

# Working Together for Caribou



*Draft Nunavut Caribou Strategy Framework  
March 2010*



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Department of Environment

Havakviat Avatiliqiyikkut

Ministère de l'Environnement

## **Executive Summary**

The Government of Nunavut (GN) has made it a priority to create a strategy that will lay the foundation for future programs and decisions affecting caribou and people whose lives are affected by caribou in Nunavut. In developing this strategy, the GN is seeking to gather input from Nunavummiut, and others interested in caribou, by conducting public consultations across Nunavut. As part of these consultations, the GN has prepared this draft of the Nunavut Caribou Strategy which has been released for public comment.

## **The Importance of Caribou**

Caribou are important for many reasons. Within the Arctic ecosystem, they are a keystone species supporting much of the tundra's biodiversity. As a resource, they provide food, support social and cultural activities, and drive local economies.

In economic terms, estimates based on the Nunavut Wildlife Management Board's harvest study indicate that Inuit harvest over 24,500 caribou annually, with a replacement food value of well over \$22 million.<sup>1,2</sup> In addition to the value of subsistence harvesting, other activities that rely on the use of caribou such as commercial harvesting, outfitting, tourism, and arts and crafts contribute substantially to Nunavut's economy. However, as a renewable resource, the full economic potential of caribou is the product of its current and future value. If caribou herds persist in Nunavut, the continued use of this resource, even at today's levels, will have a cumulative value that is immeasurable.

Use of caribou contributes significantly to the mental and physical well-being of Nunavummiut. Caribou provide a secure and reliable source of healthy and nutritious food for many people. Indirectly, the various social and cultural activities surrounding the use of caribou also promote well-being. To Nunavummiut, caribou have intrinsic value which far exceeds the economics of subsistence harvesting and other activities. The relationship with caribou is a fundamental part of Inuit identity that has been passed from one generation to the next for thousands of years. Hunting caribou is not simply a means of providing food or income. The many activities associated with hunting, such as travelling on the land, holding ceremonies and community feasts are integral to transferring and retaining knowledge about traditional culture and about caribou themselves. These activities are also about spending time with family, teaching younger generations and maintaining healthy communities.

## **The Challenges**

### **Changing Status of Caribou**

There are at least 23 herds of caribou in Nunavut today ranging in size from several hundred Peary caribou roaming across the vast islands of the High Arctic to the tens or hundreds of thousands of animals which migrate across the tundra

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<sup>1</sup> The Nunavut Wildlife Harvest Study: Final Report. 2004. Nunavut Wildlife Management Board. 822 pp.

<sup>2</sup> A more recent study, which focused only on the Beverly and Qamanirjuak herds found the net value of the annual caribou harvest to be approximately \$20 million (InterGroup Consultants Ltd. 2008). Of this \$20 million equivalent in harvest, Nunavut, Manitoba, Saskatchewan, and the Northwest territories accounted for \$11.8, \$3.8, \$3.4 and \$0.8 million, respectively.

and taiga of mainland Nunavut. Knowledge regarding the size, distribution, movement patterns, habitat needs, overall health and status of these herds is highly variable and in many cases lacking. This lack of knowledge is a concern since it limits our ability to understand how caribou herds change over time and the potential impact of human activities.

Both Inuit traditional knowledge and scientific evidence agree that caribou herds go through long cycles of abundance and scarcity in response to environmental factors. These are natural cycles that have occurred for millennia, and are thought to be linked to the effect of climate and caribou populations on forage species. It is only in recent history that man-made disturbances may have influenced caribou seasonal cycles. Currently, many of the herds in Nunavut are declining with herd sizes considerably lower than those recorded in previous decades. The mechanisms of these declines are not well understood but there is concern that human activities could be contributing to this change.

It is likely not possible or desirable to halt or stabilize natural changes in the abundance of caribou and attempts to manipulate parts of the cycle may have unintended ecosystem-wide consequences. For people living in Nunavut, it is not a matter of attempting to manage these natural changes but instead adapting to them by planning for periods when caribou are scarce or abundant. However, if current declines in the size and condition of some herds are due in part to the disruption of natural cycles by human activities, these activities can and should be managed to ensure the recovery of herds and continued access to caribou by future generations of Inuit. In so doing we must closely monitor caribou herds in Nunavut during this period of dramatic changes, deepen our understanding of the factors responsible for these changes (natural and human-caused), and determine what if anything can or should be done to influence these changes.

### **Growing Human Influence of Caribou and Caribou Habitat**

Human use of caribou and caribou habitat is growing and changing. In recent years, there has been a large increase in mineral exploration and development in Nunavut, often in caribou habitat, and sometimes specifically in caribou calving areas. At the same time, harvesting means and patterns have changed, reflecting the evolution of society. With Nunavut's growing human population and the wide-spread use of technologies, such as high powered rifles, scopes, snowmobiles, ATVs, and global positioning systems, harvesting efficiency and overall hunting pressures have increased on some herds. Furthermore, the use of caribou has diversified from traditional subsistence hunting to commercial harvests and outfitting.

