

NUNAVUT TUNNGAVIK INCORPORATED RESPONSE TO PROPOSED LIMITATIONS ON INUIT HARVESTING

SUBMITTED FOR CONSIDERATION AT SPECIAL MEETING NO. 12 OF THE NUNAVUT WILDLIFE MANAGEMENT BOARD

NUNAVUT TUNNGAVIK INCORPORATED APRIL 25, 2006

Note to Reader:

This response is based on materials filed with the Nunavut Wildlife Management Board pursuant to the directions of the Board. During the preparation of this response, some modifications to proposed limitations and supporting justifications were filed, including notification that some limitations previously proposed would not be going forward. As noted in its April 6 letter to the Board, NTI has based this response primarily on materials of which NTI had notice by April 5, 2006. Exceptions are:

- 1. The biological analysis in **Annex 1** is based on the updated GN TAH report filed in April, 2006, which came to NTI's attention after April 5. (The body of the response, however, is based on the previous version of the GN TAH report sent to NTI by the NWMB in January, 2006, as qualified by the content of the draft orders and regulations filed on March 29 and by the notices given by the GN, in its March 29 letter and enclosures, of withdrawal of some previously proposed limitations. The qualifications include withdrawal of proposed seasons for Arctic wolf and wolverine.)
- 2. The body of the response relies on the GN's April 19 notice ("TAH Levels Proposed", undated) that certain previously proposed NQLs associated with TAH proposals, including seasons for gyrfalcon and muskox, are not going forward.

Regrettably, there was not time during the completion of this response to consider the document entitled "Proposed Total Allowable Harvests and Non-Quota Limitations in the draft Wildlife Regulations and Orders", dated April 13, 2006, which was prepared on behalf of the Board and came to NTI's attention on the afternoon of April 21.

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1. Introduction

Nunavut Tunngavik Incorporated (NTI) would like to express its appreciation for the very substantial work that has gone into the development of new wildlife regulations and orders for Nunavut by the Government of Nunavut (GN, or government) and all the organizations and individuals involved. NTI also thanks the Nunavut Wildlife Management Board (NWMB or Board) for this opportunity to present NTI's views on the related harvesting limitations that have been submitted to the Board for decision.

In NTI's view, Special Meeting #12 and any related meetings that follow are the most important meetings that the NWMB will have held since it was established. In this process, the Board should hear the evidence and views that enable it to decide which limitations on the harvesting of terrestrial wildlife should be put into place at this time in accordance with the Nunavut Land Claims Agreement (NLCA, or Agreement). The Board has made some such decisions previously, but in the package of draft regulations and orders being presented in this process, most of the old rules that governed terrestrial harvesting in Nunavut since before the NLCA was signed will be replaced by new measures tailored to the requirements of the NLCA. Although the Act that authorizes the new measures was brought into force last July, most of the harvesting limitations that affect Inuit will be introduced by way of regulations and orders.

It is important in preparing for this meeting for Inuit to reflect on the meaning of the NLCA for Inuit harvesters. Before 1993, when the NLCA was signed, the wildlife laws and the system of wildlife management in what is now Nunavut did not recognize Inuit hunting rights. Inuit were only allowed to harvest what government decision-makers permitted Inuit to take. All Inuit communities have stories of how Inuit had to hide their ducks, geese, and eggs in the spring when the wildlife officer came around.

The NLCA changed how wildlife is to be managed in Nunavut. Under the NLCA, Inuit have the right to harvest up to their full level of needs. Any restrictions on Inuit harvesting must be established by an independent board, half of whose members are appointed by Inuit organizations. In addition, all such restrictions - even restrictions that Inuit are used to following – must be justified according to a strict standard set out in the NLCA itself.

As a land claims agreement having the force of law and protected in Canada's constitution, the NLCA takes precedence over legislation such as the Wildlife Act and regulations, species at risk and other wildlife management laws.

2. The importance of these decisions

The decisions that the Board has been asked to make will set a precedent for how to implement and comply with the wildlife provisions of the NLCA in future orders and regulations. NTI joins with all of the parties to this process—the GN, NWMB, Regional

Wildlife Organizations (RWOs) and Hunters and Trappers Organizations (HTOs), Inuit harvesters and members of the public - in striving to make the precedent a strong one.

Among the many key limitations the Board will consider are Total Allowable Harvest levels (TAHs) on populations of several species. Under Article 5 of the NLCA, TAHs are the basis for any restriction that can be introduced on the number of animals that Inuit may harvest. TAHs have major implications for RWOs and HTOs, as well as individual harvesters. As in the case of all other Inuit harvest limits, TAHs must be strictly justified, according to the test set out in the Agreement.

The other form of harvesting limitation that the Board may establish is a Non-Quota Limitation (NQL). Among the key types of NQL being proposed are restrictions on the harvest methods that Inuit may employ, prohibitions on the harvest of younger or older wildlife or under certain conditions, and qualifications for harvesters engaged in certain types of harvesting.

3. The role of NTI in this process

NTI is taking part in this decision process as an advocate of Inuit rights under the NLCA. The NLCA recognizes Inuit harvesting rights, and also rights to participate in wildlife management decisions.

As an advocate of Inuit *harvesting* rights, NTI supports the conservation of wildlife. Inuit have always understood that a sustainable harvest depends on conservation. As an advocate of Inuit *decision-making* rights, NTI supports the NWMB in making wildlife management decisions, including decisions that may restrict Inuit harvesting, according to the NLCA standard.

Under the NLCA, it is not appropriate for NTI or other Inuit organizations to be asked to "consent to", "approve", or "support" restrictions on their harvesting rights. Restrictions on Inuit harvesting are for the NWMB to decide, independently. Rather, NTI's role is to support Inuit harvesting, the conservation of wildlife, and the decision-making process that may limit Inuit harvesting to an extent that is necessary for conservation or other recognized purposes. That is the aim of this submission.

This submission challenges any of the proposed limitations on Inuit harvesting of which NTI has notice that, in NTI's view, based on the materials filed, do not meet the NLCA standard for justification. In making such a submission, NTI intends to assist the NWMB in its independent decision-making role. NTI is operating from the premise that knowledge and informed debate are required for sound decisions about wildlife management. Co-management, which is the basis of the new system established by Article 5, requires that both scientific and Inuit Qaujimajatuqangit contribute to these discussions.

NTI has put considerable effort into reviewing and analyzing all documents filed for this Special Meeting. In this submission and at the Meeting, NTI will do its best to bring forward scientific knowledge and Inuit Qaujimajatuqangit that, in NTI's view, can assist the decision process.

4. The responsibility of the NWMB, and the NLCA standard for justifying Inuit harvest limits

As the main instrument of wildlife management in Nunavut, the NWMB is responsible to make most wildlife management decisions for the territory. (Once the NWMB makes a management decision, the Government of Nunavut, which is ultimately responsible, accepts or disallows the decision, and, if disallowed, returns the decision to the Board for reconsideration and final decision before accepting, rejecting, or varying the final decision. The government then implements the decision by means of a regulation, order or other appropriate measure.)

The Board's decision responsibility includes sole authority to establish any limitations on Inuit harvesting. There are no types of Inuit harvesting limitation that may be established without the NWMB's decision.

As has been noted, under the NLCA the NWMB and Minister may only restrict Inuit harvesting if the restriction being considered is the least restriction necessary to effect a valid conservation or other recognized purpose. Section 5.3.3 states:

Decisions of the NWMB or a Minister made in relation to Part 6 shall restrict or limit Inuit harvesting only to the extent necessary:

- (a) to effect a valid conservation purpose;
- (b) to give effect to the allocation system outlined in this Article, to other provisions of this Article and to Article 40; or
- (c) to provide for public health or public safety.

In applying the 5.3.3 standard (or 'test'), the Board may find it useful to break the standard into its components. For example, the standard regarding conservation limitations is that Inuit harvesting may be limited "only to the extent necessary ... to affect a valid conservation purpose." Broken into its components, it is clear that the standard requires Board decisions to restrict Inuit harvesting as little as necessary and that, at the same time, any restriction must be truly necessary to fulfill the recognized purpose.

Although the 5.3.3 test is broad in scope and leaves considerable room for judgment within its boundaries, it is not subjective or discretionary. The NWMB, for example, is not authorized to decide what "a valid conservation purpose" means. The parties to the NLCA made that decision by choosing to use those words in the context in which they appear in Article 5. The NWMB is responsible to make management decisions that

conform to this standard. As is the case for NTI and the government, the NWMB must do its best to interpret the words of section 5.3.3 according to the meaning intended by the Agreement.

5. The responsibility of the HTOs and RWOs

One of the most significant changes to wildlife management in Nunavut brought about by Article 5 is the recognition of extensive powers of Inuit self-regulation that may be may exercised collectively, through Inuit HTOs and RWOs. These powers reverse the marginal standing that the pre-NLCA management system gave to Inuit harvesters. Indeed, one of the founding principles of Article 5 is the commitment to establish a management system that "recognizes Inuit systems of wildlife management that contribute to the conservation of wildlife and protection of wildlife habitat." A complementary achievement of the new Wildlife Act is the Act's provision for enforcing HTO and RWO by-laws by means of collectively administered penalties, recoverable as debts through the courts.

One of the themes of this submission is that the government and NWMB should support the appropriate exercise of Inuit self-regulation wherever possible, and refrain from establishing limitations that reflect legitimate interests but have little justification and are more suitably handled by local or regional Inuit authorities.

NTI has encouraged HTO and RWO representatives to take an active role in this hearing, in their capacities as Inuit self-regulating authorities and as advocates of Inuit rights and interests.

6. "Conservation" under Article 5 of the NLCA

All of the harvest limitations discussed in the Government of Nunavut's paper, entitled "Recommendations on Total Allowable Harvest (TAH) Rates for Terrestrial Wildlife Populations in Nunavut" (GN TAH Report filed), are described as required "for a valid conservation purpose" (see Guiding Principle P2, page 2). Based on the materials filed, it is clear that the majority of limitations to be dealt with at Special Meeting #12 are put forward for the sake of conservation. Although it is not always cited, the NLCA justification standard being relied on in these cases appears to be s. 5.3.3 (a), quoted above.

"Conservation" is not defined in the NLCA, but Article 5 provides strong direction as to how this critical term in section 5.3.3 (a) should be interpreted. In NTI's submission, the Board should adopt the following understanding of "conservation" when assessing whether proposed limitations meet the 5.3.3 (a) test.

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¹ Section 5.1.2(e), NLCA.

"Conservation", in the 5.3.3(a) context, should be understood as represented by one or more of the principles of conservation defined in section 5.1.5 of the NLCA. These are:

- (a) the maintenance of the natural balance of ecological systems within the Nunavut Settlement Area;
- (b) the protection of wildlife habitat;
- (c) the maintenance of vital, healthy, wildlife populations capable of sustaining harvesting needs as defined in this Article; and
- (d) the restoration and revitalization of depleted populations of wildlife and wildlife habitat.²

As directed by section 5.1.4, these principles should be interpreted in the light of the principles and objectives stated in the opening sections of Article 5, and the rights and obligations set out elsewhere in the Article.

With respect to the particular TAH proposals that the Board has been asked to consider at Special Meeting #12, this understanding suggests that principles (c) and (d) are the main criteria that must be met within the applicable "conservation" standard. Nowhere in the GN TAH Report, for example (which contains the government's most extensive presentation of conservation reasons behind the proposals filed) is ecological balance – the balance of the life systems in which the population in question is a component – given as a purpose for limiting the harvest of a population. Similarly, habitat protection is not identified as a purpose for limiting harvesting. The concern of the GN TAH Report is with wildlife population levels themselves.

7. Types of limitation being considered – TAHs and NQLS

A TAH for a stock or population means an amount of wildlife able to be lawfully harvested as established by the NWMB pursuant to Sections 5.6.16 to 5.6.18 of the NLCA (NLCA definition, section 5.1.1).

An NQL means a limitation of any kind, except a TAH, and may include a limitation on season of harvest, sex of wildlife, size of wildlife, age of wildlife or method of harvest. (NLCA definition, section 5.1.1)

As already noted, all limitations on Inuit harvesting are either TAHs (and quantities that flow from TAHs), or NQLs, and these must be established by the NWMB.

It is important to have a common understanding of the difference between the term 'quota' and a 'total allowable harvest'. A quota was part of the pre-NLCA wildlife management system. Now that the NLCA has put a new system in place, the use of the term 'quota' can create confusion if it appears to be used interchangeably with TAH. (As will be noted later in this submission, such confusion occurs in some parts of the GN's TAH Report.)

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² Section 5.1.5, NLCA.

The TAH system requires that, if it is necessary to restrict the quantity of Inuit harvest for a recognized purpose, researchers, working with Inuit Qaujimajatuqangit, assess how many animals can be taken from the population. That information is brought before the NWMB with a recommendation to establish a TAH. If this is done, then the NWMB must establish a Basic Needs Level (BNL) for Inuit harvesting. The BNL is the guarantee to Inuit of first access to a resource whose available quantity is limited by a TAH. At the same time, the BNL limits the amount of wildlife that Inuit may harvest as of right, outside the general licensing system for which any Nunavummiut qualifies.

If the NWMB sets a TAH for a population, the TAH is expressed as a community total where only a single HTO's members harvest the species. Otherwise, the TAH must be set as a regional total.

The establishment of a TAH and the resulting striking of a BNL lead to special responsibilities for the RWOs and HTOs, making it all the more necessary for their active involvement in the process of establishing these limitations. Neither the NWMB nor government allocates the Inuit share of TAHs between communities. The RWOs perform that role by means of allocating regional BNLs. HTOs allocate community BNLs among their members.

NTI believes that for this system to be workable at the community level, TAHs and NQLs should emerge from a process where Inuit and government work together to develop a set of shared management objectives and a common understanding as to populations, the size of populations, whether they are increasing, decreasing or stable, the carrying capacity of the habitat, and levels of current and desired harvest, based on scientific studies and IQ. In most cases, this shared understanding should provide the basis for a more detailed management plan containing the recommended TAH and related NQLs.

8. Evidence Required to meet the NLCA Standard

In the case of TAHs, it is the purposes referred to in subsections (a) and (b) of section 5.3.3 that are relevant to justification. Practically speaking, a TAH must be necessary in order either

- To effect a valid conservation purpose, as the term conservation is used in Article 5; or
- To give effect to the allocation system in Article 5 where the system can provide a benefit to Inuit.

(Section 5.3.3 also provides for restrictions that are necessary to give effect to other provisions of Article 5 or Article 40, or to provide for public health or public safety, but these do not relate to the setting of TAHs.)

Under this standard, a TAH may not be set simply because information about population levels is inadequate. There must exist a valid reason, based on evidence, to restrict the quantity of the Inuit harvest. In most cases, in order to justify a proposed limitation out of concern for conservation, the evidence should at least show:

- The size of the population
- The population level capable of sustaining Inuit harvesting needs; and
- A reason to believe that the level capable of sustaining Inuit needs cannot be achieved or sustained without imposing harvesting restrictions.

In all cases, the evidence relied on should be presented in a form that enables it to be examined. Also, the remedial objective of a proposed TAH should be stated (e.g. a TAH calculated to enable the population level to increase from x to y within z years is proposed). The method should also be stated (e.g. the proposed TAH is calculated as x% of the mean estimate of current populations).

