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Building Nunavut Together
Nunavuliuqatigiingniq
Bâtir le Nunavut ensemble

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Minister of Environment
Ministaat Avatiliqiyitkut
Ministre de l'Environnement

March 29, 2018

RECEIVED
APR 24 2018

Mr. Daniel Shewchuk
Acting Chairperson
Nunavut Wildlife Management Board
P.O Box 1379
Iqaluit, NU X0A 0H0

Dear Mr. Shewchuk:

Re: Peary Caribou Management Plan and proposed Total Allowable Harvest for Peary Caribou.

At the Nunavut Wildlife Management Board's (NWMB's or Board's) regular meeting, held in Iqaluit on September 11, 2017, in response to the Government of Nunavut's (GN's) Request for Decision, the Board addressed the process by which they should consider approving a Peary Caribou management plan and the establishment of Total Allowable Harvests (TAHs) for Peary Caribou.

After considering the concerns raised by Nunavut Tunngavik Incorporated (NTI) in its letter to the GN and Board, dated August 4, 2017, and the response provided by the GN in its letter to NTI, dated August 30, 2017, the Board decided to delay the process to be followed and invited NTI and the GN to work together to discuss and address outstanding issues regarding the Plan.

In the NTI letter to the GN and Board, dated August 4, 2017, a request was made to ensure meaningful consultation with affected Nunavut beneficiaries. NTI expressed concern with the time that had passed since the initial consultations and the concerns expressed by communities regarding the TAH recommendations.

NTI and GN officials held a conference call with the Iviq HTO in Grise Fiord on November 30, 2017. As an outcome to the call, NTI and GN representatives agreed that due to the time that had passed since the previous consultations on the draft Management Plan, there was a need for follow-up consultations with the Grise Fiord and Resolute Bay HTOs.

P.O. Box 2410
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Minister of Environment
Ministaat Avatiliqiyitkut
Ministre de l'Environnement

The GN held HTO consultations with Resolute Bay and Grise Fiord between the dates of February 1-2, 2018. NTI, NWMB, and Qikiqtaaluk Wildlife Board (QWB) representatives participated in each of the GN-led consultations. The purpose of the additional consultations was to:

- Discuss the current draft Peary Caribou Management Plan (2014) and the rationale for proposed TAH recommendations and management units.
- Invite comments from each HTO on: i) whether TAHS are justified for Peary Caribou, ii) if so, based on what populations, and iii) the core components of the current draft management plan.

Following the HTO consultations, the GN completed a summary report (see attached). As a result of the consultations and in an effort to accommodate the opposition from both communities concerning the TAH recommendations for the Ellesmere Island Group (PC-01) and the Bathurst Island Group (PC-05, the GN would be open to having mandatory harvest reporting in place of TAHs. The GN maintains the recommendations to have moratoriums on harvesting for the Devon Island Group (PC-04) and the Prince of Wales Group (PC-06). GN representatives will be present to answer any questions regarding these matters at the next NWMB regular meeting set for June 2018.

I look forward to the Board continuing with the decision making process for the Peary Caribou Management Plan and harvest recommendations. If the Board's staff members have any questions, please address them to Drikus Gissing, Director of Wildlife Management.

Sincerely,

Joe Savikataaq,
Minister

P.O. Box 2410
Iqaluit, Nunavut X0A 0H0
(867) 975-5075
(867) 975-5016

May 4, 2018

Mr. Daniel Shewchuk
Acting Chairperson
Nunavut Wildlife Management Board
P.O. Box 1379
Iqaluit, NU X0A 0H0

Re: Regular Meeting No. RM 002-2018; revised Peary Caribou Request for Decision

Nunavut Tunngavik Incorporated (NTI) appreciates the opportunity to provide the following submission in response to the notice of NWMB Regular Meeting No. RM 002-2018.

General Comment regarding proposed Peary Caribou decisions

NTI is recently in receipt of the Government of Nunavut's (GN's) revised Peary Caribou proposal and the GN's request that the Nunavut Wildlife Management Board (NWMB) continue its decision-making process for matters pertaining to Peary Caribou at Regular Meeting No. RM 002-2018.

Please be advised that NTI received the GN's revised Peary Caribou proposal only on April 28, 2018. As such, NTI will need more time to have discussions with HTO's and the GN before being in a position to provide a submission to the GN and NWMB on a mutually satisfactory procedure for the NWMB to consider the views of Inuit and the public regarding this matter. As discussed during our telephone conference with the NWMB and others yesterday, there is value in further engagement taking place prior to any decisions regarding the GN's Peary Caribou proposal.

NTI Proposals for Regular Meeting No. RM 002-2018

NTI proposes that the NWMB, at Regular Meeting No. RM 002-2018, request or direct the GN to take the following steps:

... /2

- Revise the draft Peary Caribou Management Plan to more clearly incorporate the GN's revised positions on mandatory reporting and TAHs outside the proposed PC-04 and PC-06.

- Inform the NWMB, NTI and HTOs of its views of the following three issues:

    - Issue 1: What regulatory instrument does the GN propose to use to establish mandatory reporting for Inuit in the absence of a TAH?

    - Issue 2: Would the proposed moratoria for PC-04 and PC-06 be achieved through a TAH of zero and, if not, what HTO measure or other Article 5-compliant regulatory instrument would be used to implement such moratoria?

    - Issue 3: Does the GN support the holding of in-person hearings in Grise Fiord, Resolute Bay or both to consider the approval of the draft Peary Caribou Management Plan and revised harvesting management measures?

- Undertake further engagement with the Grise Fiord and Resolute Bay HTO's, including NTI, to receive the results of the HTO follow-up discussions that HTOs indicated they planned to conduct following the February engagement regarding this matter.

Planning for future decision-making

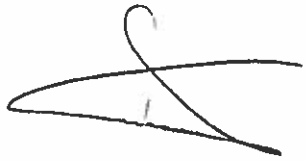
The GN's letter asking the NWMB to continue its decision-making process for matters pertaining to Peary Caribou does not recommend a process by which the NWMB will consider the views of Inuit and the public for this important matter.

While discussions between the GN and NWMB regarding procedure for decision-making pertaining to Peary Caribou have been ongoing since the NWMB's December, 2017 meeting, sufficient information is not available at this time for NTI to provide a submission on a mutually satisfactory procedure.

Therefore, NTI recommends that that no substantive decision be made on the GN's Peary Caribou proposal at the June meeting. NTI proposes to provide the NWMB with our recommended procedure for considering the views of Inuit and the public regarding Peary Caribou matters once NTI has had an opportunity to review the revised Peary Caribou proposal with the HTO's and confer further with GN officials.

For the present, please be advised that NTI plans to recommend that the NWMB hold in-person hearings in Resolute Bay, Grise Fiord or both.

Sincerely,



James Eetoolook,
Vice President, Nunavut Tunngavik Inc.

