitoring reports and on the website www.taiga.net. Information gathered on the Yukon North Slope should be linked to global climate change monitoring.

Recommended Actions

B.5.1. Review and update the process for monitoring and reporting climate change to communities and decision-makers.

B.5.2. Review the indicators used by the Arctic Borderlands Ecological Knowledge Co-op and other initiatives to monitor climate change.

B.5.3. Review climate change initiatives covered under the Yukon North Slope Long-term Research and Monitoring Plan.

B.5.4. Global climate change should be taken into account when developing new wildlife and species management plans.

B.5.5. Future Yukon North Slope conferences should address issues of climate change as they affect the Yukon North Slope.



ENHANCED INTERJURISDICTIONAL COOPERATION

GOAL C

Ensure integrated and coordinated management of North Slope wildlife and habitat through interjurisdictional and international cooperation.

A variety of terrestrial, aquatic and marine habitats form the North Slope. From within these areas, numerous wildlife species migrate to and from Alaska, Yukon, the Northwest Territories and other jurisdictions. Political boundaries often serve to fragment management of wildlife. There is growing recognition, however, that these boundaries should not result in disparate or competing management strategies.

In the Inuvialuit Final Agreement
 "14.(38) Canada undertakes to endeavour to obtain changes to other international conventions and arrangements and to explore other alternatives in order to achieve greater flexibility in the use of wildlife resources by the Inuvialuit. Canada undertakes to consult the Inuvialuit Game Council prior to any new international agreements that might affect the harvesting of wildlife in the Inuvialuit Settlement Region.

14.(39) Canada undertakes to ensure that wildlife management and habitat management produce an integrated result with respect to migratory species within the Yukon Territory, the Northwest Territories and the adjacent offshore. In respect of migratory species that cross international boundaries, such as the Porcupine Caribou Herd, Canada shall endeavour to include the countries concerned in cooperative management agreements and arrangements designed to maintain acceptable wildlife populations in all jurisdictions affected, including safe harvesting levels within each jurisdiction. Canada shall endeavour to have included in any such agreements provisions respecting joint research objectives and related matters respecting the control of access to wildlife populations.

THE ARCTIC COUNCIL

Canada was one of eight Arctic nations to sign the Arctic Environmental Protection Strategy (AEPS) in Finland in 1991, a first step toward reducing contamination of the Arctic. In 1997, the working groups under AEPS were incorporated into the Arctic Council. The Arctic Council was established in 1996 in Ottawa, Canada. The Council is a high-level inter-governmental forum, providing a mechanism to address the common concerns and challenges faced by the Arctic governments and the people of the Arctic. The members of the Council are Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden, and the United States of America. The Russian Indigenous Peoples of the North (RAIPON), the Inuit

Circumpolar Conference, the Saami Council, the Gwich'in International Council, the Arctic Athabaskan Council, and the Aleut International Association are permanent participants in the Council. (See www.arcticpeoples.org) There is provision for non-Arctic states, inter-governmental and inter-parliamentary organizations and non-governmental organizations to become involved as observers. The main activities of the Council focus on the protection of the Arctic environment and sustainable development as a means of improving the economic, social and cultural well-being of the north.

Former working groups of the AEPS that now operate under the Arctic Council include the Arctic Monitoring and Assessment Program (AMAP), which monitors

levels and assesses effects of anthropogenic pollutants on the Arctic environment; Conservation of Arctic Flora and Fauna (CAFF), which facilitates actions to conserve Arctic biodiversity; Emergency Prevention, Preparedness and Response (EPPR), which provides a framework for future cooperation in responding to the threat of Arctic environmental emergencies; Protection of the Arctic Marine Environment (PAME), which takes preventive and other measures regarding marine pollution in the Arctic; and the Sustainable Development Program (SDP), which works to protect and enhance the economies, culture and health of the inhabitants of the Arctic. For more information go to: www.arctic-council.org.

14.(40) The principles of caribou herd management, as generally expressed in Inuvialuit Nunangat, are accepted and in furtherance of those principles Canada shall endeavour to enter into agreements with all jurisdictions where lands support the herds and the caribou are harvested for subsistence. Canada shall endeavour to involve the native people who traditionally harvest caribou for subsistence in the formulation of such agreements and in the management of the caribou.”

“14.(41) Canada shall, in cooperation with other jurisdictions, implement the Porcupine Caribou Management Agreement set out in Annex L.”

A number of international agreements have been signed that further the integration of wildlife management on the North Slope. Some of these agreements focus on conservation of a single species or a group of related species. They include the Migratory Birds Convention, the International Agreement on the Conservation of Polar Bears, the Agreement between the Government of Canada and the Government of the United States of America on the Conservation of the Porcupine Caribou Herd, the North American Waterfowl Management Plan, and the Circumpolar Agreement on the Conservation of Arctic Flora and Fauna of the Arctic Environmental Protection Strategy, now under the Arctic Council. Other agreements, such as the United Nations Convention on Environmental Impact Assessment in a Transboundary Context, focus on establishing consistent environmental management and protection goals in the transboundary context. The United Nations Convention on Biodiversity promotes international cooperation in the conservation of biodiversity, especially where the actions of one state affect biodiversity in another.

The Yukon North Slope is increasingly being seen as part of the circumpolar world. Connections between Arctic countries are being made in recognition of the unique Arctic ecosystem and wildlife shared by the circumpolar countries and to accomplish improved management of migratory wildlife and their habitat on an ecosystem basis, through mutual cooperation. Among other issues, climate change, ocean and coastal management and contaminants are increasingly being looked at on a circumpolar basis.

In addition to government initiatives, Inuvialuit and Alaskan Inupiat organizations have concluded or are concluding cooperative management agreements for important migratory species, such as the Polar Bear Management Agreement for the Southern Beaufort Sea and the Inuvialuit-Inupiat Beaufort Sea Beluga Whale Agreement.

Cooperative management agreements and strategies, similar to those mentioned above, should continue to be developed between Canadian and American governments and other countries and user groups to ensure that wildlife management strategies lead to conservation of species and protection of habitat throughout the range of shared species.

The Yukon North Slope Long-term Research and Monitoring Plan encourages international cooperation in research related to species that move across borders. The Arctic Borderlands Ecological Knowledge Co-op has expanded into Alaskan communities. These initiatives work towards the goal of overall conservation of the ecosystem. Within this context, there is value in developing a broad Coastal Zone management agreement, which should enhance the species-specific and issue-specific agreements by integrating them into an ecosystem management arrangement.

THE NORTHERN FORUM

The Northern Forum is a non-profit organization composed of regional governments in ten northern countries: Canada, Norway, China, Finland, Japan, Korea, Mongolia,

United States, Russia and Sweden. The purpose of the forum is to bring together regional leaders from throughout the north to address common economic,

environmental and political issues. The Yukon is a member of the Northern Forum. For more information, go to www.northernforum.org.

OBJECTIVE 1

Ensure that populations of North Slope wildlife shared by two or more jurisdictions are managed cooperatively and in concert with traditional Inuvialuit harvesting practices.

Interjurisdictional agreements and arrangements relating to single species have proven to be useful tools for wildlife management on the North Slope. The international agreements relating to polar bear, migratory birds and caribou have had some success in providing cooperative research, controls over harvesting and protection of habitats. Other species that migrate or range widely among North Slope jurisdictions would benefit from similar interjurisdictional agreements and arrangements. Priority should be given to those species, such as bowhead and beluga whales, Dolly Varden charr, grizzly bear, Dall's sheep and muskoxen, that are of particular importance to Inuvialuit and other aboriginal peoples.

Recommended Actions

C.1.1. Where necessary, new interjurisdictional management arrangements between government agencies and aboriginal organizations should be established to address research, harvest allocations, barter and trade, and habitat protection for all important transboundary species. Attention should be given to establishing a management agreement between Inuvialuit and Inupiat for North Slope muskoxen. Although snow geese are covered under the Migratory Birds Convention Act (1917), a species-specific management plan between Alaska, NWT and Yukon should be developed to cover this important interjurisdictional species.

C.1.2. In consultation with the Inuvialuit, the Wildlife Management Advisory Council (NWT) should develop and recommend regulations to manage spring hunting of migratory game birds by Inuvialuit. These regulations should be founded on the principles of migratory bird management in the Inuvialuit Settlement Region previously adopted (1990) and upon discussions between the Inuvialuit Game Council, WMAC(NWT), WMAC(NS) and Yukon Fish and Wildlife Management Board.

C.1.3. The federal and territorial governments should ensure that all existing and future international wildlife management agreements are consistent with the harvesting rights of the Inuvialuit.

C.1.4. The Government of Canada, in cooperation with the governments of the Yukon and the Northwest Territories and IFA co-management organizations, should initiate the development of cooperative management arrangements with the Government of the United States of America, the State of Alaska and other appropriate local management organizations for the purpose of protecting marine and coastal environments and wildlife shared by these North Slope jurisdictions.

C.1.5. Federal agencies in Canada and the United States should pursue cooperative arrangements for the management of wildlife and habitat of protected lands in the Arctic National Wildlife Refuge, Ivvavik National Park, Vuntut National Park and adjacent areas.

INTERJURISDICTIONAL MANAGEMENT OF SPECIES

Agreements have been signed for the international management of polar bears of the Western Arctic, Porcupine caribou and beluga whales of the Beaufort Sea.

MIGRATORY BIRDS CONVENTION

Canada and the U.S. have reached agreement on an amendment to the Migratory Birds Convention. This amendment recognizes the traditional practice and fulfills the obligation of Canada in the IFA to legalize the harvesting by the Inuvialuit of migratory game birds

during the spring migration, subject to conservation. The two countries signed the protocol on December 14, 1995. This amendment has been ratified by the U.S. Congress and Canada has amended its own Migratory Birds Convention Act.

OBJECTIVE 2

Ensure that Canadian Yukon North Slope users are able to participate in decisions affecting the North Slope.

Development issues in other jurisdictions may affect ecosystems on the Yukon North Slope. Potential future development of the Alaskan Arctic National Wildlife Refuge for oil and gas may significantly affect populations of caribou, polar bear, migratory birds, fish, marine mammals and other species that migrate from northeastern Alaska to the northern Yukon and the northwestern Northwest Territories. The Canadian and Yukon governments, the Porcupine Caribou Management Board, the Inuvialuit Game Council and WMAC(NS) have supported proposals to the United States Congress for the protection of calving grounds critical to the Porcupine Caribou Herd in the Arctic National Wildlife Refuge. Canada also signed the International Porcupine Caribou Agreement with the United States in an attempt to permit joint action to conserve the herd.

There is a potential threat of transboundary environmental damage from developments either on land or offshore. To date, interjurisdictional cooperation to ensure transboundary users are involved in decision-making or to ensure they are compensated for transboundary damage has been limited. Canada and the U.S. have signed the United Nations Convention on Environmental Impact Assessment in a Transboundary Context, but the U.S. has not ratified it. Work has also been undertaken between Canada, Mexico and the United States to develop a trilateral agreement on transboundary environmental impact assessment. However, negotiations concerning the trilateral agreement have not been finalized and the timing of the conclusion of negotiations remains uncertain. The following actions are recommended to address these issues.

Recommended Actions

C.2.1. In cooperation with the Inuvialuit, federal and territorial governments in Canada should negotiate an agreement with the United States to

ensure transboundary participation in the public processes that form part of each country's decision-making on North Slope matters. These parties should additionally develop legislation to implement the United Nations Convention on Environmental Impact Assessment in a Transboundary Context on the North Slope. The Convention calls for notification of nations likely to be affected by the transboundary impact of a proposed activity and ensures the opportunity for public participation in environmental assessment processes in the area likely to be affected equivalent to public participation in the nation where the activity is to take place.

C.2.2. In cooperation with the Inuvialuit, federal and territorial governments in Canada should endeavour to negotiate a reciprocal agreement with the United States that would provide Canadian users of the North Slope region with rights to compensation for loss of subsistence and commercial wildlife-harvesting opportunities caused by industrial activity or accident in the United States.

OBJECTIVE 3

Promote prevention of industrial accidents occurring in other North Slope jurisdictions and ensure coordination of responses to industrial accidents, such as oil spills.

The ice-filled waters of the Beaufort Sea pose special challenges to those involved in offshore development. Since 1974, there has been an agreement between Canada and the United States on a joint Marine Contingency Plan for spills of oil and other noxious substances. In 1977, an annex was added to deal with the Beaufort Sea specifically. The Canada/U.S. Joint Marine Pollution Contingency Plan was recently revised. A section of the Plan deals with the Beaufort Sea. The Canadian Coast Guard is the Canadian lead on this issue. Among other things, the agreement calls for consultation on projects or activities that could create a significant risk of pollution; information exchange; and cooperation in identifying and monitoring vessel-routing areas outside territorial waters. Building

upon this first step, the contingency-planning regime and compensation/liability measures should be improved. Implementation of the recommendations in the 1991 report of the Beaufort Sea Steering Committee will be extremely helpful in addressing these matters in the Canadian Beaufort. In addition, the following action is also recommended to achieve this objective:

Recommended Action

C.3.1. Canada and the United States, in cooperation with state and territorial governments, the Inuvialuit and the Inupiat, should work toward the development of formal transboundary agreements addressing cooperation in contingency planning and countermeasure operations in relation to Beaufort Sea oil spills. These agreements should also address liability for damage caused by blowouts and spills. The Canadian Coast Guard should continue to monitor the effectiveness of existing contingency planning.