The on-going use of caribou and their habitat is both desirable and necessary for the cultural, social and economic well-being of Nunavummiut. As human use of caribou and caribou habitat increases, however, so too do the risks. With herds numbers already low, increased pressures from development, unmanaged

harvest, as well as the possible impacts of global climate change, have the potential to greatly exacerbate declines to an unsustainable degree. Consequently, there is a need for careful management of human activities affecting caribou to avoid unacceptable and irreversible impacts on the health of herds; impacts which not only jeopardize the integral role of caribou in the Arctic ecosystem but also the use of this resource by future generations of Inuit. At same time, we also face the challenge of avoiding limitations on the use of caribou or caribou habitat which are contrary to the long-term economic, social and cultural interests of Inuit.

### **A Shared Resource and Shared Responsibility**

The right to use and the responsibility to manage caribou and their habitat is shared by many organizations and individuals. Within Nunavut, responsibility for management is shared amongst several levels of government, Inuit organizations, land and resource boards established under the *NLCA*, and wildlife comanagement organizations such as the Regional Wildlife Organizations (RWO's) and Hunters' and Trappers' Organizations (HTO's). Collectively, these organizations are responsible for land-use planning, environmental impact assessment and wildlife management at the territorial, regional or community levels. The right to use caribou or their habitat is shared amongst a variety of stakeholders including the public and industry; Inuit and Inuit-Owned businesses being first and foremost amongst them.

The Government of Nunavut, through the *NLCA* and the *Nunavut Wildlife Act* has legislated responsibility for the management of caribou and caribou habitat in Nunavut. These responsibilities include research and monitoring, harvest management, habitat management, land-use planning and environmental impact assessment. In particular, the GN works closely with the Nunavut Wildlife Management Board (NWMB), as the main instrument of wildlife management in Nunavut, and with RWO's and HTO's to monitor caribou and manage harvesting activities. The GN is also engaged with the Nunavut Planning Commission (NPC) and Nunavut Impact Review Board (NIRB) in land-use planning and environmental assessment activities relating to caribou. A key feature of all of these activities is the commitment and obligation to work closely with Inuit through collaborative research and management activities, consultation and shared decision-making; a process referred to as co-management.

Some of Nunavut's largest caribou herds have ranges that extend into neighboring provinces and territories. As in Nunavut, caribou and their habitat are subject to human use in these areas by a variety of stakeholders. In managing these trans-boundary herds, the GN and its partners in Nunavut must work closely with management authorities and stakeholders in these neighboring jurisdictions in-order to avoid conflicts or over-exploitation in the use of these resources.

Given the multi-jurisdictional and multi-stakeholder environment associated with caribou, a significant challenge facing the GN and its partners is to effectively coordinate the shared use and management of caribou and caribou habitat.

## **The Uncertainties**

There are many uncertainties surrounding caribou and the actions required to address the challenges described above.

Amongst wildlife managers, environmental regulators and land-use planners, there are uncertainties about things such as; current and future changes in the size and productivity of some caribou herds especially the factors responsible for those changes; the distribution of sensitive habitats; the types and quantity of habitat needed to support viable herds; the extent to which development and other land uses affect caribou; the combined effects and interactions between different human activities; whether there are identifiable thresholds beyond which human impacts become too great or irreversible.

Amongst harvest managers and hunters, there are uncertainties about how harvesting affects caribou populations. Much of this uncertainty stems from a lack of basic information on the levels, trends, composition and distribution of harvesting. Our limited understanding of herd demographics is also a problem. Without this information it is not possible to assess the impact of harvesting on herd status or determine whether there is a need for active harvest management measures.

Amongst those interested in developing Nunavut's economy there are uncertainties and concerns about; where to go and how to develop land while avoiding sensitive habitat or direct conflicts with caribou; what procedural and regulatory challenges will arise; how to ensure coordination and consistency amongst decision-makers and regulatory authorities involved in reviewing and approving potential development projects; the economics of development projects subject to high exploration, construction and operating costs in the face of changing global markets.

These uncertainties create risks; risks that the decisions we make concerning land-use, environmental management and wildlife management will stifle economic and social development, reduce investment in Nunavut, unnecessarily limit peoples' rights to hunt, cause irreversible damage to key habitats and ultimately threaten the long-term viability of herds. One of the ultimate challenges facing the GN and its partners with respect to caribou management is therefore to resolve uncertainty and manage risk within acceptable limits thereby enabling effective decision-making.

## **The Needs**

The challenges and uncertainties surrounding caribou management in Nunavut can be addressed through:

- Investment in research and monitoring to acquire needed information.
- Coordination and cooperation amongst regulatory authorities and resources users.
- Adopting a clear and consistent legislative and policy framework.
- Supporting transparent, inclusive, informed and responsive decision-making processes.
- Implementing measures to manage development and other activities occurring in caribou habitat, especially that most sensitive to impacts.
- Supporting the use of caribou as a renewable resource and working with communities during periods when access to caribou is limited.