In September 2004, the *Nunavut Wildlife Legislation Working Group* (comprised of representatives of the GN, NTI and the RWOs and the NWMB) provided the *DOE Workshop Concerning Nunavut Species under the Wildlife Act* with a list of questions for the biologists for the purpose of assessing the rationale for proposed TAHs under section 5.3.3. This document reflected the consensus of Working Group members as to the type of evidence and level of detail expected for this purpose. This document is attached as **Annex 2, Item 1**.

In preparation for Special Meeting No. 12 NTI filed two "templates" with the Board on March 27, to set out NTI's view on the evidence the NWMB would need in order to be in position to make an informed decision on TAHs or NQLs, as follows:

TAH Template

Section 5.3.3 of the NLCA sets out the only circumstances under which a TAH can be established. In order to accept a TAH proposal, the NWMB must be satisfied that the TAH is justified under 5.3.3. In the submission of NTI, the NWMB should make this determination based on the reasons given and the evidence provided in the proposal. To be more precise, any TAH proposal should contain the following in order to be considered for decision by the NWMB.

- 1. Identify the population that requires a TAH.
- 2. A management plan, developed in cooperation with the affected Inuit communities, including clearly stated, shared management objectives.
- 3. The authority being relied on under 5.3.3, namely (a) or (b).
- 4. The reasons why there is 5.3.3 authority for the proposed TAH, including the reasons why the proposed TAH is considered to be the least limitation necessary to restrict Inuit harvesting.

5. All the evidence used to support the reasons given – including both scientific and Inuit Qaujimajatuqangit.

NQL Template

In the case of non-quota limitations, in the view of NTI, any proposed limitation should contain the following in order to be considered for decision by the NWMB.

- 1. The proposed limitation.
- 2. The authority being relied under the NLCA namely section 5.3.3 or, in exceptional cases, others such as 5.7.42(c) or 5.9.4.
- *The reasons why there is authority for the limitation.*
- 4. All the evidence used to support the reasons given including both scientific and Inuit Qaujimajatuqangit.

In sum, before establishing any limitation on Inuit harvesting the Board is responsible to ensure, based on evidence, that the applicable standard of justification is met. Inuit rely on the NWMB to perform this responsibility, independently. Lack of challenge by NTI in this submission, or any lack of comment by Inuit in the consultations held previously, is not a mandate to establish a limitation. NTI submits that the Board was correct to state in its March 31 letter to the GN that "the Board will not make a decision which limits Inuit constitutionally enshrined rights without receiving adequate evidence to meet the demands of section 5.3.3 of the ... NLCA".

9. NTI submissions on the procedure for decisions

In the fall of 2005 and since, NTI and its legal counsel have corresponded with the NWMB and its counsel regarding the appropriate procedure for making the decisions proposed for Special Meeting #12. Some of this correspondence has been filed with the Board following announcement of the Ad Hoc Procedures for the Meeting.

In NTI's submission, Special Meeting #12 is a hearing, to which all parties affected by the proposed decisions are entitled as a matter of procedural fairness. In NTI's submission, the Board's procedures in preparing for and conducting Special Meeting #12 are governed by the requirements of procedural fairness, whose content is outlined in the previous correspondence of NTI counsel.

The Meeting has been scheduled following two public consultation processes, one conducted by the GN over the course of the fall of 2005 and the other by the NWMB in November, 2005. These meetings followed the officials' level consultations that took place in 2004-2005 by means of the legislative working group. NTI representatives took part in all of these processes. In preparing this submission, NTI has given close attention to the GN's *Summary Report of the Consultations and Submissions* (GN consultation report, filed) and to the NWMB's *Summary Report on the informal hearing held by the*

Nunavut Wildlife Management Board on November 15 – 17, 2005 (NWMB report of "informal hearing", filed.)

The reports of these consultation sessions are very important sources of information for the Board regarding the views and preferences of Inuit. In NTI's submission, however, when considering this information in the decision process the Board should take care to avoid reading more into views expressed than the circumstances of the meetings warrant. The Board should consider, in particular, that many participants had limited time and information available to them when preparing to state their views. Also, even where reported Inuit preferences may reflect the range of considerations that the Board should consider, NTI submits that the decisions at issue are for the Board alone to make, based on all of the relevant information and evidence before it.

As the consultation reports note, in several instances participants felt pressed for time. Some topics were rushed, some unfinished, and others not reached. In NTI's submission, stated preferences as to whether or not the legislation should contain a limitation should receive little weight in themselves. All limitations have to be justified, and participants' preferences as to outcomes do not necessarily reflect full consideration of NLCA justification. In NTI's submission, Inuit views reflected in the consultations are especially relevant on the question whether a limitation that would effect a 5.3.3. purpose would restrict Inuit harvesting as little as is necessary.

A further consideration when referring to the consultation results is that where preferences are expressed, the Board should ask whether the questions being responded to canvassed the full range of management options available under the NLCA. An Inuit harvester, for example, may prefer that legislation limit the use of low caliber ammunition for harvesting of big game to the option of no regulation of this practice, but, if asked, the same harvester may have preferred that Inuit self-regulate regarding this practice, through HTO/RWO by-laws.

NTI also submits that, although BNLs have not been proposed in the materials filed to date, procedural fairness requires that the Board give reasonable notice of any BNLs for non-presumption of needs species that it proposes to strike, and reasonable opportunity for affected parties to be heard, before making such decisions.

10. NTI SUBMISSIONS ON THE PROPOSED LIMITATIONS

A. TOTAL ALLOWABLE HARVESTS AND RELATED NQLs

1. <u>PEARY CARIBOU</u>

NTI has applied its TAH and NQL templates to construct its response respecting the limitations proposed for the harvest of Peary Caribou.

NTI is basing its analysis on the GN TAH Report. The detailed review is attached as **Annex 1 (Item 1)**.

For the reader's further information **Annex 2** (**Item 1**) contains the list of TAH-related information that the Nunavut Wildlife Legislation Working Group requested the Government of Nunavut's biologists to provide in support of any proposed TAHs.

Proposed TAHs

1. Populations requiring TAHs³:

PC/01 Bathurst Island Archipelago	14
PC/02 Somerset/Prince of Wales	0
PC/03 West Devon	2
PC/04 North Devon	0
PC/05 Ellesmere/Axel Heiberg	50
PC/06 Other Queen Elizabeth Islands	N/A

2. Management Plan:

The GN TAH Report states:

"Consultations toward a Peary caribou management plan are ongoing with the affected HTOs and other co-management partners". (page 25)

"Of primary importance, there is an overall need for a unified conceptual framework to guide caribou management decisions. This framework would allow strategic allocation of our limited research capacity to ensure management decisions are appropriate and timely." (page 30)

On April 11, 2006 NTI received a letter⁴ from the Chairperson of the Resolute Bay HTA reporting on a special meeting held concerning the Peary Caribou Populations and TAHs. Regarding the development of a management plan for Peary Caribou:

"The Management Plan was introduced to the RBHTO by biologist Michael Ferguson two (2) Years ago, that was the first time that we saw it and without much consultation prior to the readings. It was hard to set our beliefs and needs concerning the populations and TAH, our voice was not heard, neither met during that time."

3. The authority being relied on:

Not clearly identified – apparently 5.3.3(a) NLCA. In the GN response to questions posed by the NWMB it is stated that:

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³ As per the list NTI received from the NWMB on April 19th, 2006.

⁴ Copy of letter attached as **Annex 2 (Item 2**).

"..... However, it should be mentioned that "the test" under NLCA Section is not defined, and is of course subjective. What constitutes a restriction that is "necessary to effect a conservation purpose" can, as has been demonstrated, mean different things to different views."

4. The reasons why there is 5.3.3 authority for the proposed TAH, including the reasons why the proposed TAH is considered to be the least limitation necessary to restrict Inuit harvesting:

The GN TAH Report provides:

"TAH levels were specified for the endangered (COSEWIC 2004) Peary caribou populations in the high Arctic." (page 25)

PC/01 - "TAH based on 5% of mean population estimate for a recovering population with growth rate of 30% annually." (page 29)

PC/02, PC/03, PC/04 - "Very low numbers. Overall need for strategic research." (page 29

PC/05 - "Current harvest appears sustainable. Need for strategic research." (page 29)

PC/06 - "Densities are known to be very low". (page 29)

Note that the Summary Report on the Informal Hearing held by the NWMB contains the following comments:

"There is concern from hunters about listing Peary Caribou as endangered. In Bathurst Island, an increase from 14 to 60 is recommended by the Resolute Bay HTA. For Somerset, Prince of Wales and North Devon Islands it was felt a TAH of 40 should be established – many caribou are now being killed off by wolves regardless of TAH restrictions for Inuit. More consultations and studies are required. Recognition needs to be given to HTAs in these areas that they have been managing these herds." (item 4.5)

5. All of the evidence used to support the reasons given – including both scientific and Inuit Qaujimajatuqangit:

In the GN's response to the NWMB's questions the following statements were made:

"Evidence for all other species [other than Porsild's Bryum] under discussion is included in the TAH report. It is recognized and acknowledged that in many cases this information is not as complete as we (or other parties) would like it to be, but that is likely to be a permanent situation, as there will always be limited information available."

"With the exception of some project and species specific IQ studies, there is very limited IQ evidence readily available, and no organized or coordinated effort to gather it. In

most cases our available and applied IQ comes from discussions with hunters and HTOs, and this is referenced in the TAH report."

In summary, the results of NTI's review of the evidence provided by GN to support the establishment of **TAHs for Peary Caribou** conclude:

• The document does not provide any evidence or references for the delineation of the 6 Peary caribou populations. The identification of populations of PC/01 (*Bathurst Island Archipelago*), PC/03 (*West Devon Island*), PC/04 (*North Devon Island*), PC/05 (*Ellesmere/Axel Heiberg Islands*) is not supported by any information presented in the document. In opposition to the document, the COSEWIC status report does not support the identification of these 5 separate populations (COSEWIC 2004). Based upon a caribou genetics and relationship workshop, the COSEWIC status reports the Western Queen Elizabeth Islands as a distinct population (COSEWIC 2004).

"Although there have been no DNA samples of caribou from the eastern Queen Elizabeth Islands analysed for genetic relationships, based on morphology, they group with western Queen Elizabeth islands caribou" (COSEWIC: 17).

The COSEWIC status report then assigns a population designation of Queen Elizabeth Islands as one population for the remainder of its analysis (COSEWIC: 18). This view is supported by the Resolute Bay HTO.⁵

- The document is lacking critical information regarding the population status and population dynamics for each population. For those populations where an estimate is provided, there are no references or detailed information provided for the confidence levels and intervals of these estimates. There is no means to review the establishment of a TAH for each population.
- There is no recognition or discussion of the results from the 15 years of management efforts by the HTOs and harvesters of Grise Fiord and Resolute Bay. These efforts have resulted in increased numbers of caribou and have received formal recognition from Wildlife Society in 1994.

NTI's Submission Concerning the Proposed TAHs on Peary Caribou:

- 1. It is premature to establish TAHs on Peary Caribou for the reasons provided in NTI's detailed assessment of the evidence submitted. Specifically:
 - a. There is no evidence provided to support the identification of Peary caribou populations PC/01 PC/06. (see **Annex 1 (Item 1)**)
 - b. There is no evidence provided with respect to the population status and dynamics of Peary caribou populations. (see **Annex 1, (Item 1**))

⁵ See **Annex 2 (Item 2)**, the April 11, 2006 letter to NTI from the Chairperson of the Resolute Bay HTA.

- 2. In order to properly manage this species, a reliable and long-term approach is required. This can be achieved through the completion of a management plan in cooperation with the affected communities, the RWOs, HTOs and NTI. Any recommendations for limitations on Inuit harvesting would emerge from this management plan.
- 3. When considering any TAHs and BNLs, public hearings should be held in the affected communities.

2. MUSKOX

NTI has applied its TAH and NQL templates filed with the NWMB on 23 March 2006 to construct its response to the proposed limitations respecting muskox.

NTI is basing its analysis on the GN TAH Report, filed. The detailed review is attached as **Annex 1** (**Item 2**).

For the reader's further information **Annex 2** (**Item 1**) contains the list of TAH-related information that the Nunavut Wildlife Legislation Working Group requested the Government of Nunavut's biologists to provide in support of any proposed TAHs.

Proposed TAHs and related NQLs

1. Populations requiring TAHs and related NQLs⁶

MX/01	5	Maximum 2 females
MX/02	0	
MX/03	70	
MX/05	27	
MX/06	14	Maximum 7 females
MX/07	4	Maximum 2 females
MX/08	0	
MX/09	32	
MX/10	N/A	No harvest restrictions
MX11	358	
MX/12	20	
MX/13	101	

2. Management Plan

There is no shared management plan. Any management objectives stated in the GN TAH Report have been developed by GN.

In the report on the GN consultations it was noted:

"Most Kivalliq delegates did not support the proposed muskoxen management approach of only conducting harvesting inland in order to support the population range expansion."

"The department has revised the proposed population's delineation and approach to muskoxen management to reflect the preferences of the Kivalliq HTOs. Specially, the current proposed system will allow harvesting of muskoxen in any part of a geographic population, and not be restricted to inland areas".

⁶ As per the list NTI received from the NWMB on April 19th, 2006. Seasons of harvest have been removed.

"The delegate from Grise Fiord did not support the delineation of muskoxen populations on southern Ellesmere Island. It was stated that the way they are presently managed is not supported by the community, and that a single population should be recognized, not three smaller ones."

"The department has revised the proposed populations delineation and approach to muskoxen management to reflect the preferences of the Grise Fiord HTO. Specifically, the current proposed system contains a single population (MX05-GF, comprised of what was previously three populations) on the southern part of Ellesmere Island."

The Summary Report on the Informal Hearing held by the NWMB notes the following:

"Further discussion and consultation is warranted in terms of the allocation for MX-1. This seems too low since both Resolute Bay and Arctic Bay hunt in this zone. The same applies to MX-2.

With regards to zones Mx-3-6 – all proposed for Grise Fiord, there was a feeling that the HTA should be allowed to manage the areas themselves – in particular so that they can hunt closer to home. It was noted that Arctic Bay hunters occasionally travel to MX-5 and they support lifting restrictions. In other areas (MX-7 and MX-8 and MXC-9) an increase was also proposed, particularly establishing some levels of MX-8 other than 0.

Three are similar issues with zones in the west. Some increases for MX-12 should be considered with Inuit able to hunt closer to home and an increase in the TAH from 106 to 120. MX-13 can be considered one population area with Inuit being allowed to decide between the Kivalliq and Kitikmeot regions."

The NWMB asked GN to provide sufficient evidence to justify geographic non-quota limitations (management areas) under NLCA 5.3.3. The GN replied:

"Justifications for various muskox TAHs are provided in the TAH Report, and a number of changes have been made to the management approach, such as removing some proposed areas of no harvesting".

3. The authority being relied on:

Not clearly identified – possible 5.3.3(a) NLCA. In the GN response to questions posed by the NWMB it is stated that:

"..... However, it should be mentioned that "the test" under NLCA Section is not defined, and is of course subjective. What constitutes a restriction that is "necessary to effect a conservation purpose" can, as has been demonstrated, mean different things to different views."