Catherine Kennedy



INVOLVEMENT OF USER GROUPS IN MANAGEMENT DECISIONS

GOAL D

Ensure participation of all North Slope user groups in management decisions

In the *Inuvialuit Final Agreement*
"14.(4) It is recognized that one of the means of protecting and preserving the Arctic wildlife, environment and biological productivity is to ensure the effective integration of the Inuvialuit into all bodies, functions and decisions pertaining to wildlife management and land management in the Inuvialuit Settlement Region."

Although the Yukon North Slope appears to be a vast wilderness without any permanent settlements, it is not uninhabited. The area is a seasonally important hunting area for the Inuvialuit and other Yukon hunters. It is also an area that is relied upon by several migratory species of wildlife that are critical food sources for the Inuvialuit as well as for the Gwich'in of Old Crow, Inuvik, Fort McPherson and Dawson. All of these people depend upon the Yukon North Slope directly or indirectly. To a lesser degree, other people, including hikers, boaters, wilderness travelers, tourists and industry workers also use or may use this area at various times of the year.

The *Inuvialuit Final Agreement* established new rights for the Inuvialuit, redefined the duties of government wildlife management institutions, and created new Inuvialuit and co-management institutions. While the appropriate government ministers retain their authority for final decisions affecting wildlife management and conservation on the Yukon North Slope, the IFA has provided the Inuvialuit with new responsibilities within the unique management system on the Yukon North Slope.

In the *Inuvialuit Final Agreement*
"14.(5) The relevant knowledge and experience of both the Inuvialuit and the scientific communities should be employed in order to achieve conservation."

The involvement of aboriginal users in management on the Yukon North Slope is a partnership that places an equal responsibility on the Inuvialuit and government to use their experience, knowledge and efforts to prudently manage the natural resources of the Yukon North Slope. In the case of certain wildlife populations,

this may also require discussions and decision-making with recently formed management boards of overlapping claims, including the Gwich'in Renewable Resources Board, North Yukon Renewable Resources Council, the Yukon Fish and Wildlife Management Board and the Alaskan Department of Wildlife Management for the North Slope Borough.

OBJECTIVE 1

Involve Inuvialuit and other user groups in the review and implementation of wildlife research proposals to be directed toward either the Yukon North Slope or wildlife that seasonally use the region.

Local knowledge, acquired on a day-to-day basis by the people who live in and actively use the Yukon North Slope region, as well as information from oral histories, can increase the understanding of wildlife population biology and ecology. Given the Inuvialuit's knowledge and use of the area, as well as their important role in managing the region, they should be involved in the design, development and implementation of wildlife research projects affecting the Yukon North Slope. Other user groups should be informed and involved in research studies as appropriate. Such cooperation is essential to good decision-making and for the successful completion of research.

Northern communities have much knowledge to offer regarding the land and wildlife in their traditional areas. Communities expect researchers to use this traditional and local knowledge, where possible, in all stages of a research project, from project design to final report.

The use of traditional and local knowledge provides many benefits. It can provide answers to many questions (e.g. best times and places for research), thereby saving time and money while improving the quality and focus of the research. Furthermore, it can provide valuable insights into the functioning of northern ecosystems and the impact of human activity on the environment. Its use also involves local people in research, resulting in greater support and cooperation among researchers and the community.

A Yukon North Slope Research Guide has been developed by WMAC(NS) containing information and references on all that is necessary to know about conducting research on the Yukon North Slope and adjacent areas.

Recommended Actions

D.1.1. The Research Guidelines should be reviewed periodically by the Aklavik Hunters and Trappers Committee, the Inuvialuit Game Council and the research community.

D.1.2. WMAC(NS) should facilitate an annual schedule of meetings for discussions of wildlife management needs and research priorities with the Yukon Government, Government of Canada and Aklavik Hunters and Trappers Committee.

OBJECTIVE 2

Ensure that all management actions for the Yukon North Slope are developed jointly by the appropriate government agencies, management boards, and the Inuvialuit, and include public consultation.

The *Inuvialuit Final Agreement* established co-management groups such as the Fisheries Joint Management Committee and the Wildlife Management Advisory Council (North Slope) for the purpose of providing joint decision-making. For most management decisions, the schedule of regular meetings of these groups is sufficient to provide time to accommodate the requirements of government management agencies. Where time does not permit utilization of regular meetings for joint decisions, other mechanisms must be employed.

Public consultation is an important part of the process of decision-making for the Yukon North Slope. Yukon residents have an interest and stake in participating in decisions that may affect this area. Governments and co-management boards have made commitments to consulting the Yukon public and interest groups about issues that are important to them.

Recommended Actions

D.2.1. Government agencies, the Inuvialuit and other affected aboriginal groups should employ regular meetings of the co-management bodies whenever possible to share information pertaining to research and management arrangements.

D.2.2. An annual meeting of the WMAC(NS), the WMAC(NWT), the Fisheries Joint Management Committee and others, as appropriate, should be held to review issues of common concern and to share information on research activities.

D.2.3. An annual meeting of the appropriate co-management agencies with Alaskan government and Alaskan organizations should be held to discuss selected issues.

D.2.4. For recommendations relating to important issues of wildlife and habitat management, the best efforts to consult with the Aklavik Hunters and Trappers Committee and Inuvialuit Elders in Aklavik will be undertaken.

D.2.5. WMAC(NS) will work with the Yukon public and non-governmental organizations to facilitate public consultation on Yukon North Slope conservation issues.

ACTION IMPLEMENTED: Yukon North Slope Research Guide

<p>The Yukon North Slope Research Guide is a clear, concise resource document for researchers and communities. It provides direction on how to consult with and involve communities in</p>	<p>research, how to access traditional and local knowledge, ethical conduct, and on the appropriate permits, licences and review processes. The Research Guide has been distributed to the</p>	<p>research community, including government agencies, universities, colleges and industry. It can also be viewed at www.taiga.net/wmac/researchplan/researchguide.pdf.</p>
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OBJECTIVE 3

Encourage reporting of activities that may be harmful to wildlife, habitat or the overall environment of the Yukon North Slope.

People who are on the land, such as trappers, hunters, tourists, researchers, explorers, and industry workers may occasionally see actions or activities that may be harmful to the environment. Encouraging community, tourist and industry involvement in managing the area will also enhance awareness and interest in conserving and protecting the region.

Recommended Actions

D.3.1. Local people, researchers, explorers and travelers should be encouraged to report actions and activities occurring on the Yukon North Slope that may harm wildlife or the environment. Educational material informing people how and whom to contact should be made available to both tourists and the communities.

D.3.2. Inuvialuit harvest studies and the annual community-based monitoring of the Arctic Borderlands Ecological Knowledge Co-op should be used for the reporting of unusual environmental events, threats and changes.

OBJECTIVE 4

Encourage the use and application of traditional knowledge in wildlife management on the Yukon North Slope.

Inuvialuit communities have much knowledge to offer regarding the land and wildlife in their traditional areas. Traditional knowledge can provide valuable insights into the functioning of northern ecosystems and the impact of human activity on the environment. Its use also involves local people in research and management.

Both the Yukon North Slope Research Guide and the Long-term Research Plan contain guidelines and suggestions for the further use and application of traditional knowledge in wildlife management on the Yukon North Slope.

Recommended Actions

D.4.1. The Yukon North Slope Research Guide and Long-term Research Plan should be reviewed every three years with respect to their treatment of traditional knowledge.

D.4.2. Expand the use and application of traditional ecological knowledge in research databases and programs.

ACTION IMPLEMENTED:

Database of Documented Yukon North Slope Traditional Knowledge

WMAC(NS) has compiled a database of sources of documented Yukon North Slope

traditional knowledge. This annotated bibliography includes reports, videos and transcripts.

This database can be found at www.yukon.taiga.net/northslope.

Wayne Lynch



DEVELOPMENT WITHIN ENVIRONMENTAL LIMITS

GOAL E

Ensure that development activity does not compromise the environment, wildlife, habitat or native use of the Yukon North Slope.

The IFA established goals and provisions in support of both conservation and development in the Inuvialuit Settlement Region. On the Yukon North Slope, the territorial and national parks and the creation of a controlled development area contribute significantly to both of these ends. They do so within the general conservation framework established for the area.

The *Inuvialuit Final Agreement* establishes for the Yukon North Slope several conservation measures that are designed to promote setting limits on development in order to protect the environment, wildlife, habitat or native use of the area⁴. Ongoing effort to acquire knowledge, understanding and insight is required in order to balance many interests and considerations and to ensure that the long-term and overriding objectives of the IFA for the region are always achieved.

*Under the IFA, development is defined as:
"A) any commercial or industrial undertaking or venture, including support and transportation facilities related to the extraction of non-renewable resources from the Beaufort Sea, other than commercial wildlife harvesting; or
B) any government project, undertaking or construction whether federal, territorial, provincial, municipal, local or by any Crown agency or corporation, except government projects within the limits of Inuvialuit communities not directly affecting wildlife resources outside those limits and except government wildlife enhancement projects."*

Conservation Measures

In order to create the regime to fulfil those objectives for the Yukon North Slope, the *Inuvialuit Final Agreement*:

- provides for the dedication of two parks, Ivvavik National Park and Herschel Island Historic Park, where no commercial or industrial development can take place;
- establishes that elsewhere on the mainland and offshore islands the existing Withdrawal Order, which prevents the granting of commercial or industrial rights to surface or subsurface lands and resources, shall be

maintained until part or parts are required to be removed from such protected status for development purposes according to due process outlined in the *Inuvialuit Final Agreement*; and

- requires that any proposed development in the Withdrawn area on the Yukon North Slope and in the Yukon North Slope's marine offshore be subject to the requirements of the Environmental Impact Screening and Review and the Wildlife Compensation provisions. These provisions put the onus on industry and government to maintain or, if damaged, restore the natural wildlife populations used by the Inuvialuit and to demonstrate that they can do so during the public Environmental Impact Review of the project. These same provisions apply to developments outside the Yukon North Slope that could affect it (for example, those activities that could result in an accidental oilspill that could drift into the Yukon North Slope).

The *Inuvialuit Final Agreement* also contemplates additional measures to ensure that development activity shall respect the conservation regime's dominant purpose: the conservation of wildlife, habitat and traditional native use. Examples are the application of additional protective legislation and the implementation of the Yukon North Slope Wildlife Conservation and Management Plan.

Withdrawal Order

Since the signing of the IFA in 1984, conflicting interpretations have arisen between the parties and within government as to the intent and meaning of the provisions. These will need to be resolved between the parties if there is to be any accommodation of certain development in the Withdrawn area, subject to the requirements of the IFA.

The Withdrawal Order, as long as it remains in force on the Yukon North Slope, is an important conservation measure, comparable to the dedication of two areas as wilderness parks. The significance of the Withdrawal Order is that it removes the respective administrative abilities

⁴ See IFA provisions 12(2) relating to conservation and 12(3) relating to development that are cited in the Introduction.

of the Minister of Indian and Northern Affairs Canada⁵ under the Territorial Lands Act and the Minister responsible under the Yukon Oil and Gas Act⁶ to grant development rights to surface or subsurface lands. Before any commercial development requiring the acquisition of rights to occupy land or extract resources from the area under withdrawal (the mainland east of the Babbage River and the offshore islands other than those west of the Babbage that are part of Ivvavik National Park and Herschel Island Territorial Park) can proceed, a federal Order in Council amending the Withdrawal Order must be made. Such amendments would have to be made before there could be any large-scale activity such as mining, oil and gas exploration or the development of surface infrastructure. After due process required by the *Inuvialuit Final Agreement* and the laws of general application, the Withdrawal Order can be altered only to the extent necessary to permit the approved project. Consideration of development proposals in the Withdrawn area and in the offshore, wherever development is not otherwise prohibited, is to be conducted by review processes and with requirements that are intended to be rigorous⁷.

Requirements of the Environmental Impact Screening and Review Process

The first step in the consideration of all such proposed developments is review by a public environmental impact assessment process set out in section 11 of the *Inuvialuit Final Agreement*. The mandate of the Environmental Impact Screening and Review Process is not limited to consideration of “wildlife, habitat or

harvesting by native people.” It also includes “environment,” “social” and “economic” factors. In addition, it must consider, in the context of the Yukon North Slope regime, developments located outside the Yukon North Slope whose negative effects could reach it (for example, an oil spill in the Beaufort Sea).