## **Scope and Intent of the Strategy**

In response to the identified needs, the GN has created the *Nunavut Caribou Strategy*. This management strategy is intended to provide a broad framework to guide caribou management in Nunavut. It is an “umbrella” strategy encompassing all 23 known caribou herds in Nunavut, including feral reindeer. The Strategy works within the co-management approach outlined in the *NLCA*. As such, its’ success is dependent on the participation of many organizations and individuals in Nunavut. Since some herds are shared with the Northwest Territories, Manitoba and/or Saskatchewan, the Strategy also take into account the need to work closely with our neighbouring jurisdictions involved in caribou conservation and management.

This strategy does not replace herd-specific management plans, recovery plans or land use plans. Detailed management plans for specific herds and a prioritized schedule for taking specific actions that are referred to in the Strategy will be created as stand-alone documents that are reviewed on a more frequent basis than the Strategy itself.

This strategy seeks to develop an environment in which caribou management decisions are based on sound information and are governed by and subject to the principles of conservation. Within this context, the intent is to make decisions and take actions that serve and promote the long-term economic, social and cultural interests of Inuit and other Nunavummiut. Through this strategy and the actions within it, there is also intent to engage the public and promote confidence in caribou management by inviting participation, enhancing communication and promoting a common understanding.

This strategy involves working with our partners on a program of monitoring and assessment in order to provide the GN and other stakeholders with the information required for confident on-going management of caribou herds over the long term.

## **Vision**

The *Nunavut Caribou Strategy* is based on Nunavummiut's desire for healthy and sustainable caribou herds capable of supporting harvesting and coexisting alongside responsible land development and other human activities. Through our precautionary approach, caribou will always be present on the land and the land will always be capable of supporting caribou. However, the management of caribou will not unduly limit Nunavut's economic and social development, of which caribou are part.

This vision encompasses the spirit and intent of the *Nunavut Land Claims Agreement* (NLCA) which recognises the need for a system of wildlife and land management that provides optimum protection to the renewable resource economy and the harvesting rights, privileges and priorities of Inuit. In doing so, it is recognised that Inuit systems of wildlife management contribute to the conservation of wildlife and protection of habitat. The Strategy is also consistent with the Government of Nunavut's mandate to ensure stewardship of our environment and wildlife as set out in *Tamapta 2009-2013*.

## **Guiding Principles**

The following principles will guide caribou management decisions in Nunavut:

### **1. Inuit Societal Values and Knowledge:**

Inuit societal values and knowledge are an important part of the management of wildlife and habitat in Nunavut and are integral to this strategy. The *Nunavut Wildlife Act* outlines the guiding principles and concepts of *Inuit Qaujimaqatuqangit* (IQ) which apply to wildlife management in Nunavut. These principles were used to guide the development of this Strategy and must be kept in mind throughout its implementation.

### **2. Precautionary Approach:**

In accordance with the *Nunavut Wildlife Act* and the *NLCA*, while the best available information must guide caribou management decisions, there is a need to err on the side of caution when dealing with caribou conservation measures and the risk of serious or irreversible harm. The absence of certainty should not be a reason for postponing reasonable conservation



measures. Every effort, however, must be made to fill gaps in our knowledge which create uncertainty.

### **3. Interests of Inuit:**

Caribou management in Nunavut should as a priority serve and promote the long-term social, economic and cultural interests of Inuit.

### **4. Integration of Inuit Traditional Knowledge and Science:**

Decisions will be based on integrating the best available information (science and Inuit traditional knowledge).

### **5. Consideration of Cumulative Effects:**

Cumulative effects of both human and natural impacts need to be considered when making caribou management decisions.

### **6. Education:**

It is important to foster interest, learning, and communication about both caribou and their management.

## **Key Components of the Strategy**

The Strategy has 5 key components each made-up of a series of objectives, policy statements and actions.

- 1. *Qanuqtuurniq* (Information and Knowledge Acquisition):** Ensuring appropriate information is available for management decisions.
- 2. *Piliriqatigiingniq* (Working together):** Engaging all partners with an interest in caribou management (including public education).
- 3. *Avatittinnik Kamatsiarniq* (Environmental Stewardship):** Managing the impacts of human activities in caribou habitat.
- 4. *Aajiiqatigiingiq* (Collaborative Decision Making):** Developing a policy framework for decision-making in caribou management.
- 5. *Inuillu Tuktuillu* (People and Caribou):** Supporting the use of caribou as a renewable resource and enhancing the relationship between people and caribou.

## Key Component Objectives

### ***1:0 Qanuqtuurniq (Information and Knowledge Acquisition)***

Development of a solid information base for Nunavut's caribou populations is critical. Caribou in Nunavut have been studied, when possible, for decades, but lack of baseline information and limited on-going monitoring has resulted in important gaps in our knowledge about caribou population health and sustainability. Additionally, there is a need to understand the levels and drivers of public participation, and to promote public involvement in caribou management in Nunavut.