SUBMISSION TO THE

NUNAVUT WILDLIFE MANAGEMENT BOARD (NWMB)

Regular Meeting No. RM 002- 2018

FOR

Information: ☐ **Decision:** ☒

Issue: ***Delay or Suspension of the NWMB Public Hearing Processes for "Management Plan for Peary Caribou in Nunavut", and All Peary Caribou TAHs and Moratoriums in Qikiqtaaluk Region***

Background:

Since the 1960s, Resolute Bay and Grise Fiord have been effectively self-managing Peary caribou harvests on the High Arctic islands within their resource use areas. These communities have over 50 years of Peary caribou management expertise, which they have adjusted as needed with many population fluctuations and changes in distributions of Peary caribou. In their harvesting areas, no caribou populations have been depleted due to harvesting under the communities' careful and wise management. The QWB supports the HTOs in continuing their long legacy of Peary caribou management based mainly on Inuit Qaujimajatuqangit.

Nunavut's Department of Environment (DoE) has developed a Peary caribou management plan without full involvement of both Arctic Bay and Pond Inlet. During February 2018, DoE consulted about the proposed plan with the HTO Boards in Grise Fiord and Resolute Bay, but not in Arctic Bay and Pond Inlet. Public meetings were not held in Grise Fiord and Resolute Bay, but the HTO Boards did inform DoE that the public had to be consulted before decisions could be made. Inuit in the communities do not understand the implications of the proposed Plan.

The communities want to be able to continue their proven community-based management of Peary caribou. These effective mechanisms have not been explicitly recognized and enabled in the current draft of the DoE plan. Documentation of community-based Peary caribou management strategies and methods, and the lack of consultation with Arctic Bay and Pond Inlet, will take several months to address.

Consultation:

The HTOs in the High Arctic have been working to manage Peary caribou successfully for 50 years using proven locally based management strategies, both independently and in communication with their co-management partners. The QWB and its predecessors have been working with the HTOs at least 35 years.

Recommendation:

1. The QWB recommends that the NWMB Hearing processes for the "Management Plan for Peary caribou in Nunavut", and all Peary caribou TAHs and moratoriums in Qikiqtaaluk region, should be delayed or suspended for 9-12 months.
2. The QWB proposes to work with the HTOs and communities to document their community-based Peary caribou management strategies and harvest management methods, so that these may be recognized and enabled in the future.

Prepared by:

Jason Mikki, Qikiqtaaluk Wildlife Board, 867-645-4860

Michael Ferguson, Qikiqtaaluk Wildlife Board, 613-407-1197

Date:

May 3, 2018

Consultations with Hunting and Trapping Organizations on the Draft Nunavut Peary Caribou Management Plan

February 1-2, 2018

Department of Environment, Government of Nunavut Iqaluit, Nunavut

Executive Summary

Government of Nunavut, Department of Environment (DOE) representatives conducted consultations with Hunters and Trappers Organizations (HTOs) in Resolute Bay and Grise Fiord, from February 1-2, 2018, as an additional round of consultations on the draft Nunavut Peary Caribou Management Plan (the Plan). There were initial consultations held during the development of the Plan, prior to submission of the Plan to the Nunavut Wildlife Management Board (NWMB) in 2014. The additional round of consultations were carried out due to the significant amount of time that has elapsed since the Plan was submitted to the NWMB. In the time since the original submission, there as been some changes to sitting members of the HTOs and new concerns related to Peary Caribou could have arisen.

The Plan and the harvest restriction recommendations were discussed as separate items. Both Resolute Bay and Grise Fiord HTO members expressed agreement with the content of the Plan but were strongly opposed to the recommended Total Allowable Harvest (TAH) recommendations for two of the proposed Peary Caribou Management Units. DOE staff proposed that the TAH recommendations could possibly be reconsidered and replaced with consistent harvest reporting and community-based management. DOE agreed to communicate any proposed changes to the NWMB at the June 2018 regular meeting.

This report attempts to summarize the comments made by participants during the second round of consultations.

Preface

This report represents the Department of Environment's best efforts to accurately capture all of the information that was shared during consultation meetings with the Hunters and Trappers Organizations of Resolute Bay and Grise Fiord.

The views expressed herein do not necessarily reflect those of the Department of Environment, or the Government of Nunavut.

Table of Contents

1.0 Report Purpose and Structure

This report is intended to collate and summarize comments, questions, concerns and suggestions provided by the HTOs in response to the Draft Nunavut Peary Caribou Management Plan (the Plan) and the TAH and Moratorium recommendations for specific proposed Peary Caribou management units. The following communities were consulted from February 1-2, 2018:

- Resolute Bay, February 1, 2018
- Grise Fiord, February 2, 2018

Since a substantial amount of time has passed since the Plan was submitted to the NWMB and there had likely been turnover in HTO members, there was agreement between the DOE and co-management partners that additional consultations should be carried out. Initial consultations had been completed during the drafting of the Plan, prior to submission to the NWMB in 2014. The additional consultations, carried out in 2018, were necessary to ensure HTOs were still well informed and to discuss any new Inuit Qaujimajatuqangit or new concerns regarding the management or population status of Peary Caribou.

Representatives from the DOE, NWMB, Nunavut Tunngavik Inc. (NTI), and the Qikiqtaaluk Wildlife Board (QWB) attended each of the consultations.

2.0 Purpose of Consultations

The consultations were planned to be additional to the rounds of consultations that had taken place during the development of the Plan. Since approximately four years had passed since the Plan and harvest recommendations had been submitted to the NWMB, the DOE and co-management partners felt that there would be a benefit in ensuring that the Resolute Bay and Grise Fiord HTOs were still well informed and fully aware of the current status of the Plan.

2.1 Format of Meetings

The meetings were held in the evening or afternoon and ran between 2 to 3 hours depending on HTO engagement. Meetings were facilitated and led by the Senior Manager of Wildlife Operations, Jason Aliqatuqtuq, and the Senior Wildlife Advisor, Caryn Smith. Each consultation started with a presentation (Appendix 1) summarizing the process of the development and submission of the Plan and an overview of the harvest recommendations that had been submitted in 2014. The participants were invited to ask questions, raise concerns, or provide alternative recommendations throughout the meetings. After the presentation, questions/discussion continued until no further questions were raised.

3.0 Summary by Community

The objectives of the consultations were made clear to the HTO members prior to and at the start of each meeting. There were many similar questions, concerns and suggestions raised by HTO Board members in both communities consulted.

3.1 Resolute Bay

Date: February 1, 2018

Representatives:

- GN-DOE, Senior Manager of Operations: Jason Aliqatuqtuq
- GN-DOE, Senior Wildlife Advisor: Caryn Smith
- GN-DOE, North Baffin Manager: Scott Johnson
- GN-DOE, Resolute Bay Conservation Officer: Tabitha Mullin
- NTI, Biologist Cheryl Wray
- NWMB, Biologist: Denis Ndeloh
- NWMB, Biologist: Kyle Ritchie
- QWB, Board Member: Adamie Nuna
- Resolute Bay HTO Board members
    - Philip Mannik (HTO Chair)
    - Nancy Amauralik (HTO Manager)
    - Paddy Aqiatusuk
    - Joadamie Amagoalik
    - Paul Amagoalik
    - Simon Idlout
    - Kantisse Idlout
    - Mark Amarualik

Comments and questions:

The HTO members expressed concerns over outdated survey results being used to inform management recommendations, including TAHs. The community feels they have done their best to work with governments and NTI on the recovery of Peary Caribou and they have been seeing an increase in caribou numbers. A suggestion of having strict harvest reporting in place of implementing TAHs, while maintaining recommended moratoriums, was discussed and the HTO members indicated that they would prefer that approach. The representative from NTI inquired as to how DOE would accommodate the reporting of caribou harvesting. DOE representatives communicated that there would be mechanisms in place through the local Wildlife Office and Conservation Officer to facilitate the reporting of harvests. The hunters

would need to fill out a standard hunter kill return form and would be eligible for compensation from hunter incentive programs for submitting caribou samples.