The net effect of the *Inuvialuit Final Agreement* provisions is that when governments and the Environmental Impact Screening and Review Process are considering developments that could affect the Yukon North Slope⁸:

1. the dominant purposes of the area, which are the conservation of the environment, wildlife, habitat and native use, should be maintained and remain unaffected by significant negative impacts from development; or
2. as an exception, any development proposal that may have a significant negative impact on the dominant purposes may be permitted only when it has been demonstrated:
 - a) that the larger public purpose requires such development;
 - b) that no reasonable alternatives that would not require compromising the dominant purposes of the Yukon North Slope exist;
 - c) that the value of the larger public purpose outweighs the value of the dominant purposes of the area established by the *Inuvialuit Final Agreement*; and
 - d) that industry and government have a proven capability to “manage” the development project to ensure minimum short-term and long-term impact and, in the event damage occurs, to be able to restore wildlife and habitat.

For governments and the Environmental Impact Screening and Review Process to make the necessary evaluations regarding 1 and 2 above requires a state of knowledge about the Yukon North Slope environment adequate to assess the consequences and risks of any proposed development.

⁵ Following the devolution of land management responsibilities from the federal government to the Yukon government, a parallel arrangement should exist with the responsible Yukon minister and cabinet.

⁶ Since 1998, the legislative authority to manage the exploration and development of its oil and gas resources has been transferred from the federal government to the Yukon government. The Yukon Oil and Gas Act and Regulations provide the Yukon government with the ability to issue subsurface oil and gas rights and regulate oil and gas activity within the Yukon.

⁷ The interpretation of those provisions in the *Inuvialuit Final Agreement* that pertain to the Withdrawal Order and the treatment of the Withdrawal Order as it pertains to development suggested in the Plan are those of the Wildlife Management Advisory Council (North Slope).

⁸ See sections 12(3) and 12(23) of the IFA for the actual text of criteria to be considered by the appropriate review board. (Appendix1)

Development Scenarios

Given the broad and all-inclusive nature of the definition of “development” in the *Inuvialuit Final Agreement*, the management objectives and actions related to establishing environmental limits for development are segregated, for the purposes of the Plan, into two categories:

Small-Scale Small-scale development refers to most of the existing activities associated with the current Yukon North Slope circumstance. These activities include those required for wildlife and park management purposes. All such activities contemplated in this category do not require an amendment to the Withdrawal Order; and

Large-Scale Large-scale development refers to those activities associated with future commercial developments that would involve the granting of surface or subsurface rights and that would require an amendment to the Withdrawal Order if the development were to be located on the mainland or offshore islands (other than Herschel Island and the area within Ivvavik National Park, where there are statutory prohibitions on commercial development).

SMALL-SCALE DEVELOPMENT REQUIREMENTS

Most current activities on the Yukon North Slope that fall within the IFA's definition of “development” are relatively small-scale and will likely be ongoing, predictable and manageable under existing circumstances. These activities are non-industrial and have been confined principally to tourism development.

ACTION IMPLEMENTED: Tourism Guidelines

Tourism Guidelines were developed and transmitted to the EISC by the WMAC(NS). The Yukon government in 1999 established the Wilderness Tourism Act to regulate the activities of commercial tourism operators.

OBJECTIVE 1

Ensure that adequate management policies, guidelines and enforcement mechanisms are in place to assist in the management of current and existing small-scale development.

Some development activities, such as increasing tourism and related air and marine traffic, the storage of offshore drilling equipment and the storage of fuel and supplies required to support management activities, are occurring and will continue in the Yukon North Slope. These initiatives do not require alienation of land or extensive support or infrastructure networks but could create unnecessary environmental damage or adversely affect wildlife harvesters. Special attention is needed. The following actions are intended to support the need for establishing environmental standards and practices for those activities.

Recommended Actions

E.1.1. Tourism guidelines for tourism activities affecting wildlife, habitat and native harvesting on the Yukon North Slope should be reviewed and updated.

E.1.2. Guidelines and standards for the location and storage of equipment, fuel and supplies that must be cached on land in the Yukon North Slope should be reviewed as development activities require.

E.1.3. Guidelines should be tied to legislation that establishes locations and standards for marine storage of offshore drilling equipment and supplies in Herschel Basin, including Pauline Cove and Roland Bay. Currently no permits are required for structures that are not anchored to the sea bed.

E.1.4. Inspection or enforcement agencies should provide annual reporting of permitted land use activities and any reported infractions to

the Aklavik Hunters and Trappers Committee, the Inuvialuit Game Council, the Wildlife Management Advisory Council (North Slope), the Environmental Impact Screening Committee, the Environmental Impact Review Board, Parks Canada and Yukon's Department of Environment.

OBJECTIVE 2

Ensure that adequate management policies, guidelines and enforcement mechanisms are in place to assist in the management of Ivvavik National Park and Herschel Island Territorial Park.

Recommended Actions

E.2.1. The Ivvavik National Park Management Plan and the Herschel Island Territorial Park Management Plan should be reviewed to manage current and anticipated tourist activities on the Yukon North Slope that may affect wildlife, habitat and native harvesting.

E.2.2. In addition to their respective management plans, Parks Canada and the Yukon Parks and Protected Areas Branch should work towards preventing conflicts between visitors and wildlife (especially sensitive wildlife such as nesting falcons and potential safety hazards such as bears) in Ivvavik National Park and Herschel Island Territorial Park respectively.

E.2.3. In addition to their respective management plans, Parks Canada and the Yukon Parks and Protected Areas Branch should take steps to minimize conflicts between visitor activity and the harvesting rights of Inuvialuit hunters if the need arises.

E.2.4. Parks Canada and the Yukon Parks and Protected Areas Branch should work towards preventing illegal, non-compatible and hazardous activities, and their adverse effects on the environment, in Ivvavik National Park and Herschel Island Territorial Park respectively.

E.2.5. Parks Canada and the Yukon Parks and Protected Areas Branch should monitor miscellaneous activities such as scientific research and aircraft activities, including landings and overflights.

E.2.6. Parks Canada and the Yukon Parks and Protected Areas Branch should work to ensure that facilities and visitors do not contribute to the contamination of water, by sewage and other human waste, in Ivvavik National Park and Herschel Island Territorial Park respectively.

E.2.7. Parks Canada should periodically monitor tourist and hunting camps within Ivvavik National Park to maintain high standards of cleanliness.

E.2.8. Parks Canada and the Yukon Government should design a North Slope/Ivvavik National Park/Herschel Island Territorial Park information program on bears and bear safety.

LARGE-SCALE DEVELOPMENT REQUIREMENTS

The possibilities for large-scale development activities on the Yukon North Slope are largely industrial. They are thought to be limited to those associated with the exploration, production and transportation of subsurface resources, and the construction of supporting infrastructure. Of all the subsurface resources in the Yukon North Slope, experience would suggest that development of oil and gas resources is the most likely.

By its very nature, petroleum exploration and development in the Yukon North Slope is more difficult, more expensive and involves longer time frames to plan, approve and carry out a program than has conventionally been the case in southern Canada. The harsh Arctic physical environment poses special challenges to the industry, affecting both operational and environmental safety. The fragile biological systems and their importance to the resident aboriginal people pose further challenges to an industry interested in developing the subsurface resources. Realistically, only a few of the larger companies have the capacity to consider development in the Beaufort Sea area.

The Plan recognizes that the oil and gas industry has gone through profound changes that will significantly affect the considerations of any future interest or activity in the region. The

“industry” that is initiating the next generation of petroleum-related activities will not be the same “industry” that operated here through the 1970s and 1980s. With the exception of local people, not only will the experience of most individuals who have been involved in reviewing, regulating, managing and conducting the operations in the area previously be unavailable as new activity resumes, but the entire social, economic and technical operating climate is significantly different as well.

Drawing upon the experience of the past but also anticipating the conditions of the future, the Plan endeavours to respond to the requirements of newly emerging conditions. If the return of petroleum development is driven by market forces and without government financial subsidies, the future industry will likely be very sensitive to price, costs, timing and risk. Long and unpredictable time delays in the regulatory processes and uncertain environmental standards and limits are significant factors in industry’s analysis of financial risk when projecting rates of return for investment and activity in the Beaufort Sea area. In order for everyone, including industry, to operate in as stable a situation as possible, uncertainty relating to the requirements of environmental standards and limits and regulatory process should be minimized.

The Plan approaches its tasks related to the Yukon North Slope on the basis that the interests of future subsurface resource developers, the Yukon North Slope and the Inuvialuit beneficiaries can best be met by ensuring that the issues necessary to prepare for future development are brought into clear focus and are addressed in a rational and definitive manner.

These issues should be dealt with in an orderly and realistic time frame in order that all of the environmental limits, standards and processes affecting development in the Yukon North Slope are known well in advance of the planning stage of industry. The risk in not doing so and leaving issues unclear and other fundamental matters unresolved is to add significantly to costs to both developers and users of the Yukon North Slope.

The Plan’s contribution to the economic climate of future development, therefore, is to promote stability and certainty by advocating the attainment of critical ecosystem knowledge and the resolution of issues that have a bearing on matters of development and conservation in the Yukon North Slope.

Timing of Development

Until late 1999, industry’s interest in actively exploring or developing Canadian Beaufort Sea oil and gas remained low for more than a decade. Interest in establishing a pipeline corridor across the Yukon North Slope from Alaska to the Mackenzie Delta remained similarly low. Interest in mining activity in the area continues to be low. However, the prospect of large-scale commercial development associated with exploration, development and transportation of hydrocarbon resources is again being actively pursued by industry in the region of the Beaufort Sea and Mackenzie Delta. The ten-year hiatus in large-scale development activities through the 1990s provided an opportunity for the development of conservation plans, wildlife species status reports and plans, an ecological monitoring regime and a long-term research plan. While the area is better prepared for defining the limits on large-scale development today, more can and should be done.

The following objectives and actions should be considered important requirements in enabling large-scale developments to occur. Virtually all of the actions can likely be completed within a reasonable time as part of regular activity of government and co-management agencies.

OBJECTIVE 3

Ensure that the state of knowledge about wildlife species and the dynamics of the North Slope ecosystem is sufficient for the Environmental Impact Screening and Review Process to adequately determine the potential consequences of future large-scale commercial development activities that are on, or that may affect, the Yukon North Slope.

Large-scale commercial developments probably pose the greatest potential impacts on the Yukon North Slope ecosystem and the Inuvialuit's use of it. These developments would most likely be related to non-renewable resource exploration, extraction and transportation (for example, mining, oil and gas drilling, pipelines, all-weather roads and supply bases for offshore activity). Research into and knowledge of Yukon North Slope wildlife has improved greatly over the last 25 years. Relationships within, and requirements of, the Yukon North Slope ecosystem are less well understood, making it more difficult to assess confidently the potential ecological consequences of large-scale commercial developments or to restore wildlife and habitat that might be damaged, in order to ensure that the dominant purposes of the Yukon North Slope are maintained.

In the Inuvialuit Final Agreement

"13.(1) The objectives of this section [Wildlife Compensation] are:

- (a) to prevent damage to wildlife and its habitat and to avoid disruption of Inuvialuit harvesting activities by reason of development; and*
- (b) if damage occurs, to restore wildlife and its habitat as far as is practicable to its original state and to compensate Inuvialuit hunters, trappers and fishermen for the loss of their subsistence or commercial harvesting opportunities."*

As a result of research effort by governments and industry, substantial baseline information has been gathered and some knowledge has been gained of certain environmental requirements for many wildlife species. The extensive baseline research conducted to date has fulfilled its objective of documenting the presence and abundance of important wildlife populations and the significance of their habitat. Community Conservation Plans have contributed to the identification of significant harvesting areas. However, in order to quantitatively assess the effects of any large-scale development on the Yukon North Slope, or to be able to restore wildlife populations that may be damaged, there must be significant

advances in the knowledge and understanding of the dynamic relationships of plants, fish and other wildlife (including those that migrate through the region) and their natural environment in the Yukon North Slope. Similarly, given that development projects occurring beyond the borders of the Yukon North Slope may negatively affect the North Slope environment and wildlife, greater understanding of these environments must also be acquired.

Recognizing the scope and difficulty of advancing the state of knowledge about the Yukon North Slope ecosystem's interactions and dynamics, it is recommended that a continued effort be made, consistent with the Yukon North Slope Long-term Research Plan, to undertake research activities necessary to achieve this vital understanding.

Given the renewed interest in hydrocarbon development in the Beaufort Sea and Mackenzie Delta, the Long-term Research and Monitoring Plan should be reviewed regularly to ensure the undertaking of research activities that will enable the Environmental Impact Screening and Review Process and management agencies to quantitatively assess impacts of large-scale developments, manage developments and restore wildlife and habitat in the event of damage.