This lack of information impedes the GN's ability to assess individual and herd-level effects on caribou due to changes in the environment (i.e. climate change, increased development, etc.) and raises uncertainties about both caribou herd status and the effectiveness of potential management actions intended to assist in the recovery of troubled caribou herds. Lack of information creates indecision and impedes the GN's ability to serve and promote the long-term economic, social and cultural interests of Inuit and Nunavummiut. Lack of information also increases the risks that decisions regarding human activities will have an unacceptable and irreversible impact on caribou and their habitat.

Continuing research and monitoring will help ensure that future management decisions are based on the best possible information. The information derived from this work will allow us to track the size and status of herds, understand the natural and human-caused factors which influence herd size and productivity, and ultimately determine when and how it is necessary to intervene in-order to retain healthy, viable caribou herds.

**1.1 Objective:** To obtain current and reliable information that will facilitate management of caribou based on the principles of conservation while serving and promoting the long-term economic, social and cultural interests of Nunavummiut and inviting public participation and public confidence, particularly amongst Inuit.

**Policy Statement:** Information needs for caribou management must be clearly defined. Accordingly, in consultation with comanagement partners and Nunavummiut, the GN will:

- **Action 1.1a:** Identify gaps and deficiencies in existing knowledge and determine future information needs, including those relating to cumulative effects.

- **Action 1.1b:** Identifying priorities for baseline research and on-going monitoring including those needed to support land-use planning and the Nunavut General Monitoring Program.

**Policy Statement:** Management of caribou should draw upon both scientific and Inuit traditional knowledge. In so doing, there is a need to:

- **Action 1.1c:** Develop a policy to support the collection of Inuit traditional knowledge and its use in caribou management.

**Policy Statement:** Information needed for caribou management must be acquired by means of well planned and credible research. Accordingly, the GN will:

- **Action 1.1d:** Develop and implement a plan for the on-going monitoring and researching of herds and their habitat, with priority given to those herds identified as declining or with inadequate baseline information.
- **Action 1.1e:** Ensure that research and monitoring activities are based on validated methods and widely accepted standards or protocols for research.
- **Action 1.1f:** Research and develop new or alternative tools for caribou monitoring and management, including methods consistent with Inuit values respecting handling of wildlife.
- **Action 1.1g:** Engage communities in collecting and using harvest data and hunter observations to track caribou health and distribution.
- **Action 1.1h:** Work with industry to better integrate the localized monitoring of caribou around development sites with long-term population-level research on caribou herds.

**Policy Statement:** As human activities within caribou habitat increase, there is a growing need for information. To ensure that herds are managed properly and support sustainable socioeconomic development, a renewed investment in research and monitoring is required to meet current and future information needs. Accordingly, the GN will:

- **Action 1.1i:** Increase Nunavut's capacity to conduct caribou research and monitoring.
- **Action 1.1j:** Explore options for long-term strategic partnerships with other government agencies and comanagement organizations in Nunavut that require information on caribou.

- **Action 1.1k:** Create formal partnerships with jurisdictions that share caribou herds with Nunavut in-order to establish joint agendas and cost-sharing arrangements for research.
- **Action 1.1l:** Work with all parties, including NGO's and commercial stakeholders, to examine options for establishing a joint caribou monitoring fund.
- **Action 1.1m:** Facilitate increased third-party research by universities and other non-government institutions, with an emphasis on baseline studies of caribou ecology that will enhance our understanding of processes and factors affecting the status of herds.

## **2.0: *Piliriqatigiinniig or Iqqanaijaqatigiit (Working Together)***

Caribou management in Nunavut is a complex process. Decision-making within the territory follows the integrated system of land and resource co-management outlined in the *NLCA*. Communities and local users expect and need to be consulted and involved in the management of caribou. Additionally, two territories, two provinces, several aboriginal groups, federal departments, the mining industry and other land users, as well as various advisory boards are potentially partners in the management of particular herds. It is essential that strong and functional relationships exist between the GN and its partners. There is a need to achieve a common understanding of the concerns surrounding caribou and the actions needed to address these concerns.

**2.1 Objective:** Build relationships with inter-jurisdictional partners.

**Policy Statement:** The basis of good management is decisions made with good information. Accordingly, the GN will work with its inter-jurisdictional partners to:

- **Action 2.1a:** Establish joint priorities, plans and schedules for monitoring and other research activities needed to support the management of shared herds.
- **Action 2.1b:** Adequately resource and ensure equity in the burden of monitoring and other research activities.
- **Action 2.1c:** Undertake joint public education and communication activities regarding shared herds.