It was explained by DOE representatives that the harvest restriction recommendations were not a part of the Plan but rather additional. HTO members were still in favor of the community based monitoring recommendations made in the submitted management plan. Some HTO members recognized the benefit of harvest information and referenced an Environment and Climate Change Canada project that involved surveying hunters. Meeting participants pointed out that Peary Caribou are still one population that moves widely around their range and that they have a cycling population. The impacts of wolves and weather events (Climate Change) on the Peary Caribou population was also a major concern brought up by HTO members. Other members indicated that there was a strong desire to ensure the GN monitors habitat use in relation to any mineral exploration or development. Concerns over being able to revisit the Plan over time were brought up and DOE representatives indicated that the Plan is meant to be reviewed, with input from communities, after several years and the Plan is also a living document that can address information as it changes. Any necessary changes that arise before the recommended review period can be addressed through submission for decision to the NWMB.

The HTO indicated they wanted to further discuss the information presented and discussed during the consultation among their members and with the community. The DOE representatives asked if the HTO would provide a letter prior to the NWMB regular meeting in June.

3.2 Grise Fiord Consultation Summary

Meeting Dates: February 2, 2018

Representatives:

- GN-DOE, Senior Manager of Operations: Jason Aliqatuqtuq
- GN-DOE, Senior Wildlife Advisor: Caryn Smith
- GN-DOE, North Baffin Manager: Scott Johnson
- NTI, Biologist Cheryl Wray
- NWMB, Biologist: Denis Ndeloh
- NWMB, Biologist: Kyle Ritchie
- QWB, Board Member: Adamie Nuna
- Iviq HTO Board members
    - Jarloo Kiguktak (HTO Chair)
    - Jeffrey Qaunaq
    - Liza Ningiuk
    - Marty Kuluguqtuq (HTO Secretary/Treasurer)
    - Ingerlise Christensen
    - Amon Akeeagok (HTO Vice-chair)

Comments and questions:

There was a strong desire from the start of the meeting to have updated population estimate surveys done for Ellesmere Island. The HTO felt they had not received adequate communication on the 2008 survey results. DOE representatives informed meeting participants that the Department recognized that the 2008 Peary Caribou Management Plan was outdated. Several rounds of community consultations were conducted as part of the drafting of the 2014 Peary Caribou Management Plan. The NWMB representative pointed out that the DOE had conducted surveys in 2015/2016 and the results of those surveys showed no change since the earlier survey work. The HTO members feel that there is a healthier population of Peary Caribou now than there was ten years ago. A suggestion of having strict harvest reporting in place of implementing TAHs, while maintaining recommended moratoriums, was discussed. HTO members indicated that the suggested approach of strict harvest reporting would be more acceptable as they know that the community does not support the recommendations of TAHs. There were concerns over how long a moratorium would be in place and whether or not the management units with moratoriums would be surveyed more frequently. HTO members felt that snowmobile surveys should be conducted in some areas before a moratorium is set. The NWMB representative mentioned that HTOs can communicate their preferences for lengths of moratoriums and survey frequency to the NWMB.

The HTO members were very much in favor of the Plan's recommendation of community based ground survey work but wanted to know if there would be funding for the work (e.g. a paid position in the community). DOE representatives pointed out that the NWMB offers significant funding for community based and IQ research proposals. The NWMB representative explained the funding in more detail and encouraged the HTO to apply for the funding.

The HTO members wanted to discuss the information presented and discussed during the consultation and did not indicate any specific support on that date. The DOE representatives asked if the HTO would provide a letter prior to the NWMB regular meeting in June.

4.0 Summary

There was a strong message from the HTOs in both Resolute Bay and Grise Fiord that there was little support in the communities for the DOE TAH recommendations and there was a desire to have community based research included in the ongoing management of Peary Caribou. The suggestion of strict harvest reporting in place of TAHs was well received and the HTOs agreed to discuss it further and engage their community members on the idea. There was still some concerns regarding the recommended moratoriums but some of the feedback indicated that maintaining the moratorium recommendations may be acceptable in light of TAH accommodations. Both HTOs requested time following the consultation to communicate the information with their respective communities before they would offer a letter expressing their position on the information provided and issues discussed.

Appendix 1

2014 Draft Peary Caribou Management Plan and Action Plan Recommendations

GN Department of Environment
Caryn Smith and Jason Aliqatuqtuq

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2008 Draft Plan

- The 2008 plan was considered substantially outdated and did not reflect the current status of Peary Caribou
- Updated population estimate surveys were being completed and DOE felt the management plan should reflect the most up to date and comprehensive information
- Communities had expressed they were not happy with the management units or TAH recommendations proposed in the 2008 draft plan

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Process

- Consult on the initial draft with communities
  - There were workshops in 2010 and 2011 with Grise Fiord and Resolute Bay
- Edit draft to reflect community input and concerns
- Share revised draft with stakeholders for further clarification
- Seek support on final draft
- Submit final draft to NWMB for approval and to form basis for new regulations under the wildlife act

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General Recommendations

- Recommend establishing management units based on 9 Island groups
- Establish an ongoing community based ground survey program with appropriate support
- Establish a harvest reporting and sample collection program
  - Each harvest should be reported through the submission of hunter kill reports

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- ᐊᐢᑭᐳᓯᓗᓂ ᐱᓕᕆᓐᓇᕐᓂᐊᖏᑐᑐᒋᓂᑦ ᓄᓇᓕᓐᓂᖏᓐᓄᑦᑐᑐᒋᓂᑦ ᓄᓇᒥ ᖃᐅᔨᓴᖏᓂᕐᒧᑦ ᐱᓕᕆᔨᐊᑎᒥᑦ ᐃᑲᔪᖏᑕᐅᔨᐊᑎᒥᔪᓕᐊᓕᖏᑕᖏᓐᓂᑦ ᐃᑲᔪᖏᑕᐅᔨᐊᑎᖏᓐᓄᑦ
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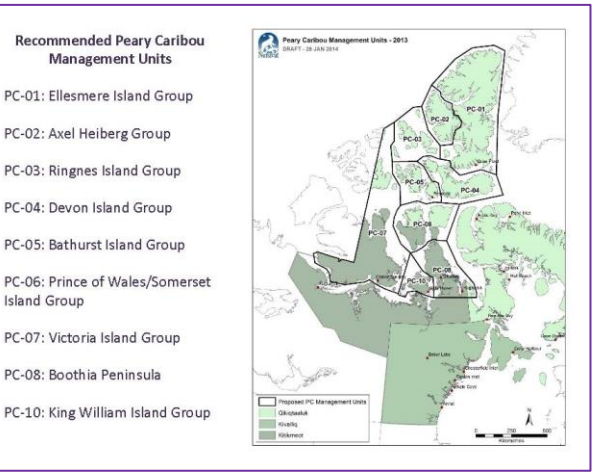
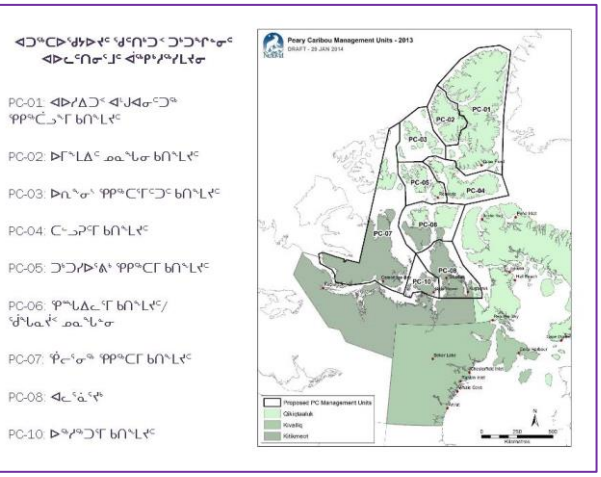
  - ᐊᑐᓂ ᓇᓰᓄᐳᑕᐅᔨᑦ ᐅᓂᐳᓕᐊᖓᖏᓕᑦᑕᒪᐊᖏᓕᒪᑕ ᑐᓂᐳᐅᔨᐊᑎᒍᒧᑦ ᐊᖓᔪᓕᐊᕐᑎᒍᒧᑦ ᓇᓰᓄᐳᑕᐅᔨᓂᑦ ᐅᓂᐳᓕᓕᐅᑎᓂᑦ