While the value of most types of ecological research is acknowledged, the Council believes that a pragmatic, objective-oriented research plan that focuses on the future needs to assess and manage large-scale developments will provide the most cost-effective way to ensure preparedness. This approach to research shares the philosophy expressed in the Beaufort Sea Steering Committee's 1991 report, Volume 5, which addresses similar problems with respect to accidental oil spills in the Beaufort Sea.

Recommended Actions

E.3.1. The Yukon North Slope Long-term Research and Monitoring Plan should be used to guide research on the Yukon North Slope.

E.3.2. The Yukon North Slope Long-term Research and Monitoring Plan should be revised as appropriate to provide a sound basis to quantitatively

assess the consequences of large-scale commercial development, including restoration of damaged wildlife populations, and to manage such developments. It should establish definitive goals and identify where significant levels of new research funding may be appropriate.

E.3.3. Prior to the public environmental review of any proposal to conduct large-scale commercial development of the subsurface, the stakeholders should prepare an emergency response research plan dealing with research requirements, responsibilities and logistics to be employed in the event of an industrial accident that might have significant environmental consequences.

OBJECTIVE 4

Ensure that adequate regulatory mechanisms are in place to manage commercial development activities in the Beaufort Sea in order to protect environment, wildlife, habitat and native use.

The complexity and possible gaps in regulatory mechanisms to deal with vessel traffic, storage of drilling hardware and other marine activity associated with offshore oil development in a way that will ensure adequate protection for the marine and coastal environment and wildlife has been recognized as a problem by regulators and advisory groups since the beginning of Beaufort Sea offshore drilling.

Recommended Actions

E.4.1. Responsible government agencies, together with the Inuvialuit Game Council and other co-management bodies, having considered the relevant findings of the Beaufort Sea Task Force Report, should coordinate a review of the adequacy of the existing regulatory regimes for the coastal and offshore areas and should identify improvements that must be made before there are any development approvals in the Yukon North Slope.

E.4.2. Where regulatory deficiencies exist, they should be corrected prior to any public Environmental Impact Review of development applications.

E.4.3. The application of the Yukon's Development Assessment Process (YESAA) on the Yukon

North Slope and the relationship between it and the Environmental Screening and Review process under the *Inuvialuit Final Agreement* should be clarified in order to avoid duplication and overlap.

OBJECTIVE 5

Ensure that all areas within the Yukon North Slope in need of additional legislative protection are protected prior to development approvals⁹.

A number of conservation measures have been implemented to protect the Yukon North Slope environment, including the two designated parks and the Withdrawal Order that covers the land area east of the Babbage River. The *Inuvialuit Final Agreement* indicates that additional special protection measures can be instituted as needed to protect areas important for wildlife, research or harvesting. Designation of areas for additional protection could occur through existing conservation legislation such as the Canada Wildlife Act, Yukon Wildlife Act, the Yukon Environment Act, the Canada Oceans Act, and the Canada National Parks Act (marine application).

Recommended Actions

E.5.1. Federal and territorial governments, Inuvialuit organizations and co-management bodies should cooperatively assess the need for continued or additional protection of the areas listed below and identify the appropriate mechanisms for each as required. Four areas have been identified initially (see Appendix 4):

- a) Workboat Passage/Shallow Bay;
- b) Babbage Watershed;
- c) North Richardson Mountains;
- d) Sheep Creek/Black Mountain.

In addition, the remaining area of the eastern Yukon North Slope should be studied to identify any other areas that may require special protection.

E.5.2. In the areas identified in the Plan as worthy of special protection, no consideration should be given to amending the Withdrawal Order until the conservation requirements of these areas are met.

⁹This objective is closely linked to Goal A, Objective 4.

OBJECTIVE 6

Ensure that governments and industry are prepared to conduct development activities within environmental limits established for the Yukon North Slope.

Within the Yukon North Slope offshore, few subsurface rights exist. None exists within the area of the Withdrawal Order in the Inuvialuit Settlement Region. The Plan recommends that a number of actions be completed prior to the initiation of commercial development within the Yukon North Slope.

In addition, potential effects on the Yukon North Slope coastline and marine environments from oil spills originating in the Beaufort Sea outside of the Yukon North Slope have been a concern. The Valdez oil-spill disaster in Alaska sparked general concern about industry's and governments' preparedness to handle an accidental oil spill in the Beaufort Sea. Such concerns were reflected in the Environmental Impact Review Board's recommendations regarding the Kulluk Drilling Program in 1990, which led to the Beaufort Sea Steering Committee's report of April 1991. In addition to the issues arising from those examinations of the offshore development problems, others will come to light over time.

Since development activity virtually ceased for more than a decade, the considerable experience of personnel in both industry and government gained through operating in western Arctic environments through the 1970s and 1980s has been lost or may no longer be available at a time of renewed activity. In addition, the state of ecological knowledge and the technical aspects of operating are likely quite different. Public expectations and judgements of today may not necessarily be the same as in the past. Acceptable environmental standards for development operations today will almost certainly need to be reconsidered.

It will be essential, therefore, to update evaluations of the state of preparedness to ensure that there is a valid basis for planning and approvals in place prior to consideration of particular development project applications. Considerable effort will be required to re-establish working

relationships among industry, government agencies, co-management bodies and the Inuvialuit. It will be most valuable if these participants can develop working relationships during the planning stages for development.

The current opportunity to prepare for development on the Yukon North Slope is especially valuable because there are no significant existing subsurface rights holders who could advance project proposals before the preparations for development detailed in the Plan are completed. Therefore, with respect to government tendering any subsurface rights for sale, or issuing any surface or subsurface rights, or providing permits and licences related to development of the subsurface resources, the following actions are recommended.

Recommended Actions

E.6.1. Prior to either:

- a) the public tendering of subsurface rights in the Yukon North Slope offshore, or
- b) the consideration of any development proposals that would require amendment to the Withdrawal Order,

A public generic environmental review should demonstrate that governments and industry are prepared for conducting commercial development relating to the type of right being considered in a manner that would meet acceptable environmental limits.

E.6.2. When industry decides it has a real interest in acquiring certain surface or subsurface rights in the Yukon North Slope (onshore and offshore), and government decides it has a real interest in granting such rights, the Yukon Government and Indian and Northern Affairs Canada should:

- a) coordinate preparation of a comprehensive analysis of preparedness for development relating to the type of right being considered for each of the offshore and onshore areas where the rights issuances are proposed;
- b) submit its comprehensive analysis to the Environmental Impact Review Board for a public generic review of the state of preparedness; and

c) provide the Environmental Impact Review Board with the required information and resources to conduct a generic review and produce its report.

E.6.3. Yukon Government's and Indian and Northern Affairs Canada's analysis and the public review for the Yukon North Slope should include an assessment of the state of preparedness of government and industry, including prevention, contingency and emergency response relating to accidents such as oil spills in the offshore.

E.6.4. The Environmental Impact Review Board should be asked to include in its recommendations generic terms and conditions that will be incorporated into any rights issuance and apply to all subsequent development activities falling within the parameters of those dealt with in the generic review.

E.6.5. The Environmental Impact Review Board should be asked to provide an assessment of the time required to complete necessary preparations for development called for under the Plan and the Long-term Research Plan, such as the protection of habitat, the establishment of adequate regulatory mechanisms for the offshore and the implementation of the necessary research and monitoring programs. Government should ensure that preparations are complete before development activities are permitted to proceed.

E.6.6. Subsequent applications for development projects relating to exploration of the subsurface resources are subject to the Environmental Impact Screening and Review Process. This process should take into account the evidence and findings of the generic review and include within its own review those subjects of the generic review identified as requiring further preparation or attention. In reviewing preparedness for development, the evaluation of emergency responses should include an acceptable Emergency Response Research Plan, which is to be developed by the stakeholders. The Emergency Response Research Plan should ensure that the research is timely, relevant, public and adequate.

E.6.7. Prior to the consideration of any oil and gas production licensing application, a public generic environmental review should demonstrate that governments and industry are prepared for conducting commercial production and transportation of oil and gas resources affecting the Yukon North Slope in a manner that would meet acceptable environmental standards.

E.6.8. Applications for development activity in the Yukon North Slope relating to production of the subsurface resources are subject to the Environmental Impact Screening and Review Process, including those under the Yukon Environmental and Socio-economic Assessment Act, and the Canadian Environmental Assessment Act. The reviewing body should take into account the evidence and findings of the generic reviews and include within its own review those subjects identified by the generic review as requiring further preparation or attention.

OBJECTIVE 7

Ensure that the policies and procedures of the Environmental Impact Screening Committee and the Environmental Impact Review Board are adapted to prepare for the consideration of future large-scale commercial development on, or which may affect, the Yukon North Slope.

Except where absolute limits are established in statutes (such as those for the two parks), the determination of environmental limits for development rests with the actions of government agencies and institutions created under the IFA. The Environmental Impact Screening and Review Process is a critical mechanism created by the *Inuvialuit Final Agreement* to maintain the biological productivity of the Yukon North Slope and to protect the right of native people to harvest wildlife in the area. The Environmental Impact Screening Committee and the Environmental Impact Review Board are given the responsibility to ensure that objective and rigorous examination of development proposals prevents unforeseen significant negative impacts on the Yukon North Slope and the Inuvialuit.

The practice of environmental assessment has evolved and continues to evolve rapidly. The Environmental Impact Screening Committee and the Environmental Impact Review Board have consistently reviewed policies and procedures from time to time, revising them to reflect further advances in related areas and improve the process. For instance, the Environmental Impact Review Board and Canada have worked to harmonize the relationship between the EIRB process and the Canadian Environmental Assessment Act. With the prospect of new Yukon development assessment process legislation, it is timely to review the policies and procedures of the Environmental Impact Screening Committee and Environmental Impact Review Board and the provisions of the proposed DAP legislation to ensure equivalency and harmonization between the two regimes. In addition, the Environmental Impact Screening Committee and the Environmental Impact Review Board should consider means within their mandates to deal with special considerations relating to potential future large-scale commercial developments on the Yukon North Slope and the cumulative effects of these and similar undertakings.

Recommended Actions

E.7.1. The Environmental Impact Screening Committee and the Environmental Impact Review Board should, together, continue to review their existing policies and procedures to ensure that the Environmental Impact Screening and Review Process established under the *Inuvialuit Final Agreement*:

- is at least as comprehensive, public and rigorous as the environmental assessment process to be established pursuant to the Canadian Environmental Assessment Act and, when enacted, the Yukon Development Assessment Process legislation;
- would meet a test of “equivalency” in these acts; and
- would meet the test of “adequacy” under the *Inuvialuit Final Agreement*.

E.7.2. The Inuvialuit Game Council, together with the appropriate co-management bodies, should explore means under the proposed federal and territorial environmental assessment legislation to enhance the Environmental Impact Screening and Review Process for the Yukon North Slope. Suggested matters for examination include the comprehensive study list, the inclusion list, consideration of project need and alternatives, consolidation of projects, use of joint panels and enforceability of approval terms and conditions.

E.7.3. The Environmental Impact Screening Committee and the Environmental Impact Review Board should consider adopting policies and procedures for conducting reviews of all potential project applications involving the granting of any surface or subsurface rights in the Yukon North Slope. The policies and procedures should reflect the special circumstance of the Yukon North Slope as set out in the *Inuvialuit Final Agreement* and in the Plan. Suggested subject matters to be addressed include particular requirements to be met by industry and government in assessments of any development requiring amendment of the Withdrawal Order or disposition of subsurface rights, and criteria and procedures to be used for applying the test of “public convenience and necessity,” including approaches to determining the need for and evaluating alternatives to the proposed development.

E.7.4. To assist the development of such policies and procedures, which would provide a stronger basis for considering the cumulative effects of activities in the Yukon North Slope, and to facilitate efficient consideration of individual development applications, the territorial and federal governments, Environmental Impact Screening Committee and Environmental Impact Review Board should consider the undertaking of generic reviews of major development issues that arise, including — in addition to overall preparedness and those issues set forth in the Plan — generic marine and land impact concerns and appropriate generic terms and conditions that would apply to any subsequently approved developments.

OBJECTIVE 8

Apply special protective measures as required to facilitate an orderly development approval process that will ensure that the required preparedness and conditions for enabling development are met.

The *Inuvialuit Final Agreement* indicates that special protective measures under existing laws can be considered from time to time for areas that are determined to be important for wildlife, research or harvesting.

Until such time as the preparations for development called for in the Plan are completed, thus providing more definitive environmental limits for development on the Yukon North Slope, conservation and the other dominant objectives for the area should not be prejudiced. Assurances should be given that this will not happen.