4. The reasons why there is 5.3.3 authority for the proposed TAH, including the reasons why the proposed TAH is considered to be the least limitation necessary to restrict Inuit harvesting:

The GN TAH Report provides (page 24):

MX/01 - Based on 3% of mean abundance estimate determined in 2001 (only 3% because of marginal population growth since 1997). TAH allows for population growth.

MX/02 - Subject to revision pending data analysis. In all likelihood the most appropriate TAH is 3% of mean abundance estimate.

MX/03 - Is likely one population since fiords do not appear to be barriers to movements.

TAH based on 5% of total abundance estimate of 70. Long history of unused tags and evidence suggesting an increasing population.

MX/05 - Based on 5% of mean abundance estimate.

MX/06 - Based on 5% of minimum count of musk ox presented in survey data.

MX/07 - Based on 5% of minimum count of musk ox presented in survey data.

MX/08 - Very low abundance, however, a small TAH may be recommended after survey calculations are complete.

MX/09 - Subject to revision. Rationale for new TAH will be based on rates of population growth and the objective of Resolute Bay to reduce the population. Quota will likely increase.

MX/11 - Based on 3% and 4% of population estimates for 4 different areas

MX/12 – No justification provided;

MX/13 – Based on survey results, approximately 3% of the lower confidence interval of survey means. TAH level set to promote population growth. Division between NK and SK based on muskox movements (being a non-migratory species, and a geographic separation in excess of known movements between NK and SK as identified in the 1999 muskox population survey. No harvest allowed in the Thelon Game Sanctuary.

5. All of the evidence used to support the reasons given – including both scientific and Inuit Qaujimajatuqangit:

In the GN's response to the NWMB's questions the following statements were made:

"Evidence for all other species [other than Porsild's Bryum] under discussion is included in the TAH report. It is recognized and acknowledged that in many cases this information is not as complete as we (or other parties) would like it to be, but that is likely to be a permanent situation, as there will always be limited information available."

"With the exception of some project and species specific IQ studies, there is very limited IQ evidence readily available, and no organized or coordinated effort to gather it. In most cases our available and applied IQ comes from discussions with hunters and HTOs, and this is referenced in the TAH report."

In summary, the results of NTI's review of the evidence provided by GN to support the establishment of **TAHs Muskox** conclude:

- The document does not provide any evidence or references for the delineation of the 12 muskox populations. For example, the separation of mainland muskox population MX/11 from MX/13 is not supported by any information presented in the document. The identification of 3 muskox populations MX/06, MX/07, and MX/08 on one island (Devon Island) is also not supported by any information. Lastly, the delineation of 2 muskox populations MX/03 and MX/05 on Ellesmere Island is also not supported by any information.
- It should be noted that populations MX/01, MX/02, MX/03, MX/05, MX/06, MX/07, MX08, MX/10, and MX/12 were each assigned one area code with a concomitant quota. Populations MX/09, MX/11, and MX/13 were assigned multiple area codes with quota levels for each area code. The rationale for subdividing these populations into areas was not presented in the document. In cases where multiple areas exist within one population, the biological rationale for the demarcation of the area boundaries was not presented.
- The document is lacking critical information regarding the population status and population dynamics for each population. For those populations where an estimate is provided, there are no references or detailed information provided for the confidence levels and intervals of these estimates. There is no means to review the establishment of a TAH for each population.
- The document provides the criteria utilized for the setting of the TAH for each population except for MX/12 for which no information is presented. The criteria utilized to establish a TAH include: 3-5% mean abundance estimate, 5% minimum count estimate, qualitative assessments of low abundance, 3-4% population estimate, and 3% of the lower confidence interval of survey means. No information or references are provided to explicate and support the selection of each criterion for each population.
- Finally, each of the management areas has been assigned a quota (within the overall TAH for the MX population). There is no regulatory consequence to these numbers. The areas shown on the TAH map should be removed from the draft Order. Further, it is also important to explicate the use of area codes and quotas in Table 3.1 as no information is provided in terms of definitions and use.

NTI's Submission Concerning the Proposed TAHs on Muskox:

- 1. It is premature to establish TAHs on Muskox for the reasons provided in NTI's detailed assessment of the evidence submitted. Specifically:
 - a. There is no evidence provided t support the identification of muskox populations MX/01, MX/02, MX/03, MX05-MX/13. (see **Annex 1, Item 2**)

- b. There is no information provided with respect to the population status and dynamics of muskox populations. (see **Annex 1, Item 2**)
- 2. In order to properly manage this species, a reliable and long-term approach is required. This can be achieved through the development of a management plan in cooperation with the affected communities, the RWOs, and NTI. Any recommendations for limitations on Inuit harvesting would emerge from this management plan.
- 3. When considering any TAHs and subsequent BNLs, public hearings should be held in the affected communities.
- 4. In the interim, the NWMB has the authority under section 5.6.4 to retain or modify existing limitations.

Proposed Related NQLs

Proposed limitation: Sex selective harvest for MX/01, MX/06 and MX/07

Proposed justification:

- i) **Authority** not identified.
- ii) **Reason** the GN TAH Report states: "We recommend that for small populations of muskox, females be conserved in order to mitigate the impact of harvesting on populations and encourage populations to attain and retain numbers." (page 22)

Supporting evidence: The harvest is oriented towards males in all populations except for those that are under utilized. The desired effect is to maintain stability and promote growth of present populations. There is no information, references or population dynamic analysis provided to support this action. There is no information provided for the selection of the recommended ratio. There is no information or analysis provided with respect to all of the effects of this type of sex selectivity.

NTI's Submission Concerning the Related NQLs:

- 1. It is premature to establish NQLs related to sex selectivity for the reasons provided in NTI's detailed assessment of the evidence submitted.
- 2. Any recommendations for limitations on Inuit harvesting should emerge through the development of a management plan.
- 3. In the interim, the NWMB has the authority under section 5.6.51 to retain or modify existing limitations.

3. BIRDS OF PREY

NTI has applied its TAH and NQL templates filed with the NWMB on 23 March 2006 to construct its response to the proposed limitations respecting birds of prey.

NTI is basing its analysis on the GN TAH Report, filed. The detailed review is attached as **Annex 1** (**Item 3**).

For the reader's further information **Annex 2** (**Item 1**) contains the list of TAH-related information that the Nunavut Wildlife Legislation Working Group requested the Government of Nunavut's biologists to provide in support of any proposed TAHs.

Proposed TAHs

1. Populations requiring TAHs⁷

GF/01	5
GF/02	5
GF/03	10^{8}
PF/01	0
SEO/01	0
BE/01	0
GE/01	0
RLH/01	0
H/01	0
O/01	0

2. Management Plan

There is no shared management plan. Any management objectives stated in the GN TAH Report have been developed by GN. Regarding gyrfalcons, the GN TAH Report (page 36) states:

"The gyrfalcon is a migratory species; however, like most birds of prey it is not subject to the Migratory Birds Convention Act (Canada). Thus, it is important for Nunavut to develop a sound management plan to protect gyrfalcons."

In the Summary Report on the Informal Hearing held by the NWMB it is noted that:

"Gyrfalcons and Peregrine Falcon have a substantial value and by establishing a TAH – Inuit will benefit – if birds are sold alive."

⁷ As per the list NTI received from the NWMB on April 19th, 2006. Seasons of harvest have been removed for gyrfalcons.

⁸ We note what we assume was a typo in the April 19^{th} list for GF/03 - ten (5).

"After caucusing, each region came up with the following proposed TAH estimates: Kitikmeot: 7 Gyrfalcon, 2 Peregrine, 7 each of Bald Eagle, Golden Eagle and Roughlegged Hawk. Kivalliq: 2 Peregrine, 1 Bald Eagle, 1 Golden Eagle, 2 Rough-legged Hawk. Qikiqtaaluk: 13 Peregrine, 13 Gyrfalcon, 5 Bald Eagle."

"Several communities would like to see a TAH for Peregrine falcons and have reported a greater population of this species in their area than Gyrfalcons."

"Noted that in some communities Bald Eagles are increasing in number e.g., Coral Harbour, Arviat and Whale Cove – and the HTAs want to see a Nunavut TAH level for this species – even a small number.

"It was noted by the GN that if Inuit believe that certain species (such as Gyrfalcons) should be allocated a TAH because of commercial market potential then the NWMB should listen and bring a revised number forward for consideration."

3. The authority being relied on:

Not clearly identified – apparently 5.3.3(a) NLCA. In the GN response to questions posed by the NWMB it is stated that:

"..... However, it should be mentioned that "the test" under NLCA Section is not defined, and is of course subjective. What constitutes a restriction that is "necessary to effect a conservation purpose" can, as has been demonstrated, mean different things to different views."

4. The reasons why there is 5.3.3 authority for the proposed TAH, including the reasons why the proposed TAH is considered to be the least limitation necessary to restrict Inuit harvesting:

Regarding Gyrfalcons, the GN TAH Report provides the following justification:

"All populations are poorly defined due to lack of research on these species; however, management of these species is a concern due to the large black-market that presented exists for live-captured birds, which are sold at high prices for falconry purposes." (page 36)

Regarding other birds of prey, the GN TAH Report states:

"All populations are poorly defined due to lack of research on these species." (page 37)

"Given the lack of interest in harvesting birds of prey (listed above) in the NWHS, and the listing of short-eared owls, golden eagles, bald eagles, and harriers under COSEWIC, we recommend that a TAH of 0 be implemented for the management of the majority of the birds of prey listed in Section 5.2.1 of this document." (page 37)

5. All of the evidence used to support the reasons given – including both scientific and Inuit Qaujimajatuqangit:

In the GN's response to the NWMB's questions the following statements were made:

"Evidence for all other species [other than Porsild's Bryrum] under discussion is included in the TAH report. It is recognized and acknowledged that in many cases this information is not as complete as we (or other parties) would like it to be, but that is likely to be a permanent situation, as there will always be limited information available."

"With the exception of some project and species specific IQ studies, there is very limited IQ evidence readily available, and no organized or coordinated effort to gather it. In most cases our available and applied IQ comes from discussions with hunters and HTOs, and this is referenced in the TAH report."

In summary, the results of NTI's review of the evidence provided by GN to support the establishment of **TAHs for Birds of Prey** conclude:

- Although, appendix I of the GN TAH Report lists 11 populations for birds of prey, neither section 5.0 or appendix I supplies any evidence or references to support the identification of 11 populations. Section 5.1.1 and Section 5.1.2 clearly states that "all populations are poorly defined due to lack of research on these species" (DoE 36-37).
- The GN TAH Report is lacking critical information regarding the population status and population dynamics for each population. For all populations, there are no references or detailed information provided to support the TAH values that have been recommended. There is no means to review the establishment of a TAH for each population.
- The GN TAH Report provides information that is ambiguous. One of the rationales provided for the establishment of a TAH is the "the listing of short-eared owls, golden eagles, bald eagles and harriers under COSEWIC" (DoE: 37). Upon review of the COSEWIC designations and SARA public registry, only short-eared owls are currently listed under schedule 3 of SARA and designated by COSEWIC as "special concern". Golden eagles, bald eagles, and harriers are all designated as "not at risk" and are not listed under SARA (COSEWIC 2005).

NTI's Submission Concerning the Proposed TAHs on Birds of Prey:

1. There is no section 5.3.3 justification for establishing a 0 TAH for Short-eared Owls, Bald Eagles, Rough-legged Hawks, Harriers or Ospreys for the reasons provided. Specifically:

- a. There is no evidence provided to support the identification of Short-eared Owl, Rough-legged Hawk, Harrier and Osprey populations. (see **Annex 1**, **Item 3**).
- b. There is no evidence provided with respect to the population status and dynamics of birds of prey populations for Short-eared Owls, Roughlegged Hawks, Harriers and Ospreys. (see **Annex 1, Item 3**)
- 2. Similar to Gyrfalcons, Peregrine Falcons have significant economic value. During the November 15-17, 2005 informal meeting held by the NWMB, requests were made for a TAH on Peregrine Falcons. A TAH would support an allocation system under section 5.3.3(b) for legal commerce.
- 3. NTI requests that the NWMB consider establishing a TAH for Peregrine Falcons. Allocation of a TAH could be left to the RWOs.

B. NON-QUOTA LIMITATIONS

The non-quota limitations addressed below are those that, in NTI's submission, have not been justified as required by the NLCA in the supporting materials filed. If the NWMB considers an alternative limitation in the course of deciding on these proposals, the alternative limitation must also be justified under the NLCA. NTI requests that the Board give affected parties notice and an opportunity to be heard in any such cases.

NTI followed NTI's proposed NQL template, quoted earlier in this submission, 9 in developing its position on these NQLs.

1. USING DOGS TO HARVEST MUSKOX AND CARIBOU

Proposed limitation: no use of dogs to harvest big game other than bears and wolverines: s.7, draft Harvesting Regulations #24¹⁰.

Proposed justification:

Authority – not identified. Based on the reason given, the authority relied on appears to be 5.3.3 (a) ("Decisions ... shall ... limit Inuit harvesting only to the extent necessary... to effect a valid conservation purpose")

Reason -

"Using dogs in the harvest of big game is prohibited at present. In general, canids tend to harass and weary ungulates, causing stress and affecting survival and reproduction. Their usage in hunting big game is generally prohibited for this reason across North America. It is difficult to assess what impact allowing this practice may have on Nunavut ungulate populations. On a precautionary basis it is recommended that the prohibition remain in place." (GN consultation report, concern #19)

Supporting evidence: evidence of the effect of the use of dogs on ungulate survival and reproduction not provided.

Other relevant information filed:

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⁹ See section 8 of this submission, "Evidence required to meet the NLCA standard", above.

¹⁰ **7.** (1) Subject to subsection (2), no person shall use a dog to kill or otherwise harvest game, except small game, a bear, [a muskox?] or a wolverine.

⁽²⁾ For greater certainty, a person may

⁽a) use a dog to chase, drive, flush, attract, pursue, worry, follow, search for or retrieve small game, a bear, [a muskox?] or a wolverine; and

⁽b) use dogs to pull a sled as transportation in the course of harvesting game.

"Several delegates expressed concern over the prohibition on the usage of dogs to hunt some big game (caribou, muskoxen) and thought this may restrict traditional activities." (GN consultation report, concern #19)

"There were views expressed by some participants that S. 7(1) [the rule against using dogs] should be deleted. With regard to S. 7(2) [allowing exceptions] there was general support and a majority agreed that Muskox should also be included in the list." (NWMB "informal hearing" report, 4.12)

NTI submission

Any such limitation should not apply to Inuit harvesting of muskox.

Under the NLCA,¹¹ Inuit have the right to use any method of harvesting, subject only to limitations that, in the case of those introduced for the purpose of conservation, meet the section 5.3.3 justification test.

Inuit used dogs to harvest muskox for a long time without noted harm to the health of populations. In Greenland, dogs are used by biologists in order to bring muskox within range of tranquilizer guns for the purpose of radio collaring. As in the case of past Inuit practice, the dogs chase the muskox into their defensive circle so that the shooter can approach. This is considered preferable to shooting from helicopters, which the biologists consider more stressful for the animals. The response of muskox to dogs is a defence mechanism that is also used against natural canid predators such as wolves.