**Policy statement:** Effective management requires integration of government activities across a herd's range. To this end, the GN will work with its inter-jurisdictional partners to:

- **Action 2.1d:** Provide consistency, compatibility or equivalency in policies, programs and management actions affecting shared herds.
- **Action 2.1e:** Establish inter-governmental agreements or memoranda of understanding, where necessary, to enhance coordination and cooperation and to promote effective cross-jurisdictional management of shared herds (see Action 4.2b).
- **Action 2.1f:** Develop and implement a management plan for each shared herd.
- **Action 2.1g:** Freely share information and expertise.

**Policy Statement:** Inter-jurisdictional advisory bodies play key role in linking the caribou management activities of Nunavut and its neighbouring provinces and territories. There is a need to work with existing advisory bodies and support the development of new inter-jurisdictional partnerships, where necessary, to identify problems for caribou management and explore the range of possible solutions. Accordingly, the GN will:

- **Action 2.1h:** Work with existing caribou management boards in the development of herd management plans and coordination of management activities.
- **Action 2.1j:** Support the establishment of similar advisory boards for other cross-jurisdictional herds and create opportunities for participation by a range of stakeholders including industry.

## **2.2 Objective:** Build relationships within Nunavut

**Policy Statement:** For the benefit of all stakeholders, there is a need for decision-makers and regulators in Nunavut to adopt a coordinated and consistent approach to caribou management. Accordingly, the GN will work closely with the resource management boards and Canada to:

- **Action 2.2a:** Establish joint goals, objectives, priorities and plans for caribou monitoring and management.
- **Action 2.2b:** To the extent possible, adopt joint policies relating to caribou in key areas of mutual interest such as land-use planning, environmental impact assessment, protected areas and economic development.
- **Action 2.2c:** Create multi-year partnerships to address monitoring needs in areas of mutual interest.

**Policy Statement:** As a basis for effective participation, there is a need to maintain public awareness and understanding of caribou management issues. Accordingly, the GN will:

- **Action 2.2d:** Provide communities with on-going information and updates on the status of adjacent caribou herds.
- **Action 2.2e:** Develop an education program on caribou ecology and management issues to educate and inform the public, including youth and other land users.
- **Action 2.2f:** Where possible, incorporate caribou management issues into curricula in schools and post-secondary programs.

**Policy Statement:** Nunavummiut must play an active role in caribou management. To this end, the GN will:

- **Action 2.2g:** Create opportunities for community involvement in monitoring and other research activities.
- **Action 2.2h:** Support the development of community capacity to monitor and manage caribou.
- **Action 2.2i:** Conduct effective public consultation on caribou management decisions.
- **Action 2.2j:** Work with the Elders Advisory Committee when considering caribou management actions.

### **2.3 Objective:** Information access and sharing.

**Policy Statement:** Effective storage and timely sharing of information is essential to ensuring that decisions affecting caribou are based on the best available information. As the primary organization conducting research, the GN must play a leading role in managing and distributing information on caribou. Accordingly, the GN will:

- **Action 2.3a:** Systematically archive all existing GN caribou data.
- **Action 2.3b:** Make caribou data and information readily available to other organizations involved in harvest management, land-use planning and environmental impact assessment within the range of each herd.
- **Action 2.3c:** Work with industry to make caribou information available for baseline studies and impact assessments.

### **3.0 Avatittinnik Kamatsiarniq (Environmental Stewardship)**

Development and caribou can readily co-exist and contribute to the on-going cultural, social and economic well-being of Nunavummiut. However, in managing development in caribou habitat there is a need to implement the principles of conservation and proceed cautiously to ensure these activities do not threaten the long-term health of herds. In circumstances where impacts cannot be mitigated or managed within acceptable limits, the maintenance of healthy herds capable of meeting the basic needs of Inuit is the priority.

If too much land is altered by the construction of infrastructure such as mines, roads, and tourism facilities, or if development occurs in habitat needed most by caribou, the capacity of the land to support healthy herds will diminish, perhaps permanently. In addition to physical changes in habitat, human activity on the land for whatever purpose can affect the behavior of caribou and their use of habitat which in turn can affect herd health. Caribou are adaptable and can tolerate human presence. However, there are limits to this tolerance and adaptability. Modeling predicts that frequent interruptions to foraging on calving, post-calving, and summer ranges could stress animals over time, reduce body condition, and possibly lower pregnancy rates, and that this could be more likely in caribou that are already environmentally stressed. Finally, long-term changes in environmental conditions such as climate, the scope of which extends well beyond Nunavut's borders, have the potential to affect caribou and habitat within Nunavut. Individually, each of these human interactions with caribou may or may not have detectable effects on the status of herds. However, when combined their cumulative effects may lead to dramatic impacts.

Land-use planning and environmental impact assessment processes are the primary mechanisms for managing development within caribou habitat. In 2007, Cabinet approved the GN's renewed involvement in land-use planning after the Nunavut Planning Commission (NPC) succeeded in establishing broad planning policies, objectives and goals for Nunavut in conjunction with Government. The GN has committed to supporting NPC in its goal to develop (by 2011) a Nunavut-wide land-use plan that will guide and direct future resource use and development. In creating this land-use plan, there is a need to consider caribou. In particular, there is a need to clearly identify sensitive habitat, determine the types of activities which should be permitted in these areas and establish strong protection and mitigation measures necessary to preserve ecosystem integrity and herd health. Existing caribou protection measures applied by regulators to land-use planning and environmental assessment in Nunavut are outdated and do not reflect current knowledge about caribou and their habitat. Now is the time to revise these measures as plans for the future development of Nunavut are laid out and caribou herds are undergoing some of the most dramatic changes seen in decades.

**3.1 Objective:** Managing human activities in caribou habitat through land-use planning and environmental impact assessment.

**Policy Statement:** Active engagement in existing land-use planning and environmental assessment processes provides effective mechanisms for the management of development in caribou habitat in Nunavut. Accordingly, the GN will:

- **Action 3.1a:** Increase capacity to proactively collect and analyze data and compile information useful for land-use planning and environmental assessment.
- **Action 3.1b:** Making this information available to other government agencies and comangement organizations in a timely and suitable format.
- **Action 3.1c:** Invest in research and monitoring to meet information needs identified through land-use planning, environmental assessment and the Nunavut General Monitoring Program.
- **Action 3.1d:** Provide timely and comprehensive input into land-use plans, environmental screenings, impact statements and assessments.
- **Action 3.1e:** Develop a set of general guidelines for mitigating development impacts on caribou.
- **Action 3.1f:** Develop recommendations on the methods and standards of research required to adequately monitor and mitigate impacts on caribou around sites of development.
- **Action 3.1g:** Work with industry to integrate short-term, local monitoring and mitigation activities into long-term, herd-level research programs the results of which will support future sustainable development and the management of caribou.

**3.2 Objective:** Management of Sensitive Habitat

**Policy Statement:** Management of development activities in sensitive caribou habitats such as calving grounds and post calving areas requires special attention. Concerns over human impacts in these areas and a lack of information erode investor confidence, slow regulatory processes, and jeopardize the future sustainability of herds. A key need in addressing these issues is to ensure that our knowledge base and capacity to properly assess and mitigate impacts remain in concert with the pace of development. Accordingly, the GN will:



- Action 3.2a: Use information currently available to identify and raise awareness concerning areas of known or potentially sensitive habitat within the range of each caribou herd.
- Action 3.2b: Working with other governments, comanagement partners, and other stakeholders, develop and adopt a set of revised caribou protection and mitigation measures to manage human activities in sensitive habitat for application in land-use planning and environmental assessment.
- Action 3.2c: Invest in research focussing on (a) increasing understanding of the distribution of sensitive habitat, (b) studying the interactions between existing human activities and caribou in-order to explore the connection between caribou persistence and industrial development over short and long-term temporal scales and over fine and coarse spatial scales, and (c) determine the effectiveness of protection and mitigations measures.
- Action 3.2d: Place priority on research in areas of habitat that are of mutual interest with respect to caribou and resource potential.
- Action 3.2e: Develop and test new and flexible management tools, including mobile protection measures based on satellite telemetry (e.g., short term area closures when caribou are in the vicinity).
- Action 3.2f: Utilize the results of new research to update caribou protection and mitigation measures.
- Action 3.2g: Working with regulatory authorities, comanagement partners, and other stakeholders, explore options for preserving calving and post-calving habitat.

### **3.3 Objective:** Managing cumulative impacts

**Policy Statement:** The GN supports the need to incorporate cumulative effects into land and caribou management. The assessment of cumulative effects should occur at a regional scale and should include all activities occurring on caribou range.

- **Action 3.3a:** Work with partners to review the likelihood and range of consequences of cumulative effects and to identify options and methods for delineating thresholds for human activity.
- **Action 3.3b:** Develop models to assess cumulative effects of human and natural impacts.

- **Action 3.3c:** Incorporate long-term case studies into the monitoring and research plan created under this Strategy that are designed to test hypotheses or model predictions, and quantify cumulative impacts on caribou.

#### **4.0: Aajiqatigiingiq (Policy and Legislative Framework)**

In setting out a strategy for caribou in Nunavut, we must ensure the right tools are in place to guide our decisions concerning the management of herds and their habitat, and our investments in things such as research. A framework of legislation and policies is needed to ensure decisions are objective, accountable, consistent and effective. These decision-making tools must be unambiguous in order to reduce uncertainty surrounding their intent or use, yet flexible enough to allow us to adapt to unforeseen circumstances. They must also be practical so that implementation does not become a barrier to success.

Within this legislative and policy framework, there is a need to ensure that decision-making processes operate effectively. Decisions affecting caribou must be anchored in a solid information base, respectful of the principles of conservation, and considerate of the long-term economic, social and cultural interests of Inuit. To promote understanding and confidence in caribou management, decision-making processes must be transparent, inclusive and inviting to stakeholders and the public. Decisions must also be made fast enough to be responsive to the need for action. We must not allow critical decisions to be delayed because of unwieldy process or a lack of information.