Recommended Actions

E.8.1. Government should formalize administrative arrangements with the Inuvialuit Game Council, Environmental Impact Screening Committee, Environmental Impact Review Board and, as appropriate, with co-management bodies and industry on the future issuance of subsurface rights in the portion of the Beaufort Sea that is within the Yukon North Slope. In addition, it is recommended that the contiguous and adjoining portion of the Beaufort Sea just outside the Yukon North Slope, known as Shallow Bay, which is an important part of the Yukon North Slope coastal ecosystem, receive similar treatment.

Such administrative arrangements would establish the timing and sequence of regulatory procedures including:

- the completion of public generic environmental reviews prior to the decision to tender subsurface rights in the Yukon North Slope;
- the inclusion of the resulting generic terms and conditions in any tenders and in any rights issuance;

- the development of standard operating procedures by industry that have been proposed and agreed to by proponents seeking to facilitate the granting of exploration and production rights;
- the timing of any work obligations in the right or elsewhere, such that development activity associated with the right will be scheduled to allow the completion of preparation for development called for in, or pursuant to, the Plan;
- the completion of preparations before development activity applications are approved; and
- the completion of appropriate public generic environmental reviews prior to the issuance of any production licences.

E.8.2. The Minister of Indian and Northern Affairs Canada should undertake to amend the Withdrawal Order established under the Territorial Lands Act for the disposition of surface and subsurface rights in the Yukon North Slope only when amendment is recommended by the Environmental Impact Review Board and within the limits of the Board's recommendation.



IMPLEMENTATION OF THE PLAN

GOAL F

Facilitate implementation of the Plan

Schedules and Responsibilities

The Yukon North Slope Wildlife Conservation and Management Plan is intended to be broad, comprehensive and forward-looking. It evaluates the immediate and long-term needs of the Yukon North Slope and provides specific concrete actions to meet those needs. The actions are to be implemented over the next decade or more and will form the basis for wildlife conservation and management on the Yukon North Slope.

Given the jurisdictional and administrative complexity of the area, many actions fall to a range of agencies and organizations for implementation. To the greatest extent possible, recommended actions have been developed in cooperation with the responsible organizations to ensure that they are practical and achievable. In the future, experience and circumstances may indicate that actions other than the ones identified in the Plan are more appropriate to address the issues identified. This Plan is intended to facilitate and respond to such future requirements and changing circumstances.

A summary of action items can be found in Volume Four of the Plan (www.taiga.net/wmac/consandmanagementplan_volume4). The action items will require periodic updating. The allocation of responsibilities will often involve partnerships among various agencies, organizations and institutions. The Yukon North Slope conferences established by the IFA will serve as a useful forum for identifying implementation priorities within the Plan and for raising new issues that require attention. Following the conferences, the appropriate agencies and organizations with responsibilities on the Yukon North Slope should meet to establish firm commitments for the implementation schedule and responsibilities for that time period.

Although the Wildlife Management Advisory Council (North Slope) can play a coordinating role to assist in developing such schedules and responsibilities, to a large extent the government departments, other co-management bodies and agencies themselves must provide the leadership to find ways and means to implement actions in

the Plan. The Council should coordinate the development of those commitments in order to facilitate scheduling that reflects the priorities assigned to the actions in the Plan.

Priorities, linkages and financial implications for implementation

Implementation of the actions contained in the Plan will span a decade or more. Some will be one-time efforts to address discrete issues. Others are directed at improving existing operations relating to the Yukon North Slope or applying existing broader policies and initiatives to Yukon North Slope issues. Some can be achieved as part of the normal business of the agencies or by a redirection of existing effort. Others will require additional effort and expenditures. These should be addressed by the implementation and scheduling process referred to above.

There are, however, some Actions called for in Goal E, addressing essential preparations for future large-scale commercial developments related to the Yukon North Slope, which may not lend themselves as easily to implementation scheduling and costing at this time. The timing of any possible future large-scale activity related to subsurface development is speculative and subject to the results of renewed gas exploration activities in the Mackenzie Delta and feasibility studies into possible gas pipeline routings in the Beaufort Sea, Mackenzie Valley and Alaska Highway. Given the uncertainty about the possibility or the timing of such future developments, the timing of these actions is uncertain as well. However, when industry and government advance formal intentions to pursue large-scale commercial developments, immediate and significant efforts will be required to prepare for and respond to formal project proposals in a responsible and timely manner.

Many actions are not dependent on the timing of development activity and could be accommodated over the next decade or more within existing budgets and agencies' activities. Others will require substantial new effort, time and expenditures. Such efforts may be considered appropriate and justified only if

the prospect of large-scale commercial developments are judged to be imminent.

In the event of large-scale commercial developments, actions should be undertaken expeditiously to establish procedures and institutional arrangements that will create an orderly system for the future. These can be accomplished within existing agency activity.

This Plan is intended to be consistent with other specific management plans such as those for Ivvavik National Park and Herschel Island Territorial Park. It stands in a complementary relationship to them. In order to bring the shared conservation objectives of Ivvavik National Park, which covers much of the Yukon North Slope, into this Plan, Ivvavik's Ecosystem Conservation Plan has been integrated into this Plan. Review of the Yukon North Slope Wildlife Conservation and Management Plan should include consideration of the park plans for Ivvavik National Park and Herschel Island Territorial Park.

Recommended Actions

F.1. After each North Slope Conference, the Wildlife Management Advisory Council (North Slope) shall convene meetings with key stakeholders from identified departments, co-management bodies and other agencies with responsibilities affecting wildlife conservation and management on the Yukon North Slope. The objective of the meetings will be to identify and review priorities under the Plan in light of conference discussion.

Monitoring and Annual Reporting

The Plan calls for many actions to be initiated by other institutions under their policies, strategies and mandates. In order to achieve the purposes of the Plan, regular monitoring and periodic reviews of the Plan's implementation will be required.

Recommended Actions

F.2. The Wildlife Management Advisory Council (North Slope) will be responsible for facilitating and monitoring implementation on an ongoing basis. The Council will report annually to Ministers and the Inuvialuit Game Council. The reports should be made public in a timely fashion.

F.3. The Aklavik Hunters and Trappers Committee should review the implementation of the Plan from its perspective and report annually to the Inuvialuit Game Council, the Wildlife Management Advisory Council (North Slope) and Parks Canada.

F.4. The Wildlife Management Advisory Council (North Slope) should prepare and provide materials to the Aklavik Hunters and Trappers Committee, identifying WMAC(NS)'s projected actions and goals for the year, to enable the Aklavik Hunters and Trappers Association to effectively review and assess implementation of the Yukon North Slope Wildlife Conservation and Management Plan.

F.5. Other organizations with responsibilities in the Plan and affecting the Yukon North Slope, such as Parks Canada, the Canadian Wildlife Service, the Department of Fisheries and Oceans, the Yukon Department of Environment, the Fisheries Joint Management Committee, the Porcupine Caribou Management Board, the Environmental Impact Screening Committee and the Environmental Impact Review Board, should review and evaluate the implementation of those aspects of the Plan that are relevant to them, as part of their regular annual reporting.

Evaluation and Public Reviews

Regular and on-going evaluation and public review of the Plan and its action items will be required.

Recommended Actions

F.6. The Wildlife Management Advisory Council (North Slope) should establish an evaluation of actions required under the Plan on a three-year schedule. The schedule should provide evaluation reports at a time that makes them available for any public review established to consider the Plan or performance under the Plan.

F.7. The Yukon North Slope Conference should be the principal forum for the public to review the Plan and the implementation of the Plan. As a matter of regular business, conferences should review and evaluate the implementation of the Plan.

Revision of the Plan

The Plan will be amended, revised or updated, as required, in response to meeting decisions or reviews, and in preparation for each Yukon North Slope Conference.

Recommended Actions

F.8. As a result of annual or other regular meetings convened by the Wildlife Management Advisory Council (North Slope) among responsible agencies for the purpose of determining implementation schedules and responsibilities, the resulting commitments shall be incorporated into Goal F — Implementation of the Plan. Any consequential adjustments to projected actions, schedules and responsibilities will also be made at that time.

F.9. As a result of annual, independent or public reviews of the Plan or the implementation of the Plan, the Wildlife Management Advisory Council (North Slope) may recommend amendment of the objectives and actions of the Plan on a regular basis. Consultation with appropriate agencies and organizations will be a part of the amendment process.

F.10. The Wildlife Management Advisory Council (North Slope) may amend the goals of the Plan, where the need for a change is indicated, only after a public review in the Yukon North Slope Conference. Such changes should be made only after further consultation with interested parties, as appropriate.

F.11. The Yukon North Slope Wildlife Population Status Reports should be reviewed and updated every three years in preparation for each North Slope Conference. WMAC(NS) should ensure that the Aklavik HTC is included in this review.



APPENDICES

APPENDIX 1: SECTION 12—*INUVIALUIT FINAL AGREEMENT*

YUKON NORTH SLOPE

12.(1) For the purposes of this section, “Yukon North Slope” means all those lands between the jurisdictional boundaries of Alaska and the Yukon Territory and the Northwest Territories, north of the height of land dividing the watersheds of the Porcupine River and the Beaufort Sea, and including adjacent nearshore and offshore waters and islands.

PRINCIPLES

12.(2) The Yukon North Slope shall fall under a special conservation regime whose dominant purpose is the conservation of wildlife, habitat and traditional native use.

12.(3) Subject to subsections (5) to (15):

- a) all development proposals relating to the Yukon North Slope shall be screened to determine whether they could have a significant negative impact on the wildlife, habitat or ability of the natives to harvest wildlife;
- b) other uses within the Yukon North Slope shall be considered and may be permitted if it is shown that there would be no significant negative impact on wildlife, habitat or native harvesting;
- c) other uses within the Yukon North Slope that may have a significant negative impact on wildlife, habitat or native harvesting shall be permitted if it is decided that public convenience and necessity outweigh conservation or native harvesting interests in the area; and

As amended January 15, 1987

- d) development proposals relating to the Yukon North Slope that may have a significant negative impact shall be subject to a public environmental impact assessment and review process.

DISPOSAL OF LAND

12.(4) Subject to this section, the withdrawal from disposal under the Territorial Lands Act of

certain lands described in the Prohibition and Withdrawal of Certain Lands from Disposal Order (SOR/80-198, 27 March, 1980, as set out in Annex E-1), within the Yukon North Slope shall be maintained.

As amended January 15, 1987

NATIONAL PARK

12.(5) Canada agrees to establish, under the National Parks Act, the Settlement Legislation or such other legislation as may be appropriate or necessary, a National Park comprising the western portion of the Yukon North Slope shown in Annex E and more particularly described as the area bounded to the south by the height of land being the watershed and to the east by the eastern shoreline of the Babbage River.

12.(6) The planning for the National Park and the management thereof shall have as their objects to protect the wilderness characteristics of the area, maintaining its present undeveloped state to the greatest extent possible, and to protect and manage the wildlife populations and the wildlife habitat within the area.

12.(7) Except as provided in subsection (14), the National Park shall be zoned and managed as a wilderness oriented park.

12.(8) Development activities inconsistent with the purposes of the National Park shall be prohibited, and any change in the character of the National Park shall require the consent of the Inuvialuit.

12.(9) The Wildlife Management Advisory Council established by subsection (46) shall advise the appropriate minister on park planning and management. The Council shall recommend a management plan for the National Park.

As amended January 15, 1987

12.(10) No lands forming part of the National Park shall be removed from National Park status without the consent of the Inuvialuit.

12.(11) Canada agrees that prior to the establishment of the National Park, the lands comprising it shall be maintained in a manner that recognizes their future use and protects the land and its habitat for this purpose.

12.(12) Nothing inconsistent with the provisions of this Agreement shall be permitted between the date of the execution of this Agreement and the coming into force of appropriate legislation creating the Park.

12.(13) The rights provided to the Inuvialuit under this Agreement in respect of the National Park shall take effect as of the date of the coming into force of the Settlement Legislation. For greater certainty, the Government of the Yukon Territory shall retain its present jurisdiction until the creation of the National Park.

12.(14) If it is determined pursuant to section 11 that an area identified in Annex E as Stokes Point is required for limited scale use and temporary use purposes in support of hydrocarbon development, the use shall be permitted on the following conditions:

a) the land to be used does not exceed forty (40) acres and any additional land that is required to satisfy the licencing requirements of the Yukon Territorial Water Board;

As amended January 15, 1987

b) the use of the land is such as not to prevent its restoration to the state it was in prior to such use; and

c) the activity must not be on a scale and of a nature as to significantly derogate from the quality and character of the adjacent Park lands.

12.(15) In subsection (14),

a) "limited scale use" includes the storage of fuel and supplies, emergency repairs and maintenance facilities, transshipment depots, caches and similar uses; and

b) "temporary use" means a period of active occupation that, in the aggregate, does not exceed six (6) years.

As amended January 15, 1987

TERRITORIAL PARK

12.(16) The parties agree that Herschel Island is to be established as the Herschel Island Territorial park and, in establishing that Park, the Government of the Yukon Territory will consult the Inuvialuit.