It is also reasonable to believe that the use of dogs to hunt muskox could appeal to sport hunters and therefore enhance the muskox sport hunt, just as the use of dogs is a feature of the polar bear sport hunt.

Some stress to animals is undoubtedly caused by the use of dogs to harvest muskox. However, the 5.3.3 test is not met where no evidence is offered of risk of harm to the populations in question, relative to other harvesting methods, and where traditional and current practice of the method in question does not disclose such harm. In summary, the evidence before the Board does not show that prohibiting the use of dogs by Inuit to harvest muskox is necessary to affect a valid conservation purpose.

With respect to Inuit harvesting of caribou, the same justification test applies. NTI requests that the Board give full consideration to the Inuit concerns with such a prohibition noted in the reports of the GN consultations and NWNB "informal hearing".

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An Inuk or assignee pursuant to Sub-section 5.7.34(a) may employ any type, method or technology to harvest pursuant to the terms of this Article that does not:

⁽a) conflict with a non-quota limitation on type, method or technology of harvest established by the NWMB for a valid conservation purpose under Sections 5.6.48 to 5.6.51;

 ⁽b) conflict with laws of general application regarding humane killing of wildlife, public safety and firearms control; or

⁽c) result in harmful alteration to the environment.

As in the case of muskox, evidence of risk of harm to caribou populations as a result of the use of dogs has not been provided. If the Board establishes any limitation of this nature, NTI relies on the board to ensure that the 5.3.3 justification test is met.

2 USING LOW PULL-WEIGHT CROSS BOWS TO HARVEST SMALL GAME

Proposed limitation: no harvesting of small game with crossbows (except compound crossbows) with a full pull weight less than 55 kg: s. 8(2), draft Harvesting Regulations #24. 12

Proposed justification:

Authority – not identified. Based on the reasons given in the public consultation relating to long bows, the authority relied on appears to be 5.3.3 (c)(" ("Decisions ... shall ... limit Inuit harvesting only to the extent necessary... to provide for public safety") and 5.7.42 (b) (consistency with "laws of general application regarding humane killing of wildlife").

Reason – not provided. The following reason was given for the proposed limitation respecting long bows:

"The proposed minimum draw weight for bows is based on standards that are applied in other Canadian jurisdictions. The minimums are established on the basis of ensuring a faster kill, and as such are for humane harvesting and public safety purposes." (GN consultation report, concern #21)

Supporting evidence: evidence that kills with low pull- weight crossbows are slower than kills with permitted long bows and guns not provided.

Other relevant information filed:

"After some discussion the majority agreed that S.8 (2) should be included." (NWMB "informal hearing" report 4.14)

(With respect to the proposed limitation on the use of long-bows), "One delegate asked that the minimum draw weight for bows be reduced to support the training of younger hunters who may not be able to handle a larger bow." (GN consultation report, concern #21)

(With respect to the limitation proposed for harvesting big game with more highpowered cross-bows) "There was general discussion about the lack of familiarity participants had with the crossbows included on this list and it was understood

¹² 8 (2) No person shall harvest small game with a crossbow, other than a compound crossbow, with a pull of less than 55 kg at full draw.

that they are being included in the regulations because of sports hunters. A majority voted in favour of including them."
(NWMB "informal hearing" report 4.15)

NTI submission

Any such limitation should not apply to Inuit.

As in the case of limitations for the purpose of conservation, limitations on the right of Inuit to use any method of harvesting¹³ that are proposed for the purpose of public safety must meet the section 5.3.3 justification test in order to be permissible under the NLCA. No evidence has been presented showing that below-55 kg crossbows are more dangerous for harvesting small game than are permissible long bows and guns. NTI believes there is reason to doubt whether such evidence exists. NTI therefore submits that this limitation has not been justified on public safety grounds under the 5.3.3 test.

In NTI's submission, the further limitations that the NLCA permits under "laws of general application regarding humane killing of wildlife" (section 5.7.42(b)) are restricted to limits contained in legislation such as the Criminal Code and criminal-type 'prevention of cruelty to animals' legislation. Only such exceptional limits on the Inuit right to use any harvesting method do not have to be justified strictly under the NLCA. This proposed limitation is not of that kind, and therefore is subject to the 5.3.3 test.

NTI also submits that, because the NWMB has sole authority to establish NQLs, ¹⁴ all of the limitations referred to in section 5.7.42 of the NLCA must go through the NWMB's decision-process in order to be established.

In addition, all 5.7.42 limitations are subject to the NLCA requirement that non-quota limitations not unduly or unreasonably constrain Inuit harvesting activities. ¹⁵ NTI submits that even if this proposed limitation were of the exceptional "humane killing" type that does not have to meet the 5.3.3 test, it poses an undue and unreasonable constraint on Inuit in relation to permissible harvesting with long bows and guns, and therefore may not be established.

3. USING NON-TRADITIONAL 'NON-PROJECTILE' WEAPONS TO HARVEST BIG GAME

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¹³ Section 5.7.42, NLCA.

Section 5.7.42, NLCA: "Subject to the terms of this Article, the NWMB shall have *sole authority* to establish, modify or remove, from time to time and as circumstances require, non-quote limitations on harvesting in the Nunavut Settlement Area" (emphasis added). In NTI's view, the words "subject to" indicate that this provision gives way to other provisions in the NLCA that conflict with it, but s. 5.7.42 does not conflict with this section or otherwise indicate that is intended to operate to the exclusion of 5.6.48. Following the normal rule of statutory interpretation, both sections should be read together so as to give each its fullest effect.

15 Section 5.6.50, NLCA: "Non-quota limitations established on Inuit shall not unduly or unreasonably constrain their harvesting activities."

Proposed limitation: No use of a 'non-projectile' weapon other than a trap to harvest big game by Inuit or assignees unless the method is traditional: ss.8 (3) (a); 8(4) draft Harvesting Regulations #24. ¹⁶

Proposed justification:

Authority – not identified. *Reason* – not provided.

Supporting evidence: not provided.

Other relevant information filed:

"There was considerable discussion about these sections, but it was clarified that this applies only to non-Inuit. There was relative satisfaction with these provisions." (NWMB "informal hearing" report, 4.16)

NTI submission

Whether using traditional methods or not, Inuit should be exempted from the proposed prohibition against using non-projectile weapons to harvest big game.

Inuit have the right to employ any method of harvesting, subject only to limitations established in accordance with the NLCA.¹⁷

There is no justification or valid management reason for prohibiting "non-traditional" methods of Inuit harvesting, whether the purpose of the general prohibition is public safety, humane killing, or conservation. A harvesting method cannot be less humane, less safe, or less sustainable only because it is not "traditional".

The NLCA does not recognize Inuit harvesting rights according to whether the harvesting is "traditional". As the NLCA states, "the legal rights of Inuit to harvest wildlife flow from their traditional *and current* use" (emphasis added). Inuit methods of harvesting can be expected to continue to evolve in future. Although 'non-projectile' methods such as spears and harpoons to harvest big game are not used frequently today, there is no reason to restrict the evolution of such practices. Establishment of this limitation on Inuit

¹⁶ 8. (3) No person shall harvest big game with

⁽a) a weapon, other than a trap, that does not discharge a projectile by means of the force discharged by the weapon or its ammunition;

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⁽⁴⁾ Paragraph (3)(a) does not apply to an Inuk or an assignee exercising his or her right to harvest a quantity of wildlife under section 16 of the Act who is harvesting wildlife using a traditional type, method or technology of harvesting.

¹⁷ Section 5.7.42, NLCA.

¹⁸ Section 5.1.2(b), NLCA.

harvesting would hamper the ability of the new wildlife management system to fulfill one of its founding objectives under Article 5 of the NLCA, which is to "reflect the traditional and current ... character of Inuit harvesting" (emphasis added).

A further concern is that the qualification, "traditional", would introduce unnecessary uncertainty into the rules that govern Inuit harvesting. "Traditional" is susceptible to different interpretations, some rigid, others flexible. Adding this qualification to the rules would probably only increase the likelihood of further litigation such as the Kadluk case. NTI is not aware of any other jurisdiction in Canada that prohibits the use of non-traditional non-projectile weapons as a category, so there do not appear to be precedents available to wildlife officers or the courts for enforcement purposes.

As a general approach, NTI submits that the Board should leave the regulation of Inuit harvesting methods that are not justifiably prohibited on a case by case basis to the HTOs and RWOs. The HTOs and RWO are mandated and best equipped to incorporate Inuit customs and values into the management of Inuit harvesting practices. They are directly accountable to Inuit harvesters and can vary approaches between communities and regions according to local customs and values.

It is also noteworthy that the satisfaction expressed by the participants in the NWMB "informal hearing" appears to have been satisfaction with the straight exemption for Inuit that NTI is proposing. No discussion is reported of a prohibition on non-traditional methods of harvesting that would apply to Inuit.

4. USING AMMUNITION LESS THAN .243 TO HARVEST BEAR, MOOSE OR MUSKOX

Proposed limitation: No use of ammunition less that .243 cal. to harvest bear, moose, or muskox: ss.8 (5) draft Harvesting Regulations #24²⁰

Proposed justification:

Authority – not identified. Based on the reasons given, the authority relied on appears to be 5.3.3 (c)("Decisions ... shall ... limit Inuit harvesting limit[s] Inuit harvesting only to the extent necessary... to provide for public safety") and 5.7.42 (b) (consistency with "laws of general application regarding humane killing of wildlife").

Reason -

"Larger and dangerous animals are, in general, more difficult to kill and for humane harvesting and public safety reasons it is recommended that the minimum size firearm for these species be .243 caliber or 6mm." (GN consultation report, concern #20)

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¹⁹ Section 5.1.3 (a) (i), NLCA.

²⁰ 8. (5) No person shall use ammunition less than 6 mm or .243 cal to harvest a bear, moose or muskox.

Supporting evidence: not provided.

Other relevant information filed:

"One delegate stated that the minimum caliber for large big game, as per Section 8(5) of the Harvesting Regulations, should be .222 or .223." (GN consultation report, concern #20)

"A majority were in favour of this section – but there were some objections from both Pangnirtung and Qikiqtarjuaq representatives". (NWMB "informal hearing" report, 4.17)

NTI submission

This limitation should not be applied to Inuit.

Inuit have the right to employ any method of harvesting, subject only to limitations established in accordance with the NLCA.²¹ This limitation on Inuit harvesting is not necessary for public safety, and would unduly and unreasonably constrain Inuit harvesting activities.²²

The public safety and humane harvesting reasons advanced in support of this proposal appear to depend upon the assumption that .22 caliber ammunition cannot kill animals as fast or effectively as higher caliber ammunition.

When the Wildlife Act was reviewed, the Board already set the minimum caliber size for the harvesting of big game at .22 cal. or 5.56 mm in diameter²³. This new proposed limitation would increase the minimum size to 6 mm for bear, moose and muskox.

Ballistics tables show that the same energy, and therefore similar effective kill speed and effectiveness, can be achieved by the use of .224 caliber bullets of 53 grain weight at a speed of 3700 feet per second as can be achieved by .243 bullets of 75 grains at 3100 feet per second. The assumption on which this proposal is based therefore appears erroneous.²⁴

²¹ Section 5.7.42, NLCA.

²² Section 5.6.50 of the NLCA provides: "Non-quota limitations established on Inuit shall not unduly or unreasonably constrain their harvesting activities." ²³ Section 80(2) (b), Wildlife Act.

²⁴ The following information is from Barnes Reloading Manual Number 3:

A 22-250 Remington (.224 caliber, or 5.56 mm) rifle shooting a 53 grain bullet at 3700 feet per second will generate 1611 foot pounds of pressure at the muzzle.

A 243 Winchester (.243 caliber, or 6 mm) rifle shooting a 75 grain bullet at 3100 feet per second will generate 1600 foot pounds of pressure at the muzzle.

Also, Inuit have been using .22 caliber bullets to harvest big game for a long time, and the practice is still common. No evidence has been presented to the Board that use of such ammunition by Inuit has been unsafe or inhumane. No evidence has been presented showing that people have been mauled or otherwise hurt, or that animals have suffered.

Inuit harvesters who use low caliber ammunition do so in order to avoid damaging animal skins. Larger caliber ammunition can ruin hides. This is an important concern for harvesters who depend upon skins for clothing or offer them for sale.

5. HARVESTING CONTRARY TO CERTAIN PRINCIPLES OF INUIT QAUJIMAJATUQANGIT

Proposed limitations: No harvesting

- with an intention contrary to the principle that malice towards animals is prohibited
- in a manner contrary to the principle that harvesting should avoid causing wild animals unnecessary suffering
- in a manner contrary to the principle that all wildlife should be treated respectfully
- with respect to hunting skills, contrary to the principle that skills must be improved and maintained through experience and practice.

(s.9 draft Harvesting Regulations #24²⁵)

Proposed justification:

Authority – not identified.

Reason -

"It was pointed out that a number of IQ principles are included in the Act. These references have been included in the Regulations to ensure that these harvesting methods are being used appropriately." (From summary of comments, NWMB "informal hearing" report, 4.18)

The assumption that a larger caliber will give you more energy is dependant on having the same bullet weight and speed. When different bullet weights and speeds are considered, there is not a significant difference between .224 cal and .243 cal.

- ²⁵ 9. (1) No person shall harvest game with an intention that contravenes the principle of Iliijaqsuittailiniq / Kimaitailinik. [defined in s. 8(j) of the Act as, "even though wild animals are harvested for food and other purposes, malice towards them is prohibited"]
- (2) No person shall harvest game in a manner that contravenes the principle of *Sirliqsaaqtittittailiniq / Naklihaaktitihuiluhi*. [defined in s. 8(k) of the Act as, "hunters should avoid causing wild animals unnecessary suffering when harvesting them"]
- (3) No person shall treat game in a manner that contravenes the principle of *Ikpigusuttiarniq Nirjutilimaanik / Pitiaklugit nekyutit.* [defined in s. 8(m) of the Act as, "all wildlife should be treated respectfully"]
- (4) Every person harvesting game shall follow the principle of *Pilimmaksarniq / Ayoikyumikatakhimanik* with respect to his or her hunting skills.[defined in s. 8(d) of the Act as, "skills must be improved and maintained through experience and practice"]

Supporting evidence: not provided.

Other relevant information filed:

"There was recognition that Conservation Officers unfamiliar with traditional practices could be challenged (and this might apply to younger Inuit officers as well). Assurance was made by the GN that enforcement would never be taken by an officer on his own, but would involve considerable consultations with the community and elders as well as senior members of the Department of Environment. Also, operational guidelines will be developed for the Conservation Officers. Therefore these particular regulations will be implemented carefully and sensitively and primarily by Inuit staff within the department. Participants were invited to send in any further comments in writing to the NWMB." (NWMB "informal hearing" report, 4.18)

NTI submission

These limitations should not be established.

Of the thirteen IQ principles that were included in the Wildlife Act, these proposed limitations select four for conversion into punishable offences. The commitment to make harvesting rules culturally appropriate is worthy. By itself, however, this purpose does not justify limiting Inuit harvesting rights, especially where unprecedented punishable offences would result. Sound limitations on Inuit harvesting rights should always be culturally sensitive to Inuit, but they should also be warranted by wildlife management concerns, and they must always be justified under the NLCA.