The provisions of the *NLCA* and the *Nunavut Wildlife Act* provide the GN with a sound legislative framework for the current and future management of caribou and other wildlife in Nunavut. However, the *Nunavut Wildlife Act* is new legislation which has yet to be fully implemented. Enabling regulations for parts of the Act are under development; more may be needed in future. Policies to guide interpretation and application of certain sections of the Act are also required some of which will affect the management of caribou. Currently, the GN has no specific policies governing research, monitoring, management or the protection of caribou and their habitat. Now is an opportune time to develop such policies.

**4.1 Objective:** An objective, accountable, consistent and effective approach to management of caribou.

**Policy Statement:** Government research programs and management initiatives should be guided by clear policy positions on issues concerning caribou. To this end the GN will:

- **Action 4.1a:** Conduct a review to identify policy needs and priorities.

- **Action 4.1b:** Address gaps and deficiencies through the adoption of policies on all key issues concerning caribou, in particular those relating to development and application of protection and mitigation measures governing human activities in sensitive caribou habitat, and those relating to the recovery of depleted herds.
- **Action 4.1c:** Ensure that programs and adequate resources are in place to implement these policies.

**Policy Statement:** Legislative tools to manage and protect caribou must be unambiguous, relevant, responsive and practical. To this end, the GN will

- **Action 4.1d:** As required, draft new or revised regulations to support the protection and enhancement of caribou and their habitat, in particular measures design to mitigate the impacts of development activities.
- **Action 4.1e:** Develop practical mechanisms and adequately resource programs to achieve regulatory compliance with caribou protection and monitoring measures, including interagency coordination for enforcement of land use permit conditions associated with development activities.

#### **4.2 Objective:** Support effective decision-making.

**Policy Statement:** In making decisions regarding caribou management, there is a need to follow the multi-step processes specified in federal/territorial legislation and the NLCA. In doing so, regulatory authorities must ensure that decisions are; (a) based upon the best available information, presented in an appropriate format, (b) inclusive of all stakeholders and inviting of public participation, (c) made in a timely fashion that is responsive to the need for action. Accordingly, the GN will work to promote an effective decision-making process by:

- Implementing **Actions 2.2d-j and 2.3a-c** of this strategy.
- **Action 4.2a:** To the extent possible, developing protocols or prescriptions specifying appropriate management actions to be taken in response to monitoring information.
- **Action 4.2b:** Supporting the development of herd management plans and inter-governmental agreements containing approved management measures/approaches.
- **Action 4.2c:** Monitoring and periodically reporting on the effectiveness of decisions and the management actions involved.

#### **5.0: Inuillu Tuktuillu (People and Caribou)**

Managing caribou in Nunavut is not only about ensuring that herds remain healthy and viable. It is also about preserving, protecting and enhancing the relationship between people and caribou. Caribou are a renewable resource, which if carefully used and managed will provide benefits to future generations of Inuit. There are many uses of caribou and there will be times when it becomes necessary to place priority on these uses to avoid conflict or the over-utilization of this valuable resource. There may also be times when peoples' access to caribou becomes limited; for example when herds undergo major reductions in size or changes in range use. There is a need to anticipate these events; to develop plans that will reduce hardships, offer alternatives and support those most affected by this loss of access.

**5.1 Objective:** To promote the wise use and sustainable harvesting of caribou.

**Policy Statement:** Harvesting can have a direct impact on the size and sustainability of a caribou herd, particularly if numbers are already low. However, to fully understand the role of harvesting in the management of caribou, there is a need to obtain accurate information on the levels, trends, composition and distribution of harvest. Accordingly, the GN will work with HTO's and other co-management partners to:

- **Action 5.1a:** Identify herds for which harvest information is needed and the most appropriate means to acquire it.

**Policy Statement:** While acknowledging the importance of subsistence harvesting and respecting Inuit rights to harvest as laid out in the *NLCA*, the GN recognizes the need to manage harvesting when necessary for the purposes of conservation, public safety or the humane treatment of animals. It is also recognized that there are numerous ways to manage harvesting which do not necessarily require regulations. Accordingly, the GN will:

- **Action 5.1b:** Work with HTOs, RWOs and the Elders Advisory Committee to outline a code of conduct for caribou harvesting, drawing on traditional hunting practices.
- **Action 5.1c:** Work with partners and the Elders Advisory Committee to develop programs targeted at educating youth on hunting rights and responsibilities, and harvesting ethics.
- **Action 5.1d:** Where necessary, develop herd management plans which may manage harvesting.
- **Action 5.1e:** Work with HTOs and other comanagement partners to support harvest management based on the principles of IQ and Inuit systems of wildlife management as provided for under the *NLCA*.

**Policy Statement:** The on-going use of caribou as a renewable resource is vital to the health, social, cultural and economic well-being of Inuit and other Nunavummiut. Accordingly, the GN will:

- **Action 5.1f:** Implement programs designed to highlight the various values of caribou and promote the sustainable use of this resource.
- **Action 5.1g:** Develop and implement a strategy to promote inter-settlement trade in caribou and other country-food products within Nunavut.
- **Action 5.1h:** Monitor and periodically report on the presence of disease in caribou herds to protect public health and maintain public confidence in caribou as a safe and secure food source.

**Policy Statement:** As a resource, the greatest value of caribou lies in its ability to meet the basic needs of Inuit as defined in the *NLCA*. The ability to meet these needs should not be limited by other uses of caribou or their habitat. Accordingly, the GN will:

- **Action 5.1i:** In cooperation with other governments, comanagement boards, and communities, lay-out priorities for the use of caribou in Nunavut through the development of broad wildlife-use policies, herd-specific management plans or as part of regional and community-based socioeconomic plans.
- **Action 5.1j:** Place priority on research and monitoring activities that will support the on-going use of caribou by Inuit to meet their basic needs.
- **Action 5.1k:** Through land-use planning and environmental impact assessment activities support the maintenance of healthy caribou herds capable of sustaining harvesting and the protection of traditional hunting areas.
- **Action 5.1l:** Ensure that socioeconomic programs linked to use of caribou support the fulfillment of basic needs over other uses such as commercial harvesting.

**5.2 Objective:** Mitigate impacts on people when access to caribou is reduced.

**Policy Statement:** When access to caribou is limited, the impacts on people must be addressed. Accordingly, the GN will:

- **Action 5.2a:** Work with communities to mitigate socioeconomic impacts and where possible seek ways to support the on-going subsistence harvesting of caribou or use of alternative sources of country food.
- **Action 5.2b:** Through economic investment, place an emphasis non-consumptive (i.e. tourism) and low-consumption (i.e. outfitting, arts and craft) activities that have a high economic return per caribou over other uses of caribou.

## Next Steps

### Implementing the Strategy

This strategy outlines the things we need to do for caribou management in Nunavut but it does not specify how or when each action will be taken. These details will be provided in an Implementation Plan that will be developed to accompany the Strategy. Given limited resources and other considerations, it is not practical to contemplate that all of the actions set out in the Strategy will be taken at the same time. Instead, the Implementation Plan will describe a schedule for taking actions in a series of logical stages starting with the highest priorities. Some of these priorities could reasonably be identified now while others will be identified during future public consultation surrounding the Strategy. Many of the actions laid out in the Strategy also require participation by other organizations besides the GN. We will therefore need to work closely with our partners to set priorities.

With mineral exploration, mine development and other development activities at a low point in their cycles, now is perhaps the most appropriate time to take certain actions such as identifying sensitive habitat, revising caribou protection measures and increasing research and monitoring efforts. Doing so will place us in a good position to inform future land-use planning, environmental assessment processes and investment in Nunavut. Other priorities might include formalizing our links with governments in neighbouring jurisdictions as a first step in managing shared herds and developing herd management plans. Priority might also be placed on implementing the Strategy for certain herds such as those listed under the *Species at Risk Act*, those thought to be undergoing the most significant changes or those for which our information is most inadequate.

This Strategy will require a significant increase in the human and financial resources allocated to caribou management by the GN and its partners. The major portion of this increased investment is required for monitoring and other forms of research. To meet these resource needs, the GN and its partners will need to work closely together on an on-going basis to create joint programs, pool expertise and combine organizational capacity in-order to create a cost effective and efficient system for managing caribou. This investment should be viewed

not simply as necessary for caribou but also as means to support the future sustainable development of Nunavut.

### **Monitoring Our Success**

As we proceed in implementing the Strategy, there will be a need to monitor our progress. Our success will be measured in three basic ways. First, by the number of actions we take and complete. Second, by peoples' sense of how well caribou management is working; for example, whether there is improved communication, greater collaboration, increased knowledge and more effective decision-making. Finally, our ultimate measure of success will be the changing status of Nunavut's caribou herds.

At least once every 5 years, the GN will review and evaluate progress that has been made in implementing the Strategy. This review will be made public and published as part of the GN's Statutory Report on Wildlife Management that is required under the *Nunavut Wildlife Act*. We will determine not only our success in taking the actions called for under the Strategy but also the effectiveness of those actions in maintaining healthy caribou herds that coexist alongside socioeconomic development.

### **Updating the Strategy**

The Strategy has no predetermined life-span but it is expected to change over time as actions are taken, new priorities arise and circumstances change. Therefore, at least once every 5 years, following a review and evaluation, the Strategy will be updated. This updating process will take into account changes in status of caribou herds and the long-term economic, social and cultural interests of Nunavummiut. Actions under the Strategy will be removed, modified or added to meet the changing needs. It will be an inclusive process involving consultation with all stakeholders.

### **Your Feedback**

Your feedback on the content of this strategy or its implementation is needed and welcome at any time. To provide your views, please call, write or e-mail the Government of Nunavut Department of Environment or contact your local conservation officer.