12.(17) Except for the lands adjacent to Pauline Cove, the park regime on Herschel Island shall be no less stringent than that of the National Park pursuant to subsections (5) to (13).

As amended January 15, 1987

12.(18) Within the lands adjacent to Pauline Cove, the historic resources shall be protected in a manner no less stringent than that of the regime of a National Historic Park as set out in the National Parks Act.

12.(19) Any development activity proposed within the lands adjacent to Pauline Cove shall be subject to:

a) the screening and review process set out in section 11; and

b) the criteria set out in subsection (23) shall apply; and

c) the terms and conditions governing such development shall be no less stringent than those under the Territorial Land Use Regulations in force at the time.

Subsection as amended January 15, 1987

AREA EAST OF BABBAGE RIVER

12.(20) The parties agree that the area east of the Babbage River extending to the jurisdictional boundary between the Yukon Territory and the Northwest Territories, but not including the adjacent nearshore and offshore waters, shall be designated as an area in which controlled development may take place, subject to the provisions of this Agreement and to laws of general application.

12.(21) Any development activity proposed for the area referred to in subsection (20) shall be subject to the screening and review process set out in section 11.

12.(22) Any development activity proposed for the adjacent nearshore and offshore waters shall be subject to the normal government process and the wildlife compensation provisions of section 13.

12.(23) The appropriate review board shall take into account the following criteria in its consideration of any development proposal:

- a) analysis of the significance of the part or parts of the Yukon North Slope proposed for development use from the standpoint of conservation and harvesting interests;
- b) evaluation of practical alternative locations and of the relative commercial and economic merits of and environmental impact on such locations compared to the part or parts of the area proposed for utilisation in the application;
- c) evaluation of the environmental and social impacts of the proposed development;
- d) weighing of the interests of users, conservationists and harvesters in the Yukon North Slope against public convenience and necessity for development;
- e) evaluation of the ability of the applicant to demonstrate that he has, or will acquire, the proven capability to carry out the project in accordance with established standards of performance, safeguards and other requirements and to carry out the necessary environmental mitigation and restoration; and
- f) requirements for effective machinery to ensure that the development proceeds in accordance with any established terms and conditions.

INUVIALUIT HARVESTING RIGHTS

12.(24) Subject to the laws of general application respecting public safety and conservation, the Inuvialuit right to harvest on the Yukon North Slope includes:

- a) subject to the collective harvesting rights in favour of all native peoples under the Porcupine Caribou Management Agreement referred to in Annex L, the preferential right to harvest all species of wildlife, except migratory non-game birds and migratory insectivorous birds, for subsistence usage throughout the Yukon North Slope;
- b) the exclusive right to harvest furbearers and polar bear; and
- c) the exclusive right to harvest game within the National Park, the Territorial Park and adjacent islands.

12.(25) Where harvesting rights are extended to other native peoples pursuant to subsection

(33) and subsections 14(17) and (18), their requirements as to subsistence usage shall be taken into account in setting subsistence quotas and the subsistence requirements of all native peoples shall be accommodated within conservation limits.

12.(26) Sport fishing shall be permitted throughout the Yukon North Slope including the National Park and the Territorial Park.

12.(27) Where, in the exercise of their exclusive right to harvest game within the National Park and the Territorial Park, the Inuvialuit wish to permit:

- a) persons who are not beneficiaries of the Settlement or adjacent land claims settlements to harvest any such game, prior approval of the appropriate minister is required and that minister may grant the privilege on any terms and conditions he stipulates; and

As amended January 15, 1987

- b) persons who are beneficiaries of adjacent land claims settlements to harvest any such game, those persons, if so permitted, may harvest game on the same basis as the Inuvialuit.

12.(28) Where, in the exercise of their exclusive right to harvest polar bear in the Yukon North Slope outside the National Park, the Inuvialuit permit persons who are not beneficiaries of the Inuvialuit Settlement or adjacent land claims settlements to harvest any such polar bear, the harvesting shall be regulated by the competent authority under the laws of general application.

12.(29) Where, in the exercise of their exclusive right to harvest furbearers in the Yukon North Slope outside the National Park, the Inuvialuit permit non-Inuvialuit to harvest any such furbearers, the harvesting shall be subject to any approval or notification required by the appropriate government and shall be regulated by the competent authority under the laws of general application.

12.(30) For greater certainty, the Inuvialuit shall make no gain or profit from the granting of permission to non-Inuvialuit to harvest furbearers except where it is part of a reciprocal

arrangement with beneficiaries from an adjacent land claims settlement.

12.(31) The Inuvialuit may trade and barter game products with other Inuvialuit beneficiaries in the Yukon North Slope.

12.(32) Subject to the provisions of the Migratory Birds Convention Act and any regulations thereunder, the Inuvialuit may for subsistence usage sell game products to other Inuvialuit beneficiaries in the National Park.

12.(33) Where native beneficiaries in adjacent land claims settlements acquire rights to game resources within the Yukon North Slope on the basis of traditional use and occupancy, those beneficiaries shall be entitled to exchange game products with the Inuvialuit on the same basis as that provided for the Inuvialuit under this Agreement.

12.(34) Where, in the final settlement of the land claims of adjacent native groups, provision is made for the exchange of game products with the Inuvialuit, the right of the Inuvialuit to exchange amongst themselves shall be extended to those other native beneficiaries.

12.(35) Subject to the provisions of the Migratory Birds Convention Act, any regulations thereunder and other similar laws of general application, the right to harvest includes the right to sell the non-edible products of legally harvested game.

12.(36) The right to harvest game includes the right to use present and traditional methods of harvesting and the right to possess and use all equipment reasonably needed to exercise that right, subject to international agreements to which Canada is a party and to laws of general application respecting public safety and conservation. The right to harvest game includes the right to possess and transport legally harvested game within and between the Yukon Territory and the Northwest Territories.

12.(37) Subject to subsection (38), the right to harvest game includes the right to travel and establish camps as necessary to exercise that right.

12.(38) In the National Park referred to in subsection (5) and the Territorial Park referred to in subsection (16) the Inuvialuit have the right to use existing hunting, fishing and trapping facilities associated with their game harvesting activities and to establish new facilities after consultation with the management authority. The location of new facilities shall be determined on the basis of the management objectives for these parks.

As amended January 15, 1987

12.(39) The Inuvialuit need not obtain permits, licences or other authorization to harvest wildlife but may be required to show proof of status as Inuvialuit beneficiaries. Where, for the purpose of conservation, permits, licences or other authorizations are required by the appropriate minister or on the recommendation of the Wildlife Management Advisory Council, Fisheries Joint Management Committee, or the Porcupine Caribou Management Board, the Inuvialuit shall have the right to receive such permits, licences or other authorizations from the local authority at no cost.

As amended January 15, 1987

12.(40) Nothing in this Agreement or the Settlement Legislation shall prevent any person from taking game for survival in an emergency.

12.(41) Within their respective jurisdictions, governments shall determine the harvestable quotas for wildlife species based on the principles of conservation and the following procedures:

- a) the Wildlife Management Advisory Council (North Slope) established by subsection (46) shall determine the total allowable harvest for game according to conservation criteria and such other factors as it considers appropriate. The Council shall make its recommendations to the appropriate minister, who shall, if he differs in opinion with the Council, set forth to the Council his reasons and afford the Council a further consideration of the matter;
- b) in determining the total allowable harvest, conservation shall be the only consideration. For greater certainty, where the Inuvialuit have the exclusive right to harvest, they shall be entitled to harvest the total allowable harvest;

c) for the purposes of management and in order to protect the interest of the Inuvialuit harvesters, subsistence quotas for the wildlife referred to in paragraph (24)(a) shall be jointly established by the Inuvialuit and the governments having jurisdiction over species or species groups of subsistence value, as follows:

- (i) within the total allowable harvest for game, the Wildlife Management Advisory Council (North Slope) shall determine the subsistence quotas according to the criteria and factors it considers appropriate in addition to those referred to in subparagraph (ii). The Council shall make its recommendations to the appropriate minister, who shall, if he differs in opinion from the Council, set forth to the Council his reasons and afford the Council further consideration of the matter, and
- (ii) in determining the subsistence quota, the following criteria shall be taken into account by the Council or, where appropriate, by the Porcupine Caribou Management Board, and the appropriate minister:

- (A) the food and clothing requirements of the Inuvialuit,
- (B) the usage patterns and levels of harvest of the Inuvialuit,
- (C) the requirements for particular wildlife species for subsistence usage,
- (D) the availability of wildlife populations to meet subsistence usage requirements including the availability of species from time to time,
- (E) the projections for changes in wildlife populations, and
- (F) the national and international obligations of Canada with respect to migratory game birds;

(F) as amended January 15, 1987

d) the allocation of the Inuvialuit quotas amongst themselves shall be the responsibility of the Inuvialuit.

ECONOMIC BENEFITS

12.(42) The parties agree that the predominant number of persons employed in the operation and management of the parks referred to in

subsections (5) and (16) should be Inuvialuit. The appropriate government shall provide training to assist the Inuvialuit in qualifying for such employment.

12.(43) To the extent that the management regime of the said parks provides for economic activities, the parties agree that opportunities should be provided to the Inuvialuit on a preferred basis.

As amended January 15, 1987

12.(44) The Inuvialuit shall be invited to participate in the planning process for any development on the lands available for development adjacent to Pauline Cove on Herschel Island, and in the economic opportunities arising out of such development. Subject to all applicable laws, the Inuvialuit shall have the right of first refusal with respect to any activities in the nature of guiding related to wildlife within the Yukon North Slope.

12.(45) The Inuvialuit and the Council for Yukon Indians may enter into bilateral agreements such as the agreement dated March 15, 1984 between the Council for Yukon Indians and the Inuvialuit, whereby the native groups may share in the rights, privileges and benefits afforded Inuvialuit beneficiaries in the Yukon North Slope.

WILDLIFE MANAGEMENT ADVISORY COUNCIL (NORTH SLOPE)

12.(46) In order to provide for joint planning by the native people and the governments in the Yukon North Slope with respect to the principles set out in subsections (2) and (3), a Wildlife Management Advisory Council shall be established as soon after the execution of this Agreement as is practicable.

12.(47) The Council shall have as permanent members a Chairman and an equal number of native and government members.

12.(48) The permanent members of the Council shall include at least one person designated by the Government of the Yukon Territory and one person designated by the Minister of the Environment of Canada.

12.(49) In addition to permanent members of the Council representing government, temporary members may be co-opted from government departments as they may be required from time to time.

12.(50) The permanent members of the Council appointed to represent the native interests shall include persons designated by the Inuvialuit, and, subject to agreements, by other native groups that have acquired harvesting rights in the Yukon North Slope under their land claims settlements.

12.(51) The Chairman of the Council shall be appointed by the Government of the Yukon Territory, with the consent of the native members and Canada.

12.(52) The permanent members of the Council shall each have one (1) vote. The Chairman shall have a vote only in case of a deadlock. Temporary members shall not have a vote.

12.(53) The Council may establish rules and adopt by-laws regulating its procedures.

12.(54) The Government of the Yukon Territory agrees to provide a secretariat to assist in meeting the administrative needs of the Council.

12.(55) Each party shall pay the remuneration and expenses of the members of the Council that it appoints or designates.

12.(56) The Council shall provide advice to the appropriate minister on all matters relating to wildlife policy and the management, regulation and administration of wildlife, habitat and harvesting for the Yukon North Slope and, without restricting the generality of the foregoing, the Council shall:

- a) provide advice on issues pertaining to the Yukon North Slope to the Porcupine Caribou Management Board, the Yukon Land Use Planning Commission, the Review Board and other appropriate groups;
- b) prepare a wildlife conservation and management plan for the Yukon North Slope for recommendation to the appropriate authorities as a means for achieving and maintaining the principles of conservation set out in subsections (2) and (3);

- c) determine and recommend appropriate quotas for Inuvialuit harvesting of game in the Yukon North Slope; and
- d) advise on measures required to protect habitat that is critical for wildlife or harvesting including those referred to in subsection 14(3).

As amended January 15, 1987

YUKON NORTH SLOPE ANNUAL CONFERENCE

12.(57) There shall be a Yukon North Slope Annual Conference, to be held once a year in the Yukon Territory, to promote public discussion among natives, governments, and the private sector with respect to management co-ordination for the Yukon North Slope.

12.(58) Each Yukon North Slope Annual Conference shall be attended by representatives of native groups with an interest in the Yukon North Slope, at least one senior official from each appropriate government department and representatives of other interested parties, as selected by the Chairman, including industry and special interest groups.

12.(59) A Chairman shall be named at each Yukon North Slope Annual Conference to hold office until the next Annual Conference. The first Chairman shall be appointed by the Government of the Yukon Territory, the second Chairman shall be appointed by the native groups that have an interest in the Yukon North Slope and, thereafter, the Chairman shall be appointed by those parties on an alternative basis.