Recommendations con’ t

- Use observed changes from community monitoring program (observations of die offs, population increase or decrease) to trigger:
  1) Potential aerial surveys for severe declines,
  2) Increased frequency and coverage of community ground survey if declines are less significant,
  3) Community based changes in harvest level that would occur within a predetermined upper and lower limit.

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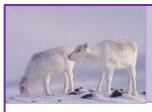
Total Allowable Harvest Recommendations

- *Ellesmere (PC-01)*
  - Recommended to maintain existing harvest levels with a bracket TAH of 45- 55 (allowing HTO to adjust as required within that bracket).
- *Devon Island group (PC-04)*
  - With only 17 animals observed in 2008 and no abundance estimate, this group should be under a moratorium until such time as an increase is observed.



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- *ᐊᐅᓯᐊᑐᑦ ᖃᑭᖅᑕᓐᓴᓗ (PC-01)*
  - ᐊᑐᖅᑕᐅᕐᔪᓂᑦ ᓯᕿᓕᑕᐅᕐᕆᓇᑦ ᑕᐃᒪᓐᓇᐃᓕᓐᓴᓂᑦ ᐊᖏᓴᓯᐊᖅᑕᐅᔪᓐᓇᖅᑎᑕᐅᔪᑦ ᐅᓇᕐᓂᖅᑦ ᒪᑭᑎᑎᑕᐅᔪᐸᑦ ᐅᓇᕐᓂᖅᑦ ᐊᖏᓴᓯᐊᖅᑕᐅᔪᓐᓇᖅᑎᑕᐅᔪᑦ (TAH) ᐃᒪᓐᓇᑎᐅᓗᑎᒃ 45-55 (ᐱᐃᖏᑎᑕᐅᓴᒪᑕ ᐊᖏᓴᓯᐊᖅᑐᓕᕐᓂᕆᔨᕆᑦ [HTO] ᐊᖅᑭᒋᐊᖅᓯᔪᓐᓇᖅᑎᑕᐅᔪᓕᒻᓗᑎᒃ ᑕᐃᒪᓐᓇᐅᔭᕆᐃᖅᑐᑎᑐᑎᒃ ᒪᑭᑎᑕᐅᑐᑐᐊᖅᐸᑦ).
- *ᑕᓕᓗᑐᒥ ᑲᑎᓴᒪᔪᑦ (PC-04)*
  - ᐃᒪᓐᑐᐃᓐᓇᐅᑎᓕᓂᑦ 17 ᐅᒪᔪᑦ ᑕᐻᐅᓕᐅᖅᑐᑦ 2008-Γ ᐊᖏᓗ ᐅᓄᓕᐅᕐᒥᒪᑕ ᒥᖏᐅᔭᑕᐅᔪᑦ, ᑕᑉᐻᐊ ᑲᑎᖅᒪᒻᒪᔪᑦ ᐅᐻᓇᓂᑦᑕᓗᐊᓕᐅᑦᓗᑐᐊᑦ ᓄᖅᑲᑎᑕᐅᑲᑲᐃᓐᓇᖅᑎᑕᐅᔪᓂ ᐊᒪᕐᓇᐅᔪᐊᖅᓯᕐᓂᓐᓂ ᐅᓄᖅᓴᓐᓂᖅᑎᓕᓂᑦ ᖃᐅᔨᓴᐅᔭᐸᑦ.

Total Allowable Harvest Recommendations

- *Bathurst Island group (PC-05)*
  - Managing for recovery, we recommended a conservative TAH of 36 caribou (a 3% harvest), based on the results of the 2013 survey estimate of 1200 caribou. IQ suggests caribou continue to recover but caution is needed so not to jeopardize recovery.
- *Prince of Wales group (PC-06)*
  - Too few caribou to support harvesting
  - At current numbers, this group should be under a moratorium until such time as an increase is observed

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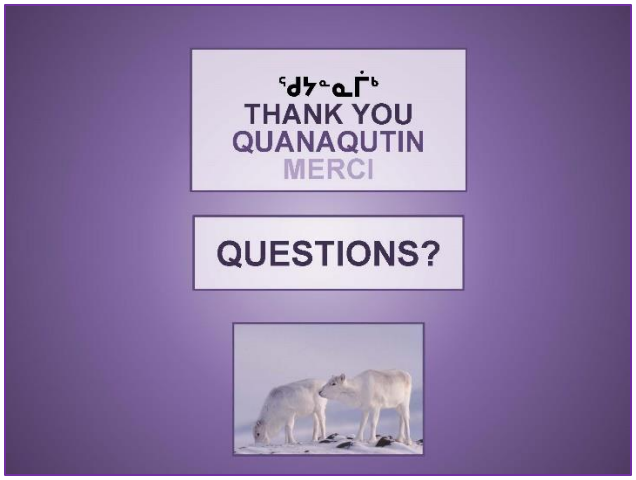
- *ᑐᓐᑐᓴᐅᓐᖁᓕᒃ ᖃᑭᖅᑕᒥ ᑲᑎᓴᒪᔪᑦ (PC-05)*
  - ᐊᐅᓪᓚᑕᐅᓂᖅᑦ ᖁᓄᐃᑦᓂᓵᖅᑎᑕᐅᓇᓯᐊᕐᔪᓐᓇᑎᒃ, ᐃᒪᓐᓇᐃᓐᑕᐅᕐᖁᓕᓪᓚᑕᕐᑦᑕ ᐱᐅᖅᓯᐊᖅᑕᐅᕐᖁᓕᓪᓚᑕᑦ ᐅᓇᕐᓂᖅᑦ ᐊᖏᓴᓯᐊᖅᑕᐅᔪᓐᓇᖅᑎᑕᐅᔪᑦ (TAH) ᐃᒪᓐᓇᑎᑎᑦ 36 ᑐᑉᑐᓂᑦ (3% ᐅᕐᓴᑎᖅᑦ ᐊᖏᓴᓯᐊᖅᑕᐅᔪᓐᓇᖅᑐᑦ), ᑐᖅᓴᐃᒪᓕᑎᑦ ᐱᓱᓇᒋᑎᖅᑦ ᐅᑦᔨ 2013 ᖁᐅᓴᖅᑕᐅᔪᑦ ᒥᖏᐅᔭᕆᐅᔪᓕᒻᓗᑎᒃ ᐃᒪᓐᓇᑎᑎᑦ 1200 ᑐᑉᑐᓂᑦ. ᐃᓄᐃᑦ ᖁᐅᔨᓴᕐᖁᖅᑦ IQ ᐃᒪᓐᓇᐅᖁᔭᖅᒪᑕ ᑐᑉᑐᓂᑦ ᑲᔪᓯᔪᑦᑕ ᖁᓄᐃᑦᑐᑉᓂᖅᑕᐅᔪᓐᓇᖅᑎᑕᐅᔪᓐᓇᖅᑐᖅᓯᕐᓂᑦ ᑭᓯᐊᓂ ᖁᐅᔨᒪᓕᑎᐊᖏᖅᑎᓕᓂᑦ ᐅᓪᓗᓕᐊᓐᖅᑎᑕᐅᔪᓐᓇᖅᑎᑕᐅᔪᑦ ᖁᓄᐃᑦᑐᑉᓂᖅ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SUBMISSION TO THE

NUNAVUT WILDLIFE MANAGEMENT BOARD

FOR

Information: **Decision: X**

Issue: Management Plan for Peary Caribou in Nunavut

Background:

Peary caribou are currently listed as an endangered species under the Species at Risk Act. Regulations under the Wildlife Act are currently outstanding and there is no management regime in place for Peary caribou in Nunavut.

The draft Management Plan for Peary Caribou in Nunavut (the plan, separate attachment) will serve as the basis for recommendations on new management units, Total Allowable Harvest (TAH), and future research and monitoring efforts.

Previous attempts to determine appropriate management units and TAH for Peary caribou were unsuccessful. This effort is less prescriptive in terms of the size and number of proposed management units and the ability of Hunters and Trappers Organizations (HTOs) to have more involvement and say in the monitoring and management of Peary caribou. In addition to recommending management units and TAH levels the plan identifies a collaborative approach to long term monitoring. The Plan uses the information presented in the Department of Environment (DoE) report "*Recent trends and abundance of Peary Caribou and Muskoxen in the Canadian Arctic Archipelago, Nunavut*," (Jenkins et al., 2011) as a baseline to monitor future trends. Through community-based ground surveys that are conducted annually, but on a spatially cyclic basis, changes in herd status can be monitored. An annual meeting to discuss results and potential management recommendations will be used to target future survey efforts and in the event of observed declines or concerns of herd status, trigger further action which may include increased ground survey frequency or aerial surveys. Recommendations that would change harvest rates or Non-Quota Limitations such as harvest seasons would be sent to the NWMB for decision.

The presentation of this submission should take approximately 45 minutes with a similar time period for questions. It is anticipated that the Board may conduct a Public Hearing at a later date to address this request for decision.

Current Status:

- The Peary Caribou Management Plan was submitted to the NWMB for decision in 2014 but the process was delayed until the September, 2017 regular board meeting.

- Several distribution and abundance surveys were conducted since the original submission of the plan but the resulting data did not differ from the data used to develop the plan and associated recommendations; therefore, no updates to the original submitted plan were necessary.

Consultations:

All communities that harvest Peary caribou were consulted on an initial draft prepared by DoE. This includes Grise Fiord, Resolute and Arctic Bay who routinely harvest, as well as occasional harvesters in the Kitikmeot, including Cambridge Bay, Gjoa Haven, Taloyoak and Kugaaruk. Consultations consisted of in-person meetings with each Hunter and Trappers Organization Board (HTO). This was followed by revisions to the draft based on input received from the HTOs.

A full list of meetings and participants is provided in Appendix 1, the consultation summary. The PowerPoint presentation used in consultations is provided in text format in Appendix 2.

In general the discussion with HTOs focused on four key areas; 1) do the proposed boundaries make sense, 2) is there support for harvest reporting and sample submission, 3) is there support to participate in community ground-based surveys, and 4) are they a species of opportunity or a targeted species and do they occur the same now as in the past?

The information obtained through these discussions was then used to revise the draft. In particular the boundaries in the Kitikmeot region were based entirely on community input.

In addition to the consultation for the plan previous workshops were held in Grise Fiord and Resolute in the fall of 2010 to share research results from the aerial surveys done to estimate Peary Caribou and Muskoxen population and distribution from 2001-2008. These workshops were very well received and generated significant discussion about management implications and Inuit knowledge about Peary caribou.

The final draft has been sent to the community HTOs for final review however only a few communities have provided comment on the final draft. Resolute did not want to proceed with a plan until results of the 2013 Bathurst Island survey were included; preliminary results have been incorporated into the plan.

The study designs and results of the post-2014 Peary Caribou population assessments were shared with the HTOs of Grise Fiord and Resolute Bay in 2015 and 2016 and were well received.

Overall the communities have expressed support for the Management Plan and its recommendations, in particular because of the ongoing collaborative process

it outlines for the management of Peary caribou. There is no consensus on proposed TAH, with Grise Fiord indicating they will oppose any TAH recommendation.

Recommendations:

DOE is requesting approval from NWMB on the following:

- Approve the Draft Management Plan for Peary Caribou in Nunavut 2014-2020.
- Determine TAH for Peary caribou based on the management units and recommendations proposed in the plan.

Appendix 1
Peary Caribou Management Plan
Qikiqtaalik Region Consultation Summary
March 13-20, 2012

This round of consultations took place in March 2012 in the Qikiqtaaluk communities of Arctic Bay, Resolute, and Grise Fiord. The purpose of the consultations was to determine support for the draft management plan in general terms (as well as for a draft management plan for Peary caribou) and to obtain specific local knowledge to facilitate redrafting to include HTO input and concerns. These specifics include potential management unit boundaries, traditional and current use, and information on historic and current trends.

The sessions varied in length based on how prevalent Peary Caribou were locally and by the number of Board members that could attend. The meetings were all positive with all HTOs expressing interest in participating in development of the management plan as well as an interest in ensuring long term sustainability of Peary Caribou.

Arctic Bay HTO
March 13, 2012
GN - Chris Hotson, Peter Hale
HTO Board: Qaumayuq Oyukuluk, Adrian Arnauyumayuq, Josia Akpaliapik, Koonark Enoogoo, Paul Ejangiaq, Jack Willie Sec/Manager
Chris introduced the topic and gave a short PowerPoint presentation (attached) that introduces the management plan, the history of the initiative, the purpose of the plan, and an overview of content. This was followed by discussion and feedback.

Specific discussion took place around the following issues:

1) Do the proposed boundaries make sense?
   - Island groups make sense
   - general support from the board for boundaries
   - Discussion looked at needs for monitoring capability, so survey scale and harvest/use

2) Are Peary caribou a preferred species to harvest or a species that is taken by opportunity?
   - They are taken opportunistically and Arctic Bay hunters occasionally harvest
   - Peary Caribou are not a big issue but HTO wants to support Grise and Resolute communities

3) Are harvest levels same now as in the past?
   - It has always been only sporadic harvest, definitely not every year

4) Is there support for harvest reporting and sample submission?
   - Yes, may require some fee for sample

5) Is there interest in participating in community ground-based surveys?
   - Yes (this would allow for combined surveys with muskox) and potentially generate knowledge for other species
   -

Other issues suggested by HTO;
   - Why called Peary caribou, should reflect Inuit language

Resolute HTO
March 17, 2012,
GN-Chris Hotson, Peter Hale
NTI-Glenn Williams
HTO Board: Philip Manik Sr., Paddy Aqiatusuk, Allie Salluviniq, Norman Idlout, David Kalluk, Simon Idlout, Nancy Amarualik Sec/Manager
Chris introduced the topic and gave a short PowerPoint presentation (attached) that introduces the management plan, the history of the initiative, the purpose of the plan, and an overview of content. This was followed by discussion and feedback.

Specific discussion took place around the following issues:

1) Do the proposed boundaries make sense?
   - Island groups make sense
   - general support from the board for boundaries but maybe more so for muskox than caribou
   - they do travel between islands, more so than muskox, something to consider.

2) Are caribou a preferred species to harvest or a species that is taken by opportunity?
   - Opportunistically now
   - Would like to be able to harvest more, particularly Cornwallis Island

3) Are harvest levels same now as in the past?
   - In 1970s only 3 muskox now there are too many on Prince of Wales and Somerset Island
   - Report data from 2001-2003 is misleading, want a new count
   - Proposed TAH at 3% harvest rate is too low
   -

4) Is there support for harvest reporting and sample submission?
   - Yes
   - Glenn raised a point that harvest reporting is not an imposition but a responsibility under the land claim

5) Is there interest in participating in community ground-based surveys?
   - Yes general support (in conjunction with concurrent muskox surveys)

Other issues suggested by HTO;
- Don't all die off when they drop in number, where do they go, they do move
- Totally opposed to collaring
- Need to identify calving areas
- Dust and noise from oil and seismic work negatively effects caribou

Grise Fiord HTO
March 21, 2012
GN-Chris Hotson, Peter Hale
NTI-Glenn Williams
HTO Board: Jaypetee Akeeagok, Aksajuk Ningiuk, Charlie Noah, Larry Audlaluk, Jopee kiguktak, Mark Akeeagok Sec/Manager
Chris introduced the topic and gave a short PowerPoint presentation (attached) that introduces the management plan, the history of the initiative, the purpose of the plan, and an overview of content.

This was followed by discussion and feedback.

1) Do the proposed boundaries make sense?
   - Island groups make sense

2) Are Peary Caribou a preferred species to harvest or a species that is taken by opportunity?
   - They are a targeted species but hard to reach sometimes.

3) Is there support for harvest reporting and sample submission?
   - No intention of creating HTO bylaws to gather harvest numbers
   - Glenn raised a point that sample submission and harvest reporting is not an imposition but a responsibility under the land claim

4) Is there interest in participating in community ground-based surveys?
   - Yes but the use of personal skidoos is a concern as it is difficult to purchase and repair them

Other issues suggested by HTO:
- Muskox and caribou don't mix
- Not alarmed about current decline, they cycle
- Pressure to have a document (plan) but don't want a flawed document
- Communities do not trust the science saying Peary Caribou are declining; have never existed in great numbers
- Would not support a TAH.

Peary Caribou Management Plan
Kitikmeot Region Consultation Summary
March 18-23, 2013

This round of consultations follows meetings that took place in February-March 2012 in the Qikiqtaaluk communities of Arctic Bay, Resolute, and Grise Fiord. The purpose of the consultations was to determine support for the draft management plan in general terms (as it is currently written for the Qikiqtaaluk region) and to obtain specific local knowledge to facilitate redrafting to include specifics for the Kitikmeot Region. These specifics include potential management unit boundaries, traditional and current use, and information on historic and current trends.

The sessions varied in length based on how prevalent Peary caribou (PC) were locally and by the number of Board members that could attend. The meetings were all positive with all HTO's expressing interest in participating in development of the management plan as well as an interest in ensuring long term sustainability of PC.

Cambridge Bay HTO
March 18, 2013, 16:00
Bobby Greenley, George Angohiatok, Johnny Lyall, Brenda Sitatak (Sec/Manager)
Chris Hotson, Mathieu Dumond

Mathieu introduced the topic and explained the difference between the recent Environment Canada consultations for Recovery Strategy development under SARA and the draft Nunavut Management Plan.

Chris went through a short PowerPoint presentation (attached) that introduces the management plan, the history of the initiative, the purpose of the plan, and an overview of content. This was followed by discussion and feedback.

Specific discussion took place around the following issues;

6) Is PC normally in the Cambridge Bay traditional harvesting area?
   - Yes but only at the northern edge around Hadley Bay
   - Have seen PC mix with Dolphin Union (DU) caribou in small groups and sometimes they move south for a bit with DU

7) Are PC a preferred species to harvest or a species that is taken by opportunity?
   - In 60's and 70's there were no DU caribou around so harvesters travelled north to harvest PC but not now as DU are preferred
   - Would choose to harvest DU caribou over PC when they are mixed together

8) Are harvest levels same now as in the past?

- Lower now; In the 60's and 70's there were no DU caribou so harvesters travelled north to harvest PC
- Now they are only taken opportunistically, usually by polar bear hunters that are travelling north to Hadley Bay area
- Harvest levels are now low, a couple of PC every year at best, sometimes none in a year

9) What are potential boundaries for management units?
   - Discussion looked at needs for monitoring capability, so survey scale and harvest/use
   - Based on discussion HTO sees utility in maintaining the Nunavut portion of Victoria Island as one management unit, also potentially Melville Island as another although no harvest occurs there

10) Is there support for harvest reporting and sample submission?
   - Yes, may require some fee for sample but it would help know harvest and perhaps provide help with genetics, other samples were discussed but it was advised that this would be an issue for stakeholder working group to determine

11) Is there interest in participating in community ground-based surveys?
   - Yes as this would allow for combined surveys for Muskox and potentially generate knowledge for other species, such as predators which are a concern

Taloyoak HTO
March 19, 2013, 19:00
Joe, David Irqiut, Lucassie Nakoolak, Sam Tulurialik, Abel Aqqaq, Anaoyok, Simon Qingnaqtuq (sec/manager)
Chris Hotson, Mathieu Dumond

Mathieu introduced the topic and explained the difference between the recent Environment Canada consultations for Recovery Strategy development under SARA and the draft Nunavut Management Plan.

Chris went through a short PowerPoint presentation (attached) that introduces the management plan, the history of the initiative, the purpose of the plan, and an overview of content. This was followed by discussion and feedback.

Specific discussion took place around the following issues;
1) Are PC normally in the Taloyoak traditional harvesting area?
   - Yes but only north of Taloyoak although local knowledge says they sometimes come further down the Boothia peninsula
   - Also Taloyoak harvesters do travel north to Prince of Wales/Somerset Islands for whale harvest and may take PC there

2) Are PC a preferred species to harvest or a species that is taken by opportunity?
   - In 60's and 70's PC were more common and more were taken
   - PC taste better and have more fat year round so would be preferred if they were more available

3) Are harvest levels same now as in past?
   - In 60's and 70's PC were more common and more were taken
   - There was a period in 80's- 90's when they were not seen but are starting to see again
   - A hunter would be lucky to harvest one every 5-10 years now

4) What potential boundaries for management units?
   - See the entire Boothia Peninsula a potential management unit
   - PC move north and south over the year and over time

5) Is there support for harvest reporting and sample submission?
   - Yes was the general consensus

6) Interest in participating in community ground-based surveys?
   - Yes was the general consensus

Other issues discussed;
- HTO would like to see protection or wildlife conservation areas for the whole of Boothia Peninsula as this is an important area for many species
- HTO is trying to participate in the NLUP process but struggling and needs assistance
- Board members encourage that IQ be used in helping to devise scientific surveys and studies
- PC and Muskox do not mix, increase in Muskox may explain why PC are down
- Need to study wolves/predators in conjunction with PC as they are linked
- May be good to survey wolves as well as PC/Muskox on ground surveys

Gjoa Haven HTO
March 20, 2013, 19:00
James Qitsualik, Simon Komangat, David Qiqut, Jacob, Joannie ,and Mark, Ben Kogvik (interpretor)
Chris Hotson, Mathieu Dumond

Mathieu introduced the topic and explained the difference between the recent Environment Canada consultations for Recovery Strategy development under SARA and the draft Nunavut Management Plan.

Chris went through a short PowerPoint presentation (attached) that introduces the management plan, the history of the initiative, the purpose of the plan, and an overview of content. This was followed by discussion and feedback.
Specific discussion took place around the following issues;

1) Are PC normally in the Gjoa Haven traditional harvesting area?

    - Yes, the Northwest part of King William Island is the main location for PC.
    - Have not seen many this year but did see some 2-3 years ago
    - Normally hunters go north for whales and may see PC
    - Targeted caribou harvest is to the south, so mainly barren ground are taken

2) Are PC a preferred species to harvest or a species that is taken by opportunity?
    - Would choose to harvest PC as they are fat year round but will harvest any caribou if given the chance

3) Are harvest levels same now as in past?
    - There was a low in the 60's and 70's but coming back now, they decline but also move over time
    - Harvest rates are very low 0-2 a year

4) What potential boundaries for management units?
    - King William Island and Boothia Peninsula to be one management unit, include islands to the northwest between King William and Victoria Islands
    - The rational for KWI and Boothia as a unit is that there is a movement corridor from the southwest of Boothia to the Northeast of KWI (Note: This could be of importance for maritime traffic impact assessment in particular).

5) Is there support for harvest reporting and sample submission?
    - Yes was the general consensus but need a CO in community
    - Payment for samples may be required

6) Interest in participating in community ground-based surveys?
    - Yes was the general consensus, perhaps include other species in surveys in addition to PC/MX

Other issues discussed: DU and PC may mix both spatially and in terms of breeding

- Use least invasive methods to survey
- They do not want to be excluded from future management process/actions
- Wolves, there are too many, can ground-based survey include that?
- PC and Muskox do not mix, must be taken into consideration

Kugaaruk HTO
March 21, 2013, 19:00
Barnaby Immingark, Zachary Oogark, Ema Qaggutaq (sec/manager)
Chris Hotson, Mathieu Dumond, Lee McPhail (CO)

Mathieu introduced the topic and explained the difference between the recent Environment Canada consultations for Recovery Strategy development under SARA and the draft Nunavut Management Plan.

Chris went through a short PowerPoint presentation (attached) that introduces the management plan, the history of the initiative, the purpose of the plan, and an overview of content. This was followed by discussion and feedback.

Specific discussion took place around the following issues;

1) Are PC normally in the Kugaaruk traditional harvesting area?
   - Yes but only on northern Boothia Peninsula, at the periphery of current harvest area

2) Are PC a preferred species to harvest or a species that is taken by opportunity?
   - Opportunity based harvest, very infrequent
   - PC is preferred due to taste and fat year round

3) Are harvest levels same now as in past?
   - Harvest very rare; no participating board members had ever seen a PC

4) What potential boundaries for management units?
   - Boothia Peninsula, including Simpson peninsula and Lady Peary Island which has had PC historically

5) Interest in supporting harvest monitoring?
   - Yes was the general consensus

6) Interest in participating in community ground-based surveys?
   - Yes was the general consensus

Other issues discussed: Predation and weather are important to PC and should also be considered.

Appendix 2
Community PowerPoint Presentation

The follow section is a text version of the PowerPoint used in the Kitikmeot consultations. The Qikiqtaalik version was the same only using references to the proposed management units specific to that region.

Draft Peary Caribou Management Plan

GN Department of Environment
Mathieu Dumond
Chris Hotson

Outline

- History of initiative
- Purpose of the plan
- Process
- Overview of content
- Discussion and feedback

History of the Management Plan

- Peary caribou are an outstanding issue for regulations
- Would like to have a Nunavut management plan in place prior to the Species at Risk Act recovery process
- The early draft was 10 years old and did not reflect current status
- Process was waiting for the survey report, report is now complete

Purpose of the Plan

- Establish goals for taking care of PC
- Identify the importance of working together;
- Provide current population estimates and trends;
- Define roles and responsibilities of the stakeholders;
- Define the information required to effectively manage;

Purpose continued

- Describe how to make decisions;
- Provide a framework for determining when management actions should be taken; and
- Ensure full involvement of Inuit in the future monitoring and management of Peary Caribou
- To provide NWMB with a management plan that is ready for implementation.

Process

- Consult on the initial draft with communities
- Edit draft to reflect community input and concerns
- Share revised draft with stakeholders for further clarification
- Seek support on final draft
- Submit final draft to NWMB for approval and to form basis for new regulations under the wildlife act

Overview

- Summary
- Purpose of the plan
- How it will be developed
- Goals of the plan
- Peary Caribou biology and management

Review continued

- The users
- Status
- Monitoring
- Decision making
- How to communicate
- How to update plan
- Appendices

Discussion and Feedback

- Run through each section

Organization of survey area into Island Groups;

- 1) Bathurst Island Group
- 2) Devon Island Group
- 3) Prince of Wales/Somerset Island Group
- 4) Ellesmere Island Group
- 5) Axel Heiberg Island Group
- 6) Ringnes Island Group

Kitikmeot management units?

General Recommendations

- Recommend establishing management units based on six (?) Island groups
- Establish an ongoing community-based ground survey program with appropriate support
- Establish a harvest reporting and sample collection program
- Each harvest should be reported through the submission of hunter kill reports
- Use observed changes from community monitoring program (observations of die offs, population increase or decrease) to trigger:
    1) Potential aerial surveys for severe declines,
    2) Increased frequency and coverage of community ground survey if declines are less significant,
    3) Community based changes in harvest level that would occur within a predetermined upper and lower limit.

Management Plan for Peary Caribou in Nunavut
2014 – 2020

Prepared in collaboration with

The Hunter and Trappers Organizations of Grise Fiord, Resolute Bay, Arctic Bay, Cambridge Bay, Gjoa Haven, Taloyoak, Kugaaruk, GN Department of Environment, Nunavut Tunngavik Inc., and the Nunavut Wildlife Management Board

Third Draft, January 2014

Note:

This draft is based upon the format and language used in the document "*Taking Care of Caribou -The Cape Bathurst, Bluenose West, and Bluenose East Barren Ground Caribou Herds Management Plan"* developed by the stakeholders and Terriplan Consultants and submitted to the Advisory Committee for the Cooperation on Wildlife Management. The majority of technical information is derived from the GN DoE report "*Recent trends and abundance of Peary Caribou (Rangifer tarandus pearyi) and Muskoxen (Ovibos moschatus) in the Canadian Arctic Archipelago, Nunavut"*. The information contained herein is an amalgamation of both documents and the work in both those documents represents the talent, skill and considerable efforts of those involved respectively.

TABLE OF CONTENTS

1.0 Summary

Peary caribou (*Rangifer tarandus pearyi*) are a distinct caribou subspecies that occurs almost entirely on islands within the Canadian Arctic Archipelago. These ungulates live the farthest north of all caribou in North America, and are the smallest in stature and in population size. In February 2011 Peary caribou were listed as Endangered under the *Species at Risk Act* (SARA) due to declines in abundance and expected unpredictable declines due to changes in long-term weather patterns.

Caribou are of major cultural, traditional and economic importance to Inuit, and are also a vital part of the Arctic ecosystem. Nunavummiut are concerned about the status of Peary caribou and their habitat as determined through public workshops in Grise Fiord and Resolute Bay. Peary caribou harvest in Nunavut has not been restricted through legislation; rather the Resolute Bay Hunters and Trappers Association (HTA) and the Iviq HTA of Grise Fiord have imposed temporary harvest restrictions on their members during periods of marked declines. Inuit knowledge however suggests that increasing land-use activity, such as resource exploration, poses a greater potential threat to Peary caribou and their habitat than hunting pressure.

The Department of Environment of the Government of Nunavut (GN DoE) has the ultimate responsibility for the management and conservation of Peary caribou within its jurisdiction. To address the DoE mandate for management this plan recommends management units and harvest levels to establish the basis of new regulations under the *Wildlife Act* as well as recommendations for ongoing monitoring of population trends and harvest through an inclusive approach with all co-management partners. This will include provisions for future monitoring and research, Inuit involvement in research, monitoring and decision making, and consensus based decision making in response to observed changes in population.

2.0 PURPOSE OF THE PLAN

The need for a management plan for Peary caribou is born out of several issues including Inuit harvest rights, territorial responsibility for species management, changes in land use needs, population declines, and changing climate. The long term Department of Environment study on Peary caribou "*Recent trends and abundance of Peary Caribou (Rangifer tarandus pearyi) and Muskoxen (Ovibos moschatus) in the Canadian Arctic Archipelago, Nunavut"* has produced the first modern, comprehensive assessment of the current status of Peary Caribou in Nunavut. With the completion of the DOE report, and the success of community workshops held in Grise Fiord and Resolute, the development of management plans is essential. The need for a plan is also connected to the survey results, which for some areas are becoming outdated, although the results remain valid as a baseline.

The Peary Caribou Management Plan provides a snapshot of current population estimates and trends for the species across its range and establishes overall principles and goals for the conservation of Peary caribou in Nunavut. It highlights the critical need for co management partners to work together, defines roles of stakeholders, and provides a framework to guide management of the species throughout its range to accomplish the goals identified in Section 4.0.

The GN DoE report "*Recent trends and abundance of Peary Caribou and Muskoxen in the Canadian Arctic Archipelago, Nunavut*" provides greater technical detail on the specific island groups and their status, both historical and current. The more recent GN report "Distribution and abundance of Peary caribou (*Rangifer tarandus pearyii*) and muskox (*Ovibos moschatus*) on the Bathurst Island Group, May 2013" provides additional information.

2.1 CO-MANAGEMENT

This plan was developed through cooperation and dialogue between co management partners in Nunavut including participation by:

Iviq Hunters and Trappers Association (Grise Fjord)
Resolute Bay Hunters and Trappers Association
Ikajutit Hunters and Trappers Organization (Arctic Bay)
Spence Bay Hunters and Trappers Organization (Taloyoak)
Ekaluktutiak Hunters and Trappers Organization (Cambridge Bay)
Kurairojuark Hunters and Trappers Organization (Kugaaruk)
Gjoa Haven Hunters and Trappers Organization
Nunavut Tunngavik Inc., Wildlife Department
Nunavut Department of Environment, Wildlife Management Division

3.0 HOW THE PLAN WAS DEVELOPED

The Plan was developed in collaboration with the communities that harvest Peary caribou as well as the other co management partners under the *Nunavut Land Claims Agreement* (NLCA). Two rounds of community workshops were conducted in 2010 and 2011 in Grise Fiord and Resolute Bay in addition to the ongoing exchange of information during the aerial and ground surveys.
The workshops were designed to:

- Share results of GN DoE research
- Gather local expert knowledge
- Seek consensus on management and monitoring actions

The initial draft was developed for further community and stakeholder involvement by GN DoE and consultations were conducted in March 2012 in the Qikiqtaalik Region and

March 2013 in the Kitikmeot Region. The final draft will be submitted to the NWMB for approval and will form the basis for development of Regulations under the *Wildlife Act*.

4.0 GOALS OF THE PLAN

The goals of the Management Plan are to provide guidance and direction to the co-management partners and are as follows:

- To manage Peary caribou in a co-operative manner that involves the full participation of communities and engagement of co management partners.
- To include Inuit Qaujimajatuqangit and scientific knowledge equally in the management process.
- To promote local and regional involvement in decision making.
- To protect, conserve and manage Peary caribou in a sustainable manner.
- To ensure the full and effective participation of Inuit and co management partners in ongoing monitoring and management of Peary caribou, and decision making.

4.1 INUIT QAUJIMAJATUQANGIT

Inuit Qaujimajatuqangit (IQ) is the knowledge and insight gained by Inuit through generations of living in close contact with nature. For Inuit, IQ is an inseparable part of their culture and includes rules and views that affect modern resource use.

The practical application of IQ with scientific information demonstrates the value of local consultations, and documenting and preserving IQ before it is lost. The communities, through the HTOs, will be consulted on an on-going basis to ensure that IQ is utilized in conjunction with scientific information in the management of Peary caribou.

This plan supports those values and reflects the following principles:

- Management decisions will reflect the wise and sustainable use of Peary caribou.
- Adequate habitat (quantity and quality) is fundamental to the welfare of Peary caribou.
- Management decisions will be based on the best available information - both science and IQ; and management actions will not be postponed in the absence of complete information, whether from science or IQ.
- Effective management requires participation, openness and cooperation among all users and agencies responsible for caribou and their habitat.
- We must anticipate and minimize negative impacts to caribou and their habitat.

5.0 PEARY CARIBOU BIOLOGY AND MANAGEMENT

Common name (English): Peary caribou
Common name (French): Caribou de Peary
Inuktitut name: Tuktu

Innuinaqtun name: Qinianaq or Tuktuinal (‘small caribou”)
Scientific Name: *Rangifer tarandus pearyi*

Status: SARA – Endangered
Wild Species 2010 – At Risk

5.1 PEARY CARIBOU RANGE