The Act adopts IQ principles in the form of "guiding principles and concepts". ²⁶ Under the Act, Inuit Qaujimajatuqangit is defined as "traditional Inuit values, knowledge, behaviour, perceptions and expectations". ²⁷ The primary purpose of the IQ principles in the Act, as shown by the section that immediately follows, is to ensure that the management of wildlife follows the guiding principles and concepts recognized; it is not to force Inuit harvesters to follow IQ. In section 9 of the Act, where harvesters are made responsible for following these principles as management partners, only their "best efforts" are called for, ensuring that harvesters are not made punishable for failing to follow principles and concepts. Even the components of section 9 that are mandatory for other wildlife managers are not enforceable by prosecution.

An exception to the primary role of IQ principles in the Act is found in section 75. This section of the Act, combined with the general prohibition section, already prohibits harvesting contrary to Iliijaqsuittailiniq / Kimaitailinik (forbidding malice towards wild animals) and Sirliqsaaqtittittailiniq / Naklihaaktitihuiluhi (urging harvesters to avoid causing wild animals unnecessary suffering). Two additional limitations, duplicating

²⁷ Section 2, Wildlife Act.

²⁶ Section 8, Wildlife Act.

these prohibitions, cannot be "necessary" within the meaning of 5.3.3. If the minor drafting differences between section 75 and these two proposed limitations explain these proposals, the added limitations would be an undue and unreasonable constraint on Inuit harvesting under the NLCA, 28 because the reasonable means to address such differences would be to amend section 75 of the Act. Duplicating the Act's prohibitions in different words would only introduce confusion to the law.

The two limitations of this type that would add entirely new punishable offences to the regulation of harvesting in Nunavut are the proposed prohibition on treating wildlife with disrespect, and the prohibition on failing to maintain and improve skills. While the guiding values underlying these proposals are very important to Inuit, both limitations are far too general to be enforceable as prohibitions in the courts, and neither is "necessary" to serve the types of purposes required for justification under 5.3.3.

When the selection of these two principles from the remaining eleven other IQ principles in the Act for treatment as punishable offences is considered, it appears that the purpose of these proposed limitations is less to recognize Inuit Qaujimajatuqangit so much as it is to extend the regulation of Inuit harvesting methods for humane treatment purposes. (Consistent treatment of all of the IQ principles in the Act, for example, would have resulted in a further prohibition on wasting wildlife, duplicating section 76 of the Act.) Inuit have the right to harvest wildlife by any method. As has already been noted, in NTI's submission, the provision for "humane killing" limitations on harvesting methods in the NLCA that do not require justification under 5.3.3 is narrow. It certainly does not extend to limitations whose scope exceeds conduct directly related to the "killing" of wildlife.

NTI has several further concerns with these proposed limitations, some of which were voiced strongly in the public consultations. In the hands of wildlife officers, many of whom are non-Inuit or lacking in experience to interpret and enforce IQ principles knowledgeably, such prohibitions would lead to uncertain and uneven application of the law. The assurances that the government gave in response to this concern have no legal force. Neither the Act nor the regulations requires any form of prior consultation before an officer charges a harvester with any offence. In NTI's submission, in considering these proposed limitations, the Board must assume that they would be enforced in the same manner as any other prohibition in the legislation. Participants in Special Meeting #12 should not be assured that they can rely on these prohibitions being interpreted and enforced with special care.

How would a court decide whether wildlife has been treated "respectfully"? When could a wildlife officer charge an individual for not practising his skills enough? Inuit may have very different understandings of respect for wildlife and competence to hunt than non-Inuit judges, lawyers, and wildlife officers. In summary, NTI is very concerned that this effort to recognize and respect Inuit cultural values could in fact result in Inuit values being undermined, and Inuit harvesters punished unfairly as a result.

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²⁸ Section 5.6.50.

²⁹ Section 5.7.42, NLCA.

As in other cases, this type of concern is also one that is more suited to regulation by Inuit, through HTO or RWO by-laws. HTO/RWO by-laws can reflect specific local knowledge, values and priorities. While even such by-laws would have to be worded with care in order to avoid some of the concerns noted in the public consultations, the enforcement of such by-laws, by means of collectively administered penalties³⁰, is in the hands of Inuit harvesters themselves.

6 LICENCE AND QUALIFICATION REQUIREMENTS FOR PERSONS CAPTURING LIVE BIRDS OF PREY

Proposed limitations: requirements that i) live captures be carried out by licensed persons; ii) live captures be carried out, and live capture traps be attended, by persons considered by the Superintendent to have demonstrated the necessary experience or ability: sections 20 and 21, Licences and Tags Regulations, ³¹ and s. 10(3) draft Harvesting Regulations #24.

Proposed justification:

Authority – not identified. **Reason** – not provided.

Supporting evidence: not provided.

Other relevant information filed:

³⁰ Section 172, Wildlife Act: (1) Pursuant to the Agreement, each RWO and HTO shall develop its own by-laws to discipline the members of the HTO subject to its jurisdiction, for contravention of its by-laws.

⁽²⁾ Pursuant to the Agreement, every member of a HTO or RWO is subject to the by-laws of his or her organization.

⁽³⁾ Notwithstanding section 8 of the *Societies Act*, a RWO or HTO that is incorporated under that Act may, by by-law, impose a penalty not exceeding \$500 on any members of the organization contravening its by-laws and the penalty may be recovered as a debt due from the member to the organization.

⁽⁴⁾ A violation of a by-law is not an offence under the Act, unless a provision of this Act specifically provides otherwise.

³¹ 20 (1) A live possession licence authorizes the holder to capture, possess and feed live wildlife of the species and number authorized by the licence.

^{21. (1)} This section applies to a live possession licence for a bird of prey.

⁽²⁾ In addition to any other criteria, the Superintendent shall not issue the licence unless satisfied that the capture and possession will be done by a falconer who

⁽a) has demonstrated the experience or ability to capture and care for that species of bird of prey; and

⁽b) has not been convicted of an offence related to the harvesting or possession of wildlife within five years prior to the application.

⁽³⁾ It is a condition of the licence that any trap used for the capture must be constantly attended by the falconer referred to in subsection (2).

"There were some concerns expressed about this regulation based in part on ...how these regulations will be applied and what standards will be put in place in terms of defining a qualified falconer for example. ... No conclusions were reached." (NWMB "informal hearing" report, 4.19)

NTI submission

Live capture is a harvest activity that Inuit are entitled to engage in without a license under s. 5.7.26 of the NLCA.³² Inuit should therefore be exempt from this license requirement.

In response to the proposed prohibition against live capture with unattended traps, *Qaujimanilik/Ihuatuyuk*, as recognized by HTOs, should also be treated as qualified falconers. (Under the Act, a *Qaujimanilik/Ihuatuyuk* is "a person who is recognized by the community as having in-depth knowledge of a subject".³³ Persons qualified this way will be authorized to perform several specialized functions, such as carrying out activities under exemption permits,³⁴ and determining the sex of harvested game.³⁵)

7. HARVEST/LIVE CAPTURE OF BIRDS OF PREY (OTHER THAN SNOWY OWLS) THAT ARE MORE THAN ONE YEAR OLD

Proposed limitation: No [harvest/live capture] of birds of prey other than snowy owls that are more than one year old: ss.10 (2) draft Harvesting Regulations #24³⁶

Proposed justification:

Authority – not identified. The following statement in the GN consultation report appears to indicate that the authority relied is 5.3.3 (a) ("Decisions ... shall...

³² Section 5.7.26, NLCA: Subject to the terms of this Article, an Inuk with proper identification may harvest up to his or her adjusted basic needs level without any form of licence or permit and without imposition of any form of tax or fee.

³³ Section 8, *Wildlife Act*: "The following guiding principles and concepts of Inuit Qaujimajatuqangit apply under this Act: ... (h) *Qaujimanilik/Ihuatuyuk*, which means "a person who is recognized by the community as having in-depth knowledge of a subject."

³⁴ Section 21, Wildlife Act: (1) The Superintendent may, by licence or order, authorize the use of a weapon, equipment, technique, procedure or activity that would otherwise be contrary to this Act, the regulations or an order, where

⁽a) it is necessary to implement an accepted decision of the NWMB; or

⁽b) the Superintendent considers it necessary or advisable in respect of those matters within the jurisdiction of the Government of Nunavut.

⁽²⁾ Only a conservation officer, *Qaujimanilik/Ihuatuyuk*, or a person acting under their authority, may be authorized under subsection (1). ...

35 Section 6, draft Reporting Regulations #13: "The expert testimony of a wildlife biologist, or

³⁹ Section 6, draft Reporting Regulations #13: "The expert testimony of a wildlife biologist, or other scientist, or *Qaujimanilik* may be used as evidence of the sex or age of game, if no acceptable biological evidence of the sex or age of game is available."

³⁶ 10. (2) No person shall harvest / capture a bird of prey, other than a snowy owl, that is more than one year of age.

limit Inuit harvesting only to the extent necessary... to affect a valid conservation purpose"):

"However it should be noted that for conservation reasons there is a proposed restriction that harvesting be limited to birds that are less than one year of age ("fall passage birds" or "screamers")."

GN consultation report, concern #13 *Reason* – not provided.

Supporting evidence: evidence of conservation basis for prohibiting the harvest of older birds not provided.

Other relevant information filed:

"No sex-selectivity of harvest is recommended for the management of gyrfalcon populations in Nunavut; however, we recommend harvest be restricted to fall passage birds only (<1 year of age) as removal of animals less than one year of age is thought to be largely compensatory for the population." (GN TAH Report, 5.1.3)

"There were some concerns expressed about this regulation based in part on the difficulty of predetermining the age of a Bird of Prey and also the lack of certainty as to how these regulations will be applied....NTI would like to know the conservation reason for the cut-off of one year in 11(2). No conclusions were reached." (NWMB "informal hearing" report, 4.19)

NTI submission

This limitation should not be applied to Inuit.

The basic harvesting right of any Inuk under the NLCA is to harvest a stock or population of any species of wildlife up to the full level of his or her economic, social, and cultural needs.³⁷ Any limitation on this right for the purpose of conservation must meet the 5.3.3 test. In NTI's submission, the conservation purpose being advanced in this case is not valid, because the reason for the previous requirement that only "fall passage" falcons be harvested was to support the marketing of falcons. Supporting the market for wildlife is not a permissible purpose for limiting Inuit harvesting under the NLCA. Inuit now have

5.6.1 Where a total allowable harvest for a stock or population of wildlife has not been established by the NWMB pursuant to Sections 5.6.16 and 5.6.17, an Inuk shall have the right to harvest that stock or population in the Nunavut Settlement Area up to the full level of his or her economic, social, and cultural needs, subject to the terms of this Article.

5.6.2 For the purpose of Section 5.6.1, full level of needs means full level of harvest.

³⁷ Sections 5.6.1 and 5.6.2, NLCA (*Inuit Rights to Harvest*):

the right to decide when and how to harvest wildlife in a way that best supports the marketing of wildlife.

An independent conservation reason for this limitation has not been provided. The fact that the loss of young birds to a population affects the population less than the loss of older birds does not explain why the harvesting of older birds should be considered harmful to the population. Also, older birds may be sought for harvesting for reasons other than marketing – study, or captive breeding, for example.

8. HARVESTING POLAR BEAR CUBS, FEMALES WITH CUBS, AND FEMALES AT DENS

Proposed limitations: No harvesting

- a polar bear under three years of age unless abandoned or mother was killed in emergency and it has little chance of surviving: s.11(1) draft Harvesting Regulations #24;
- female polar bears accompanied by bears under three years of age: s.11(2) draft Harvesting Regulations #24)
- a female polar bear in a den or constructing a den (s.11 (3) draft Harvesting Regulations #24.³⁸

Proposed justification:

Authority –not identified. Based on ss. 2(b) of the draft Harvesting Regulations, ³⁹ and the drafter's comment on the draft regulation, the authority relied on appears to be 5.9.4 ("Subject to Section 5.9.1⁴⁰, all harvesting in the Nunavut Settlement Area shall be subject to legislation implementing those terms of an international agreement that were in existence at the date of ratification of the Agreement.") **Reason** -

(a) it appears to be abandoned by its mother; or

(b) its mother bear was killed as an emergency kill in accordance with section 97 of the Act and there is little likelihood of it surviving.

³⁹ 2. The prohibitions in these regulations are made in accordance with

(b) the international Agreement on the Conservation of Polar Bears and Their Habitat;

³⁸ 11. (1) No person shall harvest a polar bear that is under three years of age unless

⁽²⁾ No person shall harvest a female polar bear that is accompanied by a bear that is or appears to be under three years of age.

⁽³⁾ No person shall harvest a female polar bear that is in a den or that is constructing a den.

⁴⁰ Section 5.9.1, NLCA reads: "Any legislation implementing an international ... agreement shall be interpreted and administered to treat Inuit on at least as favourable a basis as any other aboriginal people in Canada."

"The GN believes that [removing the prohibition on harvesting young bears, family groups of bears or denning bears] would be a breach of the international Agreement on the Conservation of Polar Bears and Their Habitat."

Supporting evidence: not provided.

Other relevant information filed:

"Kivalliq delegates suggested that instead of a prohibition on killing bears of a certain age, that size be used as the criteria.

As per the polar bear MOUs that have been agreed to by all HTOs, the protections are for family groups of polar bears, and the age of a bear cub is used in defining what constitutes a family group. The age or size of the cub is not particularly relevant, as the protection is for the family group." (GN consultation report, concern #6)

"2.1.3 Sex-Selectivity of Harvest

In accordance with the Guiding Principles presented in Section 1.2, we recommend that female polar bears be conserved in order to mitigate the impact of harvesting on populations, and encourage the number of polar bears in each population to attain and retain target population numbers presented in each management plan. This requires harvesting the TAH at two or more males per female taken (2:1 harvest sex ratio; Taylor et al. 2005). It is recognized that it would be to the benefit of each population to keep the proportion of males harvested as high as possible as long as the TAH (estimated at 2M: 1F) is not exceeded (Taylor et al. 2005). It is also recognized that females with accompanying offspring should be protected from harvest, since it is unlikely offspring under two years of age will survive in the absence of their mother (although opportunities to harvest cubs accompanying females can be made available as described in each management plan; offspring not accompanied by a female are available for harvest). Implementation of sex-selectivity of the harvest is detailed in the flexible-quota system presented in each polar bear management plan (e.g., Appendix III). To be clear, we recommend the harvest of a female polar bear that is accompanied by a bear that is or appears to be under three years of age not be allowed. Further, we recommend that no person shall harvest a polar bear that is in a den or is constructing a den, since it may be difficult to sex bears that are in or are constructing dens. Bears of either sex under three years of age and accompanying a female may be harvested only under special circumstances." (emphasis added)

(GN TAH Report, 2.1.3)

NTI submission

⁴¹ Drafter's Comment to s.11, draft Harvesting Regulations #24.

In light of the sex selective TAHs that have been established for polar bears, these limitations should be removed.

The effect of s. 5.9.4 of the NLCA on these proposed limitations

Section 5.9.4 of the NLCA makes Inuit harvesting subject to the terms of pre-NLCA international agreements, whether or not the limitations required by such international agreements are justified.⁴²

These proposed limitations, however, are not terms of the 1973 international Agreement on the Conservation of Polar Bears and Their Habitat (ACPB). The relevant term of the ACPB requires that Canada and the other signatory countries manage polar bear populations in accordance with "sound conservation practices" based on the best available scientific information. This does not require that any particular limitations be established; it allows for a range of management approaches and measures to be considered, provided only that the resulting management accords with sound conservation practices supported by the best scientific information. Therefore, each of these limitations requires justification under 5.3.3.

The Polar Bear Specialist Group (PBSG) whose predecessor drafted the ACPB recognizes that prohibiting the harvesting of cubs and females with cubs is not a term of the ACPB. In its Working Meeting Proceedings, the PBSG notes that "The Agreement did not provide for protection of female polar bears or for the cubs themselves." In correspondence with NTI, the NWMB has also recognized that these limitations are not terms of the ACPB, and that the 5.3.3 test therefore applies. 46 Confusion about the status

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⁴² Section 5.9.4, NLCA: "Subject to Section 5.9.1 all harvesting in the Nunavut Settlement Area shall be subject to legislation implementing those terms of an international agreement that were in existence at the date of ratification of the Agreement." (Section 5.9.1 states: "Any legislation implementing an international or domestic agreement shall be interpreted and administered to treat Inuit on at least as favourable a basis as any other aboriginal people in Canada.)
⁴³ Article II, ACPB: "Each Contracting Party... shall manage polar bear populations in accordance

[&]quot;Article II, ACPB: "Each Contracting Party... shall manage polar bear populations in accordance with sound conservation practices based on the best available scientific data." The ACPB can be viewed online at http://pbsg.npolar.no/start.html.

⁴⁴ To put this point another way, the ACPB requirement of sound conservation practices would only qualify the application of 5.3.3 to particular polar bear harvesting limitations if, and to the extent, that *those particular limitations were the only means available* for Canada to meet the ACPB requirement. It is difficult to identify any limitation, however, that the ACPB would require and that the NLCA disallows, because 5.3.3 justifies limitations on Inuit harvesting for valid conservation purposes to the extent that they are "necessary." In any case, any unjustified limitation that might be authorized by s. 5.9.4 would also have to meet the standard set by 5.9.1 before it may be established. Aboriginal harvesters in Ontario are not subject to limitations of the three types proposed.

⁴⁵ Polar Bears, Proceedings of the 13th Working Meeting of the IUCN Polar Bear Specialist Group, 23-28 June 2001, Nuuk, Greenland, occasional Paper of the IUCN Species Survival Commission No. 26 ("PBSG Proceedings"), page 30.

⁴⁶ Letter from NWMB Executive Director Jim Noble to NTI CAO Richard Paton, February 14, 2005: "It would clearly be incorrect to say that any of the NQLs under discussion are requirements of the ... ACPB." The letter proceeds to note the connection between the first

of these limitations under the NLCA may have been caused by the fact that a resolution containing recommendations relating to these limitations was attached as an "annex" to the original Agreement, but, as the PBSG and the NWMB have noted, this does not render such recommendations terms of the Agreement itself.⁴⁷

In fact, in the different northern jurisdictions across Canada, different types of limitation are used to satisfy the ACPB requirement of sound conservation practices in the management of polar bears. According to the PBSG proceedings, in Ontario, where the harvest is limited by quantity, none of these types of limitation is established. In Quebec, where the harvest is not limited by quantity, these types of limitations are employed. (These types of limitations are also employed in several other northern Canadian jurisdictions; however, the PBSG proceedings do not address the status of such limitations under land claims agreements such as the NLCA.)

The effect of s. 5.3.3

These limitations are not justified under s. 5.3.3 (a), because their restrictive effect on Inuit harvesting is unnecessary in light of the sex selective TAHs that are in place.

In recent years the Government of Nunavut has used a dynamic population model to establish the maximum harvest of polar bears by Inuit that is sustainable. The model is based on a total allowable harvest, sex selectivity, and a flexible quota system. Within the TAH, a minimum ratio of 2 males to 1 female harvested must be maintained. The female count in the ratio is unaffected by whether the females harvested were with cubs or not, or at dens or elsewhere. At the end of each season, any TAHs that were exceeded are reduced accordingly for the next year, and any excess of females harvested over the ratio results in a reduction in the next year's TAH.

The system also recognizes that, due to the relatively high mortality rate of cubs, the taking of cubs does not pose a conservation risk and in fact is a benefit to the population relative to the harvest of healthy adults. Under the TAH 'counting rules' that apply,⁴⁹ a

resolution passed by the PBSG's predecessors and the ACPB and the importance that the NWMB attached to that resolution when applying the 5.3.3 test to these limitations when the NWMB established them in 2004.

⁴⁷ See Appendix 2, PBSG Proceedings, at p 147. The original 1973 resolution was followed by a 1997 resolution, reproduced at p.147, qualifying (among other matters) the original recommendation of a ban on the hunting of cubs with an acknowledgement that "the occasional take of dependent young for cultural reasons [is] consistent with sound conservation practices so long as the mother continues to be protected".

⁴⁸ PBSG Proceedings, 42-43, Table 2.

⁴⁹ Draft Harvesting Regulations #24: "**22.** (1) If a female polar bear is harvested when it is accompanied by another bear that is under three years of age, that other bear is deemed to be harvested at the same time as the female bear.

⁽²⁾ A harvested polar bear is to be counted towards the total allowable harvest as only one-half a polar bear if

⁽a) it is less than two years old; and

⁽b) it, at the time of the harvest, was accompanied by a female polar bear that was an emergency kill.

cub is counted as half a bear. (This approach is consistent with the 1997 acknowledgement by the PBSG that the taking of cubs poses a lower concern than the taking of females⁵⁰ and with the fact that, contrary to the proposed draft regulation, the GN TAH Report, quoted above, does not recommend prohibiting the harvesting of cubs that are not accompanied by females.)

This dynamic management system ensures the conservation of polar bears, in so far as harvesting impact is concerned, and in particular, ensures the appropriate levels of protection for females and cubs. Inuit harvesters pay a price for any overharvest of females and cubs, proportionate to the overharvest, and sufficient to meet conservation needs. The penalty is the appropriate reduction in the following year's TAH.

Adding the three prohibitions in question to this system, however, results in double punishment for Inuit. An Inuk who harvests a female with a cub, for example, is penalized once for committing a punishable offence, and again by having the number of tags available in his or her community reduced the following year. These additional limitations on Inuit harvesting are therefore contrary to the NLCA, because under s 5.3.3 (a), limitations on Inuit harvesting may be established "only to the extent necessary" to effect a valid conservation purpose. Prosecution of Inuit cannot be "necessary" where a dynamic system of management fully adjusts harvest levels for the purpose of conservation.

These three limitations are carry-overs from the time before Nunavut's dynamic population approach to polar bear management was introduced. In NTI's submission, these prohibitions should have been removed when that approach was adopted, because of the double punishment that they constitute for Inuit. Inuit are punished doubly for the same harm when prosecuted under these prohibitions and also penalized through a TAH reduction. The recommendations of the PBSG in favour of these types of prohibition do not take enough account of this fact in jurisdictions where a dynamic management system has been implemented.

In some cultural contexts, the harvesting of polar bear cubs or females in family groups might be considered immoral, and therefore worthy of extra punishment for the sake of upholding community values. This is not the case in Nunavut, and by itself, this rationale would not satisfy the justification requirements of s.5.3.3. It is also possible that where there has been systematic or repeated disregard for the conservation priorities represented by the Nunavut polar bear management system, the 5.3.3 test might be satisfied by a suitable prohibition that could deter individuals. Again, however, in NTI's submission, there is no such pattern and no reason to believe there is a high risk of such behaviour in Nunavut that would warrant establishment of these limitations now.

It is also noteworthy that many Inuit communities are accustomed to complying with these limitations on the harvest of polar bears. Before the NLCA was signed, these limitations were part of the law for many years. In NTI's submission, the appropriate means to continue any such prohibitions under the new law represented by the NLCA is

⁵⁰ See footnote addressing the PBSG's 1997 resolution above.

through HTO or RWO by-laws. Inuit may adopt any non-quote limitations that they consider appropriate for their own harvest by this means, without contravening the NLCA. For the first time, the new Wildlife Act makes such by-laws enforceable in the courts. 52

NTI also notes that it is sometimes suggested that the availability of exemption permits under the Wildlife Act for the occasional taking of a polar bear cub, at the discretion of the Superintendent, might satisfy the type of concern that NTI is raising. In NTI's submission, the justification test under the NLCA does not allow for Inuit harvesting rights to be infringed in some cases but not others, at the discretion of government officials. NTI submits that the Board must consider whether or not these proposed limitations are justified, without regard to the possibility that exemption permits might be available in individual cases.

(NTI has withdrawn its previous challenge to the similar limitations that are proposed on the harvest of grizzly bears, in light of the fact that a dynamic population system of grizzly bear management will not be adopted unless a TAH for grizzly bears becomes necessary. For the purpose of Special Meeting #12, NTI does not challenge the continuation of such grizzly bear limitations under s 5.6.4 of the NLCA.)

9. HARVESTING PORSILD'S BRYUM MOSS

Proposed limitation: No harvesting Porsild's Bryum moss: s. 14, draft Harvesting Regulations #24.⁵³

Proposed justification:

Authority – not identified. Based on the GN's filed answer to NWMB December 14 question #5, the authority apparently relied on is 5.3.3(a) ("With respect to Porsild's Bryum, we have little scientific evidence on this species to date. Given the minimal interest in harvesting the species, we have proposed a precautionary approach and do not have any concern with the Board's possible decision.") **Reason** – see above GN answer to NWMB question.

Supporting evidence: not provided.

Other relevant information filed:

⁵¹ Section 5.7.3, NLCA: The powers and functions of HTOs shall include ...(a) the regulation of harvesting practices ... among members, including the use of non-quota limitations." S. 5.7.4 is to similar effect regarding RWOs.

⁵² Section 172(3), Wildlife Act.

⁵³ **14.** No person shall harvest Porsild's Bryum (moss).

"The general conclusion regarding restrictions on harvesting of Porsild's Bryum was that the restriction should only apply to the Quttinirpaaq National Park." (NWMB "informal hearing" report)

"With respect to the proposed prohibition on Porsild's Bryum:
The NWMB is likely to designate the moss as a species of special concern only, and ... In just a 4-day period, Parks Canada researchers recently looked for Porsild's Bryum in one small location in Nunavut – and located several new sites, mini-sites and colonies within that short period of time."

(NWMB comments and questions to GN December 14, 2005)

NTI submission:

This limitation should not be established. No substantial reason for prohibiting an Inuit harvest of this moss has been provided, and no evidence has been offered in support of such a measure. The evidence provided by the NWMB appears to indicate that there is more of such moss in at least some locations in Nunavut than may have been understood previously.

ANNEX 1 - Item 1

Review of Peary caribou (Rangifer tarandus pearyi) with respect to section 3.2 Caribou and Reindeer (Genus Rangifer)⁵⁴

1.0 Terms:

The term **document** is used to refer to *Recommendations on total allowable harvest (TAH) rates for terrestrial wildlife populations in Nunavut* prepared by the Wildlife Research Section (WRS), Department of Environment, Government of Nunavut (DoE 2005).

2.0 Definitions:

2.1 Definition of 'population'

The working definition of population is provided in section 1.4 of the document.

"Recommended levels of TAH are defined for populations specific to species, whereby a population is defined as a demographic unit for which birth and death rates are believed to contribute more to population trajectory than rates of immigration and emigration." (DoE: 3)

2.3 Definition of 'total allowable harvest' (TAH)

The working definition of TAH is provided in section 1.4 of the document.

"Total allowable harvest for a stock or population is defined as the number of individuals from a population of wildlife that may be lawfully harvested as established by the NWMB pursuant to Sections 5.6.16 to 5.6.18 of the NLCA."

3.0 Identification of populations

3.1 Population delineation

In section 3.2.1 of the document, <u>6 populations</u> of Peary caribou (labelled PC/01 to PC/06) that reside wholly or partially in Nunavut are identified. The geographic boundaries of these populations were evaluated from assessment of:

- i) Inuit Qaujimajatuqangit (IQ).
 - a. The IQ that was utilized is not presented.
 - b. There are no references provided.
- ii) <u>Survey results</u>.

a. The survey results are not presented.

⁵⁴ This analysis was prepared prior to receipt on April 19th of GN list of TAHs and associated NQLs.

b. There are no references provided.

iii) Movements of radio-collared animals.

- a. The results are not presented.
- b. There are no references provided.

iv) Known geographic barriers to caribou movements.

- a. The geographic items, locations, and rationale to consider these items as barriers to Peary caribou movements are not specified.
- b. There are no references provided.

c.

3.2 Summary:

The document does not provide any evidence or references for the delineation of the 6 Peary caribou populations. The identification of populations of PC/01 (*Bathurst Island Archipelago*), PC/03 (*West Devon Island*), PC/04 (*North Devon Island*), PC/05 (*Ellesmere/Axel Heiberg Islands*), and PC/06 (*Other Queen Elizabeth Islands*) is not supported by any information presented in the document. In opposition to the document, the COSEWIC status report does not support the identification of these 5 separate populations (COSEWIC 2004). Based upon a caribou genetics and relationship workshop, the COSEWIC status reports the Western Queen Elizabeth Islands as a distinct population (COSEWIC 2004).

"Although there have been no DNA samples of caribou from the eastern Queen Elizabeth Islands analysed for genetic relationships, based on morphology, they group with western Queen Elizabeth islands caribou" (COSEWIC: 17).

The COSEWIC status report then assigns a population designation of Queen Elizabeth Islands as one population for the remainder of its analysis (COSEWIC: 18).

4.0 Total allowable harvest (TAH)

Summaries of the recommended levels of TAH, rationale for levels of TAH and recommended quotas within populations are presented in Table 3.3 of section 3.2.2 of the document.

i) <u>PC/01</u> (Bathurst Island Archipelago)

- a. The value of the mean abundance estimate is not presented. The confidence level and interval of this mean estimate is also not provided. There is no information provided for the methods and calculation of this estimate.
- b. The recommended TAH for PC/01 is 14. This value is: "based on 5% of mean abundance estimate" (DoE: 29). The justification for selecting 5% is based upon a target "growth rate of 30% annually" (DoE: 29).

However, the current status and the population dynamics of this population are not presented. Thus, the justification of utilizing 5% of the mean abundance estimate to establish as the TAH is not supported by any information or analysis of the population dynamics of this population.

ii) <u>PC/02</u> (Somerset/Prince of Wales)

- a. The value of "very low numbers" (DoE: 29) is not presented. There is no information provided for the methods and calculation of this qualitative statement. There is no date associated with the qualitative assessment. There is no information provided for the rationale to utilize a qualitative assessment instead of the previous practice of utilizing a quantitative assessment.
- b. The recommended TAH for PC/02 is 0. There is no information provided for the generation of this value. The current status and the population dynamics of this population are not presented. The justification of utilizing a qualitative assessment to establish the TAH is not supported by any information or analysis of the population dynamics for this population.

iii) <u>PC/03</u> (West Devon)

- a. A value of 65 animals based upon a 2002 survey estimate is presented (DoE: 29). The confidence level and interval of the survey estimate is not provided. There is no information provided for the methods and calculation of this estimate.
- b. The recommended TAH for PC/03 is 2. There is no information provided for the generation of this value. The current status and the population dynamics of this population are not presented. The justification to establish a TAH value of 2 is not supported by any information or analysis of the population dynamics of this population.

iv) **PC/04** (North Devon)

- a. The value of "very low numbers" (DoE: 29) is not presented. There is no information provided for the methods and calculation of this qualitative statement. There is no date associated with the qualitative assessment. There is no information provided for the rationale to utilize a qualitative assessment instead of the previous practice of utilizing a quantitative assessment.
- b. The recommended TAH for PC/04 is 0. There is no information provided for the generation of this value. The current status and the population dynamics of this population are not presented. The justification of

utilizing a qualitative assessment to establish the TAH is not supported by any information or analysis of the population dynamics for this population.

v) <u>PC/05</u> (Ellesmere/Axel Heiberg)

- a. There is no qualitative or quantitative information of the population status provided.
- b. The recommended TAH for PC/05 is 50. There is no information presented for the generation of this value. The current status and the population dynamics of this population are not presented.

vi) <u>PC/06</u> (Other Queen Elizabeth Islands)

- a. The value of Peary caribou "densities" is not presented. There is no information provided for the methods and calculation of this qualitative statement. There is no date associated with the qualitative assessment. There is no information provided for the rationale to utilize a qualitative assessment instead of the previous practice of utilizing a quantitative assessment.
- b. The recommended TAH for PC/06 is 0. There is no information presented for the generation of this value. The population dynamics of this population are not presented.

Summary:

Firstly, the document is lacking critical information regarding the population status and population dynamics for each population. For those populations where an estimate is provided, there are no references or detailed information provided for the confidence levels and intervals of these estimates. There is no means to review the establishment of a TAH for each population.

Secondly, for Peary caribou populations PC/02-PC/06, there is no information provided to explicate the generation of the TAH values that have been recommended.

5.0 Sex selectivity of harvest

i) An annual sex harvest of 5 males: 5 individuals-of-either sex is recommended for PC/01. The rationale provided in the document is to conserve females "in order to mitigate the impact on harvesting on populations and encourage populations to attain and retain increased numbers when range conditions have recovered" (DoE:30). There is no information, references or population dynamic analysis provided to support this restriction. There is no information provided for the selection of the recommended ratio.

Summary:

The harvest is oriented towards males in all populations except for those that underutilized. The desired effect is to maintain stability and promote growth of present populations. There is no information, references or population dynamic analysis provided to support this action. There is no information provided for the selection of the recommended ratio. There is no information or analysis provided with respect to all of the effects of this type of sex selectivity.

Literature Cited

COSEWIC 2004. COSEWIC assessment and update status report on the Peary caribou *Rangifer tarandus pearyi* and the barren-ground caribou *Rangifer tarandus groenlandicus* (Dolphin and Union population) in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. x + 91 pp. (www.sararegistry.gc.ca/status/status_e.cfm).

Wildlife Research Section, Department of Environment, Government of Nunavut. 2005. Recommendations on Total Allowable Harvest (TAH) rates for terrestrial wildlife populations in Nunavut. (Dec.31, 2005). Iqaluit, Nunavut. 74 pp.

ANNEX 1 – Item 2

Review of section 3.1 Muskox (Ovibos moschatus)

1.0 Terms:

The term **document** is used to refer to *Recommendations on total allowable harvest (TAH) rates for terrestrial wildlife populations in Nunavut* prepared by the Wildlife Research Section (WRS), Department of Environment, Government of Nunavut (DoE 2005).

2.0 Definitions:

2.1 Definition of 'population'

The working definition of population is provided in section 1.4 of the document.

"Recommended levels of TAH are defined for populations specific to species, whereby a population is defined as a demographic unit for which birth and death rates are believed to contribute more to population trajectory than rates of immigration and emigration." (DoE: 3)

2.3 Definition of 'total allowable harvest' (TAH)

The working definition of TAH is provided in section 1.4 of the document.

"Total allowable harvest for a stock or population is defined as the number of individuals from a population of wildlife that may be lawfully harvested as established by the NWMB pursuant to Sections 5.6.16 to 5.6.18 of the NLCA."

2.2 Definition of 'quota'

The term quota is used in Table 3.1. However, there is no definition of quota provided in the working definitions section of the document. The document mentions that additional definitions that are used in the document are described under Section 5.1.1 of the NLCA. There is no definition of quota provided in Section 5.1.1 of the NLCA.

A definition of quota is provided in the big game hunting regulations of the wildlife act for the Northwest Territories (NWT 2004). A muskox quota has been historically set and is currently set for muskox management zones of the NWT.

""quota" means the total number of tags for a specific animal which may be issued for all licence types within a given area, unit or zone" (NWT 2004)

⁵⁵ Quota limitations, other than TAHs are not before the NWMB for decision. The use of the term 'quota' (as something other than a TAH) and its application in the GN document raises confusion.

2.3 Definition of 'Area code':

The definition of Area code used in Table 3.1 of the document is not provided. The area code represents a code used to identify a specific area of a recognized population. This is quite different from identifying a population. Populations MX/05, MX/09, MX/11, and MX/13 were subdivided into multiple areas and assigned two or more area codes. Each of these areas was then assigned a quota. This suggests that each area represents a type of management unit. The definition of area is provided in the NWT big game regulations of the NWT wildlife act.

""area" means a wildlife management area designated under section 18 of the Act" (NWT 2004)

3.0 Identification of populations

3.1 Population delineation

In section 3.1.1 of the document, <u>12 populations</u> of muskox (labelled MX/01 to MX/12) that reside wholly or partially in Nunavut are identified. The geographic boundaries of Nunavut muskox populations were evaluated from assessment of:

- i) <u>Inuit Qaujimajatuqangit (IQ).</u>
 - a. The IQ that was utilized is not presented.
 - b. There are no references provided.
- ii) Survey results.
 - a. The survey results are not presented.
 - b. There are no references provided.
- iii) Movements of radio-collared animals.
 - a. The results are not presented.
 - b. There are no references provided.
- iv) Known geographic barriers (e.g. glaciers) to muskox movements.
 - a. The geographic items, locations, and rationale to consider these items as barriers to muskox movements are not specified.
 - b. There are no references provided.

Summary:

The document does not provide any evidence or references for the delineation of the 12 muskox populations. For example, the separation of mainland muskox population MX/11 from MX/13 is not supported by any information presented in the document. The identification of 3 muskox populations - MX/06, MX/07, and MX/08 on one island (Devon Island) is also not supported by any information. Lastly, the delineation of 2

muskox populations MX/03 and MX/05 on Ellesmere Island is also not supported by any information.

It should be noted that populations MX/01, MX/02, MX/03, MX/05, MX/06, MX/07, MX08, MX/10, and MX/12 were each assigned one area code with a concomitant quota. Populations MX/09, MX/11, and MX/13 were assigned multiple area codes with quota levels for each area code. The rationale for subdividing these populations into areas was not presented in the document. In cases where multiple areas exist within one population, the biological rationale for the demarcation of the area boundaries was not presented.

4.0 Total allowable harvest (TAH)

Summaries of the recommended levels of TAH, rationale for levels of TAH and recommended quotas within populations are stated in the document to be presented in Table 3.1 of section 3.1.2 of the document.

i) <u>MX/01</u> (Bathurst Island)

- a. The value of the mean abundance estimate is not presented. The confidence level and interval of this mean estimate is also not provided. There is no information provided for the methods and calculation of the 2001 population estimate.
- b. The recommended TAH for MX/01 is 5. This value is: "based on 3% of mean abundance estimate determined in 2001 (only 3% of mean because of marginal growth since 1997). TAH allows for population growth" (DoE: 24). The current status and the population dynamics of this population are not presented. The justification of utilizing 3% of the mean abundance estimate to establish as the TAH is not supported by any information or analysis of the population dynamics for this population.
- c. This population has been assigned one area code labelled BI with a quota value of 5. There is no information provided for the justification of establishing this area and the assignment of this quota value.

ii) <u>MX/02</u> (Cornwallis Island)

- a. The value of the mean abundance estimate is not presented. The confidence level and interval of this mean estimate is also not provided. There is no information provided for the methods and calculation of the mean abundance estimate.
- b. The recommended TAH for MX/02 is 0. This value is based upon: "3% of mean abundance estimate" (DoE: 24). This statement suggests that the population estimate for MX/02 is 0. The current status and the population

dynamics of this population are not presented. The justification of utilizing 3% of the mean abundance estimate to establish as the TAH is not supported by any information or analysis of the population dynamics for this population.

c. This population has been assigned one area code labelled CI with a quota value of 0. There is no information provided for the justification of establishing this area and the assignment of this quota value.

iii) MX/03 (Ellesmere Island)

- a. The value of the total abundance estimate is not presented. The confidence level and interval of the total abundance estimate is also not provided. There is no information provided for the methods and calculation of this estimate.
- b. The recommended TAH for MX/03 is 70. This value is based upon: "5% of total abundance estimate" (DoE: 24). The current status and the population dynamics of this population are not presented. The justification of utilizing 5% of the total abundance estimate to establish as the TAH is not supported by any information or analysis of the population dynamics for this population. There is no information provided for the rationale to utilize a total abundance estimate to calculate the TAH for this population instead of the previous practice of utilizing the mean abundance estimate.
- c. This population has been assigned one area code labelled SF (Ellesmere Island). The recommended TAH for MX/03 is 70. The recommended quota for area SF is 70. There is no information provided for the justification of establishing this area and the assignment of this quota value.

iv) <u>MX/05⁵⁶</u> (Ellesmere Island)

- a. The value of the mean abundance estimate is not presented. The confidence level and interval of the total abundance estimate is also not provided. There is no information provided for the methods and calculation of this estimate.
- b. The recommended TAH for MX/05 is 27. This value is based upon: "5% of mean abundance estimate" (DoE: 24). The current status and the population dynamics of this population are not presented. The justification of utilizing 5% of the total abundance estimate to establish as the TAH is not supported by any information or analysis of the population dynamics for this population.

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⁵⁶ Note that MX/04 has been removed from the DoE document and is therefore not reviewed here.

c. This population has been assigned one area code labelled GF. The recommended quota for area code MF is 21. There is no information provided for the justification of establishing this area and the assignment of this quota value.

v) MX/06 (Devon Island)

- a. The value of the minimum count of muskox is not presented. There is no information provided for the methods and calculation of the minimum count. There is no date associated with this estimate. There is no information provided for the rationale to utilize a minimum count instead of the previous practice of calculating a mean abundance estimate.
- b. The recommended TAH for MX/06 is 14. This value is based upon: "5% of minimum count of muskox presented in survey data" (DoE: 24). The current status and the population dynamics of this population are not presented. The justification of utilizing 5% of minimum count to establish as the TAH is not supported by any information or analysis of the population dynamics for this population. There is no information provided for the rationale to utilize a minimum count to calculate the TAH for this population instead of the previous practice of utilizing a mean abundance estimate.
- c. This population has been assigned one area code labelled ND. The recommended quota for area code ND is 14. There is no information provided for the justification of establishing this area and the assignment of this quota value.

vi) **MX/07** (Devon Island)

- a. The value of the minimum count of muskox is not presented. There is no information provided for the methods and calculation of the minimum count. There is no date associated with this estimate. There is no information provided for the rationale to utilize a minimum count instead of the previous practice of calculating a mean abundance estimate.
- b. The recommended TAH for MX/07 is 4. This value is based upon: "5% of minimum count of muskox presented in survey data" (DoE: 24). The current status and the population dynamics of this population are not presented. The justification of utilizing 5% of minimum count to establish as the TAH is not supported by any information or analysis of the population dynamics for this population. There is no information provided for the rationale to utilize a minimum count to calculate the TAH for this population instead of the previous practice of utilizing a mean abundance estimate.

c. This population has been assigned one area code labelled SD. The recommended quota for area code SD is 4. There is no information provided for the justification of establishing this area and the assignment of this quota value.

vii) **MX/08** (Devon Island)

- a. The value of the abundance of muskox is not presented. There is no information provided for the methods and calculation of the abundance. There is no date associated with the qualitative assessment of the abundance. There is no information provided for the rationale to utilize a qualitative assessment instead of the previous practice of utilizing quantitative assessments.
- b. The recommended TAH for MX/08 is 0. This value is based upon a qualitative assessment that the population is suffering "very low abundance" (DoE:24). The current status and the population dynamics of this population are not presented. The justification of utilizing a qualitative assessment to establish the TAH is not supported by any information or analysis of the population dynamics for this population. There is no information provided for the rationale to utilize a qualitative assessment to establish the TAH for this population.
- c. This population has been assigned one area code labelled WD. The recommended quota for area code WD is 0. There is no information provided for the justification of establishing this area and the assignment of this quota value.

viii) **MX/09** (Somerset and Prince of Wales Island)

- a. There is no qualitative or quantitative information provided for this population.
- b. The recommended TAH for MX/09 is 32. There is no information presented for the generation of this value. The current status and the population dynamics of this population are not presented.
- c. This population has been assigned two area codes labelled RB (Somerset Island) and TA (Prince of Wales Island). The recommended quota RB is 20. The recommended quota for TA is 12. There is no information provided for the justification of establishing this area and the generation and assignment of these quota values.

ix) MX/10 (Victoria Island)

- a. There is no qualitative or quantitative information provided for this population.
- b. The recommendation is not to establish a TAH for MX/10. This is based upon a qualitative assessment that "the current total harvest is far less than even conservative estimates of the TAH, so no TAH is required" (DoE: 24). The current status and the population dynamics of this population are not presented. The wildlife division of the NWT government estimates 30,000 non-calving muskox within their territorial boundaries of Victoria Island (NWT Fisheries and wildlife 2005).
- c. This population has been assigned one area code labelled VI. There is no information provided for the justification of establishing this area.

x) <u>**MX/11**</u> (*Kitikmeot*)

- a. This population has been assigned four area codes labelled CM, QM, KW, and EX. The recommended TAH is 358 for MX/11. This value represents the sum total of a TAH provided for each area code.
- b. A TAH of 240 is suggested for MX/11-CM and is based upon 4% of the population estimate. There is no rationale and support provided for establishing a TAH for this area code. The value of the population estimate is not presented. There is no information provided for the methods and calculation of the population estimate. The justification of utilizing 4% of the population estimate to establish as the TAH is not supported by any information or analysis of the population dynamics for this population.
- c. A TAH of 66 is suggested for MX/11-QM and is based on 3% of the population estimate. A population estimate of 2200 is provided for this area code. There is no rationale and support provided for establishing a TAH for this area code. The confidence level and interval of the total abundance estimate is also not provided. There is no information provided for the methods and calculation of the population estimate. The justification of utilizing 3% of the population estimate to establish as the TAH is not supported by any information or analysis of the population dynamics for this population. There is no information provided for the rationale change the percentage of the population estimate from 4% to 3% to calculate the TAH for this population.
- d. A TAH of 12 is suggested for MX11-KW and is based upon 4% of the population estimate. A population estimate of 317 is provided for this area code. There is no rationale and support provided for establishing a

TAH for this area code. The confidence level and interval of the total abundance estimate is also not provided. There is no information provided for the methods and calculation of the population estimate. Although, it is stated that the current population is increasing, there is no information provided to explicate the rationale of selecting the value of 3% of the population estimate to establish as the TAH. There is no information or analysis of the population dynamics for this population.

e. A TAH of 10 is suggested for area code EX and is based upon 4% of the most recent estimate. There is no rationale and support provided for establishing a TAH for this area code. The value of the population estimate is not presented. There is no information provided for the methods and calculation of the population estimate. Although it is stated that the population is recolonizing, there is no information provided to explicate the rationale of selecting a value of 4% of the population estimate to establish as the TAH. There is no information or analysis of the population dynamics for this population.

xi) <u>MX/12</u>

- a. There is no qualitative or quantitative information provided for this population.
- b. The recommended TAH for MX/12 is 20. There is no information presented for the generation of this value. There is no information of the population dynamics presented.
- c. This population has been assigned one area code labelled BP. The recommended quota for BP is 20.

xii) **MX/13** (*Kivalliq*)

- a. There is no qualitative or quantitative information provided for this population.
- b. A TAH of 101 is recommended for MX/13 and is based upon "approximately 3% of the lower confidence interval of survey means" (DoE: 24). The confidence level and interval of the survey means are not provided. There is no information provided for the methods and calculation of the survey means. There is no information provided to explicate the rationale of selecting the value of 3% of the lower confidence intervals of survey means to establish as the TAH. There is no information or analysis of the population dynamics of this population.
- c. This population has been assigned three area codes labelled NK, SK, and TH. The recommended quotas for NK, SK and TH are 41, 60 and 0

respectively. There is no information provided for the justification of establishing these area codes and the generation and assignment of these quota values.

Summary:

Firstly, the document is lacking critical information regarding the population status and population dynamics for each population. For those populations where an estimate is provided, there are no references or detailed information provided for the confidence levels and intervals of these estimates. There is no means to review the establishment of a TAH for each population.

Secondly, the document provides the criteria utilized for the setting of the TAH for each population except for MX/12 for which no information is presented. The criteria utilized to establish a TAH include: 3-5% mean abundance estimate, 5% minimum count estimate, qualitative assessments of low abundance, 3-4% population estimate, and 3% of the lower confidence interval of survey means. No information or references are provided to explicate and support the selection of each criterion for each population.

Thirdly, each of the populations has been assigned one or more area codes. The document does not define the term "area". However, each area is assigned a quota according to the table heading (Table 3.1 DoE:24). No rationale, references, or explanation are provided for the setting of quotas of different areas within the same population.

Lastly, for population MX/11, each of the area codes is assigned a TAH according to the text in Table 3.1 of the document (DoE: 24). The document clearly identifies that the term TAH refers to the total allowable harvest for a population. The setting of separate TAHs within MX/11 is contradictory unless each of the area codes represents a population. If this is the case, then it may be important to explicate the use of area codes and quotas in Table 3.1 as no information is provided in terms of definitions and use.

5.0 Sex selectivity of harvest

- i) An annual sex harvest of 3 males: 3 individuals-of-either sex is recommended for MX/01. The rationale provided in the document is to conserve females for small populations of muskox. There is no information, references or population dynamics analysis provided to support this restriction. There is no information provided for the selection of the recommended ratio.
- ii) An annual harvest of 7 males: 7 individuals-of-either sex is recommended for MX/06. There is no information, references or population dynamics analysis provided to support this restriction. There is no information provided for the selection of the recommended ratio.

iii) An annual sex-selective harvest of 2 males: 2 individuals-of-either sex is recommended for MX/07. There is no information, references or population dynamics analysis provided to support this restriction. There is no information provided for the selection of the recommended ratio.

Summary:

The harvest is oriented towards males in all populations except for those that underutilized. The desired effect is to maintain stability and promote growth of present populations. There is no information, references or population dynamics analysis provided to support this action. There is no information provided for the selection of the recommended ratio. There is no information or analysis provided with respect to all of the effects of this type of sex selectivity.

6.0 Seasons of harvest

i) The document recommends a season of harvest for southern muskox populations inhabiting mainland Kitikmeot (MX/11), Boothia Peninsula (MX/12) and mainland Kivalliq (MX/13) from 01 October – 15 April. The rationale provided for the harvest season is "to protect against disruption of muskox groups during summer" (DoE: 25). "Management is directed at increasing population growth rates and conserving expanding populations" (DoE: 25). The support for increasing the population growth rates and conserving expanding populations for these specified populations is not provided.

Literature Cited

Government of Northwest Territories. 2004. *Big game hunting regulations*, Reg. 019-92

Wildlife Research Section, Department of Environment, Government of Nunavut. 2005. Recommendations on Total Allowable Harvest (TAH) rates for terrestrial wildlife populations in Nunavut. (Dec.31, 2005). Iqaluit, Nunavut. 74 pp.

ANNEX 1- Item 3

Review birds of prey with respect to section 5.0 (TAH of bird species)

1.0 Terms:

The term **document** is used to refer to *Recommendations on total allowable harvest (TAH) rates for terrestrial wildlife populations in Nunavut* prepared by the Wildlife Research Section (WRS), Department of Environment, Government of Nunavut (DoE 2005).

2.0 Definitions:

2.1 Definition of 'population'

The working definition of population is provided in section 1.4 of the document.

"Recommended levels of TAH are defined for populations specific to species, whereby a population is defined as a demographic unit for which birth and death rates are believed to contribute more to population trajectory than rates of immigration and emigration." (DoE: 3)

2.3 Definition of 'total allowable harvest' (TAH)

The working definition of TAH is provided in section 1.4 of the document.

"Total allowable harvest for a stock or population is defined as the number of individuals from a population of wildlife that may be lawfully harvested as established by the NWMB pursuant to Sections 5.6.16 to 5.6.18 of the NLCA."

2.2 Definition of 'quota'

The term quota is used in sections 5.1 and 5.2. However, there is no definition of quota provided in the working definitions section of the document. The document mentions that additional definitions that are used in the document are described under Section 5.1.1 of the NLCA. There is no definition of quota provided in Section 5.1.1 of the NLCA.

A definition of quota is provided in the big game hunting regulations of the wildlife act for the Northwest Territories (NWT 2004). A muskox quota has been historically set and is currently set for muskox management zones of the NWT.

""quota" means the total number of tags for a specific animal which may be issued for all license types within a given area, unit or zone" (NWT 2004)

3.0 Identification of populations

3.1 Population delineation

There is no identification of gyrfalcon populations presented in section 5.1 of the document. For gyrfalcons, three regions are identified but not labeled as populations in this section. The document states in section 5.1 that "all populations are poorly defined due to lack of research on these species" (DoE: 36). For other birds of prey, the following birds are recognized: Peregrine falcons (*Falco peregrinus*), Snowy owls (*Bubo scandiaca*), Short-eared owls (*Asio flammeus*), Golden eagles (*Aquila chrysaetos*), Bald eagles (*Haliaeetus leucocephalus*), Rough-legged hawk (*Buteo lagopus*), Harrier (*Circus cyaneus*) and Osprey (*Pandion haliaetus*). For all of these species, no populations are identified in section 5.1

In appendix I of the document, 11 populations of birds of prey are identified and presented.

i) Gyrfalcon-Baffin

a. There is no qualitative or quantitative information provided for the identification of this population.

ii) Gyrfalcon-Kitikmeot

a. There is no qualitative or quantitative information provided for the identification of this population.

iii) Gyrfalcon-Kivalliq

a. There is no qualitative or quantitative information provided for the identification of this population.

iv) Peregrine-Falcon

a. There is no qualitative or quantitative information provided for the identification of this population.

v) Snowy Owl

a. There is no qualitative or quantitative information provided for the identification of this population.

vi) Short-Eared Owl

a. There is no qualitative or quantitative information provided for the identification of this population.

vii) Bald Eagle

a. There is no qualitative or quantitative information provided for the identification of this population.

viii) Golden Eagle

b. There is no qualitative or quantitative information provided for the identification of this population.

ix) Rough-legged Hawk

a. There is no qualitative or quantitative information provided for the identification of this population.

x) Harrier

a. There is no qualitative or quantitative information provided for the identification of this population.

xi) Osprey

a. There is no qualitative or quantitative information provided for the identification of this population.

Summary:

Although, appendix I of the document lists 11 populations for birds of prey, neither section 5.0 or appendix I supplies any evidence or references to support the identification of 11 populations. Section 5.1.1 and Section 5.1.2 clearly states that "all populations are poorly defined due to lack of research on these species" (DoE 36-37).

4.0 Total allowable harvest (TAH)

The recommended levels of TAH are presented in section 5.0 and Appendix I of the document.

i) Gyrfalcon-Baffin

- a. There is no qualitative or quantitative information provided for this population.
- b. The recommended TAH for this population is 10. The only information presented to explicate the generation of this value is the statement: "consultation with population biologists familiar with gyrfalcon biology in arctic Canada (R. Bromley, K. Poole)..." (DoE: 36). No further information or analysis of population dynamics of this population are presented to explicate the generation of this TAH value.

ii) Gyrfalcon-Kitikmeot

- a. There is no qualitative or quantitative information provided for this population.
- b. The recommended TAH for this population is 10. The only information presented to explicate the generation of this value is the statement: "consultation with population biologists familiar with gyrfalcon biology in arctic Canada (R. Bromley, K. Poole)…" (DoE: 36). No further

information or analysis of population dynamics of this population are presented to explicate the generation of this TAH value.

iii) Gyrfalcon-Kivalliq

- a. There is no qualitative or quantitative information provided for this population.
- b. The recommended TAH for this population is 10. The only information presented to explicate the generation of this value is the statement: "consultation with population biologists familiar with gyrfalcon biology in arctic Canada (R. Bromley, K. Poole)..." (DoE: 36). No further information or analysis of population dynamics of this population are presented to explicate the generation of this TAH value.

iv) Peregrine-Falcon

- a. There is no qualitative or quantitative information provided for this population.
- b. The recommended TAH for this population is 0. There is no information presented for the generation of this value. The current status and the population dynamics of this population are not presented.

v) Snowy Owl

- a. There is no qualitative or quantitative information provided for this population.
- b. The recommended TAH for this population is 15. There is no information presented for the generation of this value. The current status and the population dynamics of this population are not presented.
- c. The document states that harvest of snowy owls "shall be distributed as 5 birds per region (i.e., Kivalliq, Kitikmeot, and Baffin" (DoE: 45). There is no information or rationale provided for this allocation.

vi) Short-Eared Owl

- a. There is no qualitative or quantitative information provided for this population.
- b. The recommended TAH for this population is 0. This value is based upon the "the general lack of interest in harvesting birds of prey listed in Section 5.1.2 of this document in the NWHS, and the listing of short-eared owls, golden eagles, bald eagles and harriers under COSEWIC" (DoE: 37). The Committee on the status of Endangered Wildlife in Canada (COSEWIC) designation, Species at Risk Act (SARA) listing and any information regarding the population dynamics of this population are not presented.

c. The short-eared owl is currently designated as "special concern" by COSEWIC under schedule 3 of SARA (SARA 2006).

vii) Bald Eagle

- a. There is no qualitative or quantitative information provided for this population.
- b. The recommended TAH for this population is 0. This value is based upon the "the general lack of interest in harvesting birds of prey listed in Section 5.1.2 of this document in the NWHS, and the listing of short-eared owls, golden eagles, bald eagles and harriers under COSEWIC" (DoE: 37). The COSEWIC designation, SARA listing and any information regarding the population dynamics of this population are not presented.
- c. With respect to the SARA listing, the bald eagle was designated as "Not at Risk" in April 1984 by COSEWIC and is not listed under SARA (COSEWIC 2006).

viii) Golden Eagle

- a. There is no qualitative or quantitative information provided for this population.
- b. The recommended TAH for this population is 0. This value is based upon the "the general lack of interest in harvesting birds of prey listed in Section 5.1.2 of this document in the NWHS, and the listing of short-eared owls, golden eagles, bald eagles and harriers under COSEWIC" (DoE: 37). The COSEWIC designation, SARA listing and any information regarding the population dynamics of this population are not presented.
- c. With respect to the SARA listing, the Golden eagle was designated as "Not at Risk" in April 1987 and in April 1996 by COSEWIC and is not listed under SARA (COSEWIC 2006).

ix) Rough-legged Hawk

- a. There is no qualitative or quantitative information provided for this population.
- b. The recommended TAH for this population is 0. There is no information presented for the generation of this value. The current status and the population dynamics of this population are not presented.

x) Harrier

a. There is no qualitative or quantitative information provided for this population.

- b. The recommended TAH for this population is 0. This value is based upon the "the general lack of interest in harvesting birds of prey listed in Section 5.1.2 of this document in the NWHS, and the listing of short-eared owls, golden eagles, bald eagles and harriers under COSEWIC" (DoE: 37). The COSEWIC designation, SARA listing and any information regarding the population dynamics of this population are not presented.
- c. With respect to the SARA listing, the Harrier, Northern was designated as "Not at Risk" in April 1993 by COSEWIC and is not listed under SARA (COSEWIC 2006).

xi) Osprey

- a. There is no qualitative or quantitative information provided for this population.
- b. The recommended TAH for this population is 0. There is no information presented for the generation of this value. The current status and the population dynamics of this population are not presented.

Summary:

Firstly, the document is lacking critical information regarding the population status and population dynamics for each population. For all populations, there are no references or detailed information provided to support the TAH values that have been recommended. There is no means to review the establishment of a TAH for each population.

Secondly, the document provides information that is ambiguous. One of the rationales provided for the establishment of a TAH is the "the listing of short-eared owls, golden eagles, bald eagles and harriers under COSEWIC" (DoE: 37). Upon review of the COSEWIC designations and SARA public registry, only short-eared owls are currently listed under schedule 3 of SARA and designated by COSEWIC as "special concern". Golden eagles, bald eagles, and harriers are all designated as "not at risk" and are not listed under SARA (COSEWIC 2005).

5.0 Seasons of harvest

i) The document recommends a season of harvest for gyrfalcons from 01 September – 31 October. The only information provided to support this restriction is the following statement: "After consultation with recognized experts on arctic gyrfalcon ecology (B. Bromley, K. Poole)." There is no further information provided. There are no references provided. Therefore, there is no means to evaluate this restriction.

Literature Cited

- COSEWIC. (2005). *Database of species assessed by COSEWIC*. Retrieved on April 14, 2006 from: http://www.cosewic.gc.ca/eng/sct1/searchdetail_e.cfm
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- SARA. (2006). *Species Profile: Short-Eared Owl*. Retrieved on April 14, 2006 from: http://www.sararegistry.gc.ca/species/speciesDetails_e.cfm?sid=60
- Wildlife Research Section, Department of Environment, Government of Nunavut. 2005. Recommendations on Total Allowable Harvest (TAH) rates for terrestrial wildlife populations in Nunavut. (Dec.31, 2005). Iqaluit, Nunavut. 74 pp.

ANNEX 2 – Item 1 [insert]

ANNEX 2 - Item 2 [insert]