12.(60) The Government of the Yukon Territory agrees to provide administrative support services for the Yukon North Slope Annual Conference.

12.(61) During the third Yukon North Slope Annual Conference, Canada, the Government of the Yukon Territory and the Inuvialuit shall collectively review the proceedings and results of past Conferences and determine whether the objective in having such Conferences warrants their continuation and, where the Conferences are continued, such a review shall be carried out every three years thereafter.

APPENDIX 2: LEGAL AND POLICY FRAMEWORK OF THE YUKON NORTH SLOPE WILDLIFE CONSERVATION AND MANAGEMENT PLAN

Wildlife conservation and environmental protection are the focus of a great variety of international, federal and territorial laws, policies and programs. Most of these are not specific to the Yukon North Slope and all are subject to the conditions established in the constitutionally-entrenched *Inuvialuit Final Agreement*. However, they do affect and influence the management actions and strategies taken by governments in the Yukon North Slope. Some of the most important of these management instruments are summarized below.

Legislation for Land and Water

Federal legislation addresses public concern relating to the environmental protection of land and water. Land use is primarily controlled by the Territorial Lands Act and the related Territorial Land Use Regulations. Based upon these two instruments, land use permits are issued establishing operating terms and conditions for all sizeable developments and most land-based activities occurring in the North Slope. In Ivvavik National Park, the Canada National Parks Act and its regulations control activities and management actions. In addition, the Canada Wildlife Act provides for the protection of habitat, the designation of public lands (National Wildlife Areas) and the prohibition of entry so as to allow for the conservation and protection of wildlife, research and interpretation.

With respect to water, the federal Fisheries Act prohibits any unauthorized harmful alteration, disruption or destruction of fish habitat, as well as the deposit of a deleterious substance in water frequented by fish. Seeking at least to monitor, if not prevent, pollution in Arctic waters are legislative schemes such as those found in the federal Arctic Waters Pollution Prevention Act and the pollution provisions of Part XV of the Canada Shipping Act and the Marine Disposal provisions of the Canadian Environmental Protection Act (CEPA). In addition, the Yukon Waters Act establishes environmental protection guidelines for Yukon waters.

The Canadian Environmental Protection Act is also the federal statute that deals with many general matters concerning environmental quality as well as with toxic substances, nutrients, international air pollution and ocean dumping. With regard to environmental impact assessment, the Canadian Environmental Assessment Act affects all development projects initiated or funded by the federal government.

With respect to territorial jurisdiction, the most important legislative tool is the Yukon Environment Act. Passed in 1991, this Act applies to all land in the Yukon, including federal lands and matters within federal jurisdiction except where there is an actual conflict between the Act and federal legislation. Similarly, the Environment Act applies to the Yukon North Slope, so far as it does not conflict with the *Inuvialuit Final Agreement*. The Act controls a wide range of environmental concerns including waste management, release of contaminants, spills and hazardous substances, and pesticides. As regulations are developed under the Act, it is hoped that a comprehensive environmental protection regime will be established.

The Yukon Wildlife Act enables the Yukon government by regulation to designate a Habitat Protection Area where it is necessary to do so because of the sensitivity of the area to disturbance, the likelihood of disturbance and the importance of the area as habitat for any population, species or type of wildlife.

The Yukon Parks and Land Certainty Act enables the Yukon government to designate lands as parks as required to implement land claims agreements, to protect and manage representative areas of territorial significance, to provide recreational opportunities and to encourage public understanding and appreciation of the Yukon's natural environment as a legacy for future generations.

Of lesser overall importance, but still of significance to the North Slope legislative regime, is the Yukon Historic Resources Act. This instrument guides management actions relating to historic and archaeological sites in the Yukon.

Negotiated between the governments of Canada, the Yukon and Yukon Indian First Nations, the Yukon Umbrella Final Agreement provides measures for the conservation of wildlife and the establishment of a Development Assessment Process (DAP) to avoid or mitigate negative environmental effects resulting from development. Canada passed legislation to implement the DAP provisions early in 2003.

Legislation for Wildlife

The Canada Wildlife Act, the Migratory Birds Convention Act, the Fisheries Act and the new federal Species at Risk Act, in association with their respective regulations, provide for the conservation and protection of wildlife and fish. Under the Canada Wildlife Act and the federal Species at Risk Act, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) — a committee of federal, provincial and territorial governments and non-government bodies — reviews species status reports and designates species for listing as threatened or endangered. The recovery of endangered species is accomplished through another committee — RENEW, or Recovery of Nationally Endangered Wildlife in Canada.

The Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act (WAPPRIITA) is the legislative vehicle by which Canada meets its obligations under the Convention on International Trade in Endangered Species of Fauna and Flora [1973] (CITES). CITES is intended to prevent further demise of those endangered species which are traded internationally, through regulation of such trade. WAPPRIITA received Royal Assent December 17, 1992, and came into force on May 14, 1996, when the Wild Animal and Plant Protection Regulations took effect.

The Canada National Parks Act through its regulations enables the management and protection of wildlife within Ivvavik National Park. A number of international agreements (see below) ensure the shared conservation and management of single species or a group of related species.

The Yukon Act and the Yukon Wildlife Act enable the Yukon government by regulation to manage

wildlife within its territory. The Yukon is also developing Species at Risk legislation. Similarly, the Northwest Territories Wildlife Act provides for the management of wildlife in the Northwest Territories, including terrestrial animals offshore of the Yukon North Slope.

The Lacey Act, Title 16, United States Code, prohibits the import or export in the United States of illegally acquired wildlife. This Act, although not Canadian legislation, provides another mechanism for the conservation and protection of Yukon wildlife. Individuals who illegally harvest wildlife (in the Yukon) and export that wildlife into the United States (Alaska) are committing an offence under this Act.

Strategies and Policies

Several strategies and policies complement the legislative framework. At the federal level, the two key strategies are the Arctic Marine Conservation Strategy and the Arctic Environmental Strategy. The former was released in 1987 as a response to the 1980 World Conservation Strategy, the 1982 endorsement of the United Nations Convention on the Law of the Sea and the 1984 Task Force Report on Northern Conservation. The Arctic Marine Conservation Strategy aimed to ensure the future health and well-being of Arctic marine ecosystems, thereby enabling Canada to fulfill its national responsibilities in the Arctic and provide for the sustained use of Arctic marine resources and, in particular, use by Arctic peoples.

This strategy has now been effectively superseded by Canada's Oceans Strategy (COS). This is the Government of Canada's policy statement for the management of estuarine, coastal and marine ecosystems. It also provides a framework for ocean management.

The Oceans Act enables the Minister of the Department of Fisheries and Oceans to lead and facilitate the development of a national ocean management strategy. The COS responds to this requirement by providing for an integrated approach to ocean management, coordination of policies and programs across governments and an ecosystem approach. One of the programs facilitated by COS is the Beaufort Sea Integrated Management Planning Initiative (BSIMPI). This is

a partnership of the Inuvialuit, government and industry. Its objective is to facilitate integrated management planning for the marine and coastal areas of the ISR.

In 1990, the federal government released the Green Plan, the Canadian strategy for a healthy environment. One component of this Plan was the Arctic Environmental Strategy. Broad in scope, the Arctic Environmental Strategy outlines government action in the areas of hazardous waste clean-up in the Arctic, enhanced water resource management, monitoring country foods for contaminants, and economic opportunities for northern communities based upon development and use of traditional values, knowledge and resources. The AES was completed in 1997.

In the territorial context, again, two strategies support the legislative framework. These are the Yukon Conservation Strategy and its companion document, the Yukon Economic Strategy. Taken together, these two strategies provide an action plan for sustainable development in the territory such that environmental protection remains a significant and vital element of economic development. The Conservation Strategy, in particular, addresses all resource areas in the Yukon, including water, wildlife and habitat, tourism, forests, and minerals, exploration and mining. It also establishes a government action agenda for environmental protection issues such as pollution control, waste management, management of toxic and hazardous materials, and preparation for environmental emergencies.

Jointly, the Yukon government, the federal government and the governments of all the provinces and the Northwest Territories developed the Wildlife Policy for Canada. Outlining a number of action guidelines, this policy commits both the federal and Yukon governments to expanding the scope of wildlife policies to fully recognize wildlife and biodiversity interrelationships, to providing for wildlife in economic and environmental policies, to the involvement of aboriginal people in wildlife management and to improving wildlife conservation.

The 1991 Report of the Beaufort Sea Steering Committee also contains important recommenda-

tions, within the current legislative framework, for strengthening government preparedness for an oil spill resulting from an oil well blowout in the Beaufort Sea. The Steering Committee, composed of representatives from the Inuvialuit, the petroleum industry, the territorial governments and the federal government, examined and made recommendations in many areas affecting wildlife and environmental management, including contingency planning and clean-up operations, contingency plan testing and review, Inuvialuit involvement in contingency planning and clean-up operations, the costing and development of a worst-case scenario, compensation and financial liability, the nature and cost of remedial and mitigative measures possible in the Beaufort Sea, scientific processes relating to research to be undertaken in the event of a spill, environmental assessment methodology and databases.

Parks Canada's Guiding Principles and Operational Policies, 1994, provides direction on how Parks Canada carries out the national program of natural and cultural heritage recognition and protection. One of the tools used to reach this goal is the Park Management Plans. These plans, which are essential for the direction of park managers and are commitments to the public of Canada for the use and protection of national parks, are defined in the Guiding Principles and Operational Policies.

International Agreements and Strategies

Internationally there has been a great deal of effort directed at developing cooperative strategies, conventions and agreements to improve environmental protection and wildlife conservation. As early as the 1970s these efforts began with the International Biosphere Programme, initiated to encourage research on such issues as the depletion of wildlife habitats and genetic resources. Several sites neighbouring the North Slope, including Canoe Lake, Rat River, Summit Lake and the Bell River, were identified through the International Biosphere Programme.

Since 1974, there has been an agreement between Canada and the United States on a joint Marine Contingency Plan for spills of oil and other noxious substances. In 1977, an annex was added to the plan to address the Beaufort Sea

specifically. The plan stresses the need for consultation and cooperation in information exchange, identifying and monitoring vessel routing areas outside territorial waters, and the development of adequate compensation schemes.

Significant international environmental protection initiatives also include the Arctic Environmental Protection Strategy, the United Nations Convention on Environmental Impact Assessment in a Transboundary Context and the Convention on Biodiversity.

The Arctic Environmental Protection Strategy, also referred to as the Finnish Initiative, was signed by representatives of the eight Arctic nations in June 1991. The Strategy commits signatory states to developing a coordinated response to the growing threat of pollution in northern regions and provides for cooperation in scientific research. This strategy addressed four areas: monitoring and assessment of pollutants; marine environment; emergency protection measures; and conservation of Arctic flora and fauna. The Circumpolar Agreement on the Conservation of Arctic Flora and Fauna is recognized under this strategy and seeks to protect and conserve flora and fauna but has no associated legislation.

In 1997, the working groups under AEPS were incorporated into the Arctic Council. The Arctic Council was established in 1996 in Ottawa, Canada. The Council is a high level intergovernmental forum, providing a mechanism to address the common concerns and challenges faced by the Arctic governments and the people of the Arctic. The members of the Council are Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden, and the United States of America. RAIPON (Russian Indigenous Peoples of the North), the Inuit Circumpolar Conference, the Saami Council, the Gwich'in International Council, the Arctic Athabaskan Council, and the Aleut International Association are Permanent Participants in the Council. There is provision for non-arctic states, intergovernmental and interparliamentary organizations and non-governmental organizations to become involved as observers. The main activities of the Council focus on the protection of the Arctic environment

and sustainable development as a means of improving the economic, social and cultural well-being of the north.

Former working groups of the AEPS that now operate under the Arctic Council include the Arctic Monitoring and Assessment Program (AMAP), which monitors levels and assesses effects of anthropogenic pollutants in the Arctic environment; Conservation of Arctic Flora and Fauna (CAFF), which facilitates actions to conserve Arctic biodiversity; Emergency Prevention, Preparedness and Response (EPPR), which provides a framework for future cooperation in responding to the threat of Arctic environmental emergencies; and Protection of the Arctic Marine Environment (PAME), which takes preventive and other measures regarding marine pollution in the Arctic. The Sustainable Development Program (SDP), which works to protect and enhance the economies, culture and health of the inhabitants of the Arctic, is a more recent addition.

Canada and the United States have also signed the United Nations Convention on Environmental Impact Assessment in a Transboundary Context. It includes a commitment to applying the principles of environmental impact assessment to policies, plans and programs. Under the convention, the nation where a proposed development is to occur is obliged to provide an opportunity to the public in areas likely to be affected—whether within or without the nation of origin—to take part in the environmental assessment process before the development is authorized or undertaken. The minimum requirement of the convention is to ensure that an environmental impact assessment is undertaken at the project level.

Canada was among the first nations to sign the United Nations Convention on Biodiversity in 1992 and the first industrialized country in that same year to ratify it and so agree to live by its provisions for biodiversity conservation. The Canadian Biodiversity Strategy is a response by federal, provincial and territorial officials to the Convention and, when completed, will describe how Canada will meet the domestic and international requirements of the Convention.

Of particular relevance to the Arctic is the Convention's call for "the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings," as well as the requirement that in doing so, states respect the traditional knowledge and sustainable harvesting practices of indigenous peoples. Twinned with the obligation to protect areas, there is an obligation to "develop or maintain necessary legislation and/or other regulatory provisions for the protection of threatened species and populations." Article 14 has special relevance for circumpolar issues in that it calls upon states to cooperate in the protection of biodiversity, especially where actions taken within one state affect biodiversity in another.

Complementing these environmental protection initiatives are a number of cooperative management agreements that further the integration of wildlife management. Some of these agreements focus on conservation of a single species or a group of related species. The Convention for the Protection of Migratory Birds (1916), signed between Canada and the United States, was amended in 1994 to acknowledge the northern traditional spring waterfowl harvest, among other changes. The North American Waterfowl Management Plan, signed between Canada and the United States in 1986 and updated in 1993 with Mexico as a partner, focuses on the value of maintaining an adequate habitat base to ensure the perpetuation of North American waterfowl populations. A component of this plan is the Arctic Goose Joint Venture. Participants in this venture include the governments of Canada and the United States as well as provincial, territorial and state governments, non-government groups and four flyway councils. The intent is to integrate goose research and monitoring programs. More recently, building on the success of the North American Waterfowl Management Plan, a strategy that addresses conservation needs of all birds is in development in the North American Bird Conservation Initiative (NABCI). It includes

working groups on landbirds (Partners in Flight = PIF), shorebirds, seabirds and other bird groups.

The Agreement between the Government of Canada and the Government of the United States of America on the Conservation of the Porcupine Caribou Herd, signed in 1987, aims to support the conservation and traditional use of the Porcupine Caribou Herd and its habitat in Alaska, the Yukon and the Northwest Territories. The International Polar Bear Agreement on the Conservation of Polar Bears and Their Habitat was signed in 1973 by Canada and the United States. In 1988, the Inuvialuit Game Council and the Alaskan North Slope Borough Fish and Game Management Committee signed the Polar Bear Management Agreement for the Southern Beaufort Sea. This agreement, which seeks to maintain the shared population of polar bears at healthy viable levels, was the first of several similar agreements between user groups across the North Slope, such as the International Beluga Management Agreement.

APPENDIX 3: ACRONYMS

AEPS

Arctic Environmental Protection Strategy

AES

Arctic Environmental Strategy

AMAP

Arctic Monitoring and Assessment Program

ANWR

Arctic National Wildlife Refuge

BSIMPI

Beaufort Sea Integrated Management Planning Initiative

CAFF

Conservation of Arctic Flora and Fauna

CEAA

Canadian Environmental Assessment Act

CEPA

Canadian Environmental Protection Act

CITES

Convention on International Trade in Endangered Species

COS

Canada's Ocean Strategy

COSEWIC

Committee on the Status of Endangered Wildlife in Canada

DAP

Development Assessment Process

DFO

Department of Fisheries and Oceans

DIAND

Department of Indian Affairs and Northern Development

DOE

Department of Environment

EIRB

Environmental Impact Review Board

EISC

Environmental Impact Screening Committee

EPPR

Emergency Prevention, Preparedness and Response

FJMC

Fisheries Joint Management Committee

GNWT

Government of Northwest Territories

HTC

Hunters and Trappers Committee

IFA

Inuvialuit Final Agreement

ISR

Inuvialuit Settlement Region

MBCA

Migratory Birds Convention Act

NABCI

North American Bird Conservation Initiative

PAME

Protection of the Arctic Marine Environment

PCMB

Porcupine Caribou Management Board

PIF

Partners in Flight

RAIPON

Russian Indigenous Peoples of the North

RENEW

Recovery of Nationally Endangered Wildlife in Canada

SARA

Species at Risk Act

SDP

Sustainable Development Program

WAPPRIITA

Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act

WMAC (NS)

Wildlife Management Advisory Council (North Slope)

WMAC (NWT)

Wildlife Management Advisory Council (Northwest Territories)

YESAA

Yukon Environmental Socio-economic Assessment Act

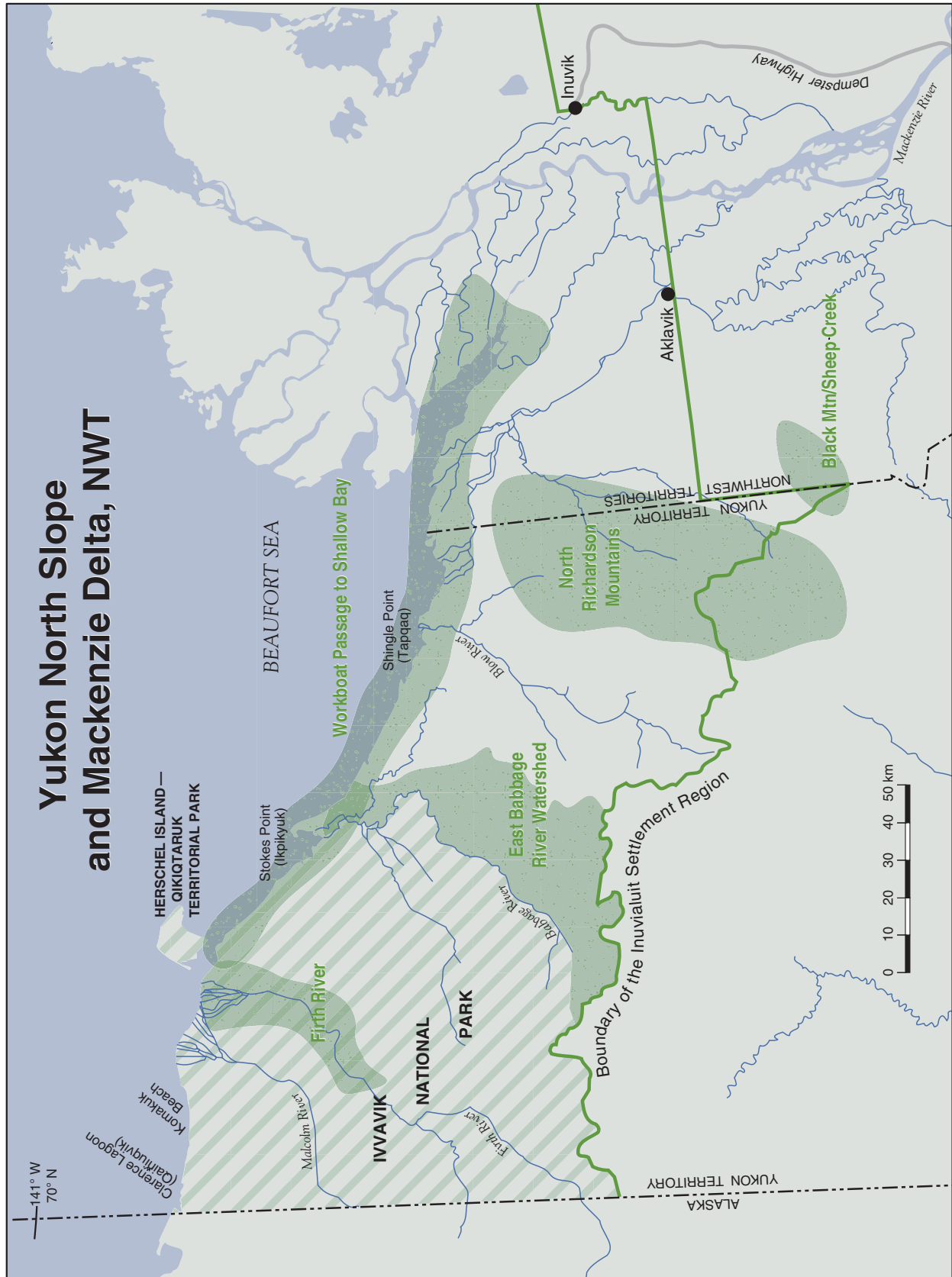
YNS

Yukon North Slope

YTG

Yukon Territorial Government

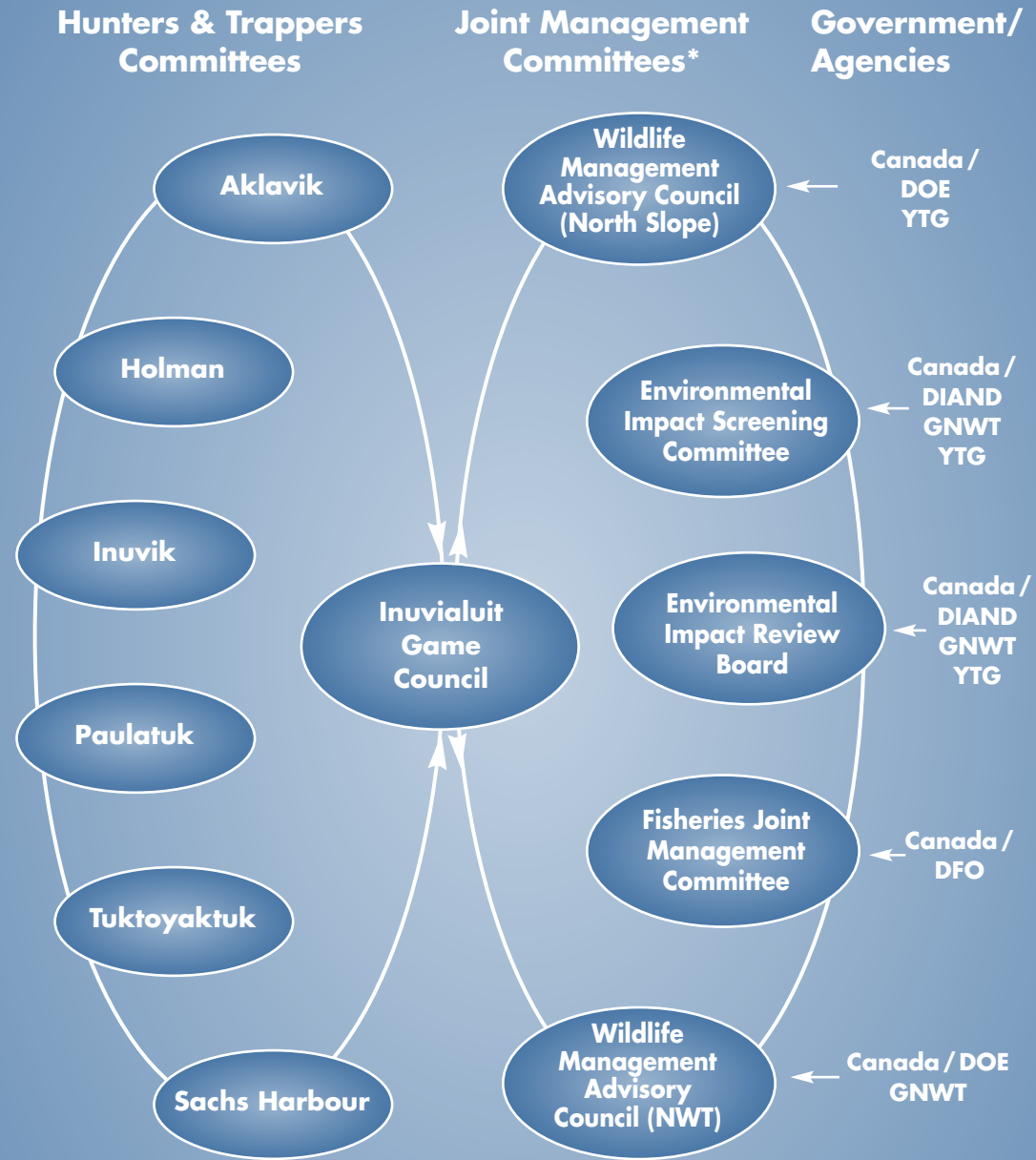
APPENDIX 4: CANDIDATE AREAS FOR SPECIAL CONSERVATION MANAGEMENT



**APPENDIX 5:
ORGANIZATION OF IFA ENVIRONMENTAL AND WILDLIFE MANAGEMENT BODIES**

ORGANIZATION

of environmental and wildlife management bodies established under the Inuvialuit Final Agreement



The Joint Secretariat provides administrative, technical, and logistical support to the organizations and committees.

* Participation is 50% Inuvialuit and 50% Government
 GNWT-Government of the Northwest Territories; YTG-Yukon Territorial Government;
 DFO-Department of Fisheries & Oceans; DOE-Department of the Environment

TAIMANGA NUNAPTA PITQUSIA

THE LAND AND THE LEGACY



Yukon Government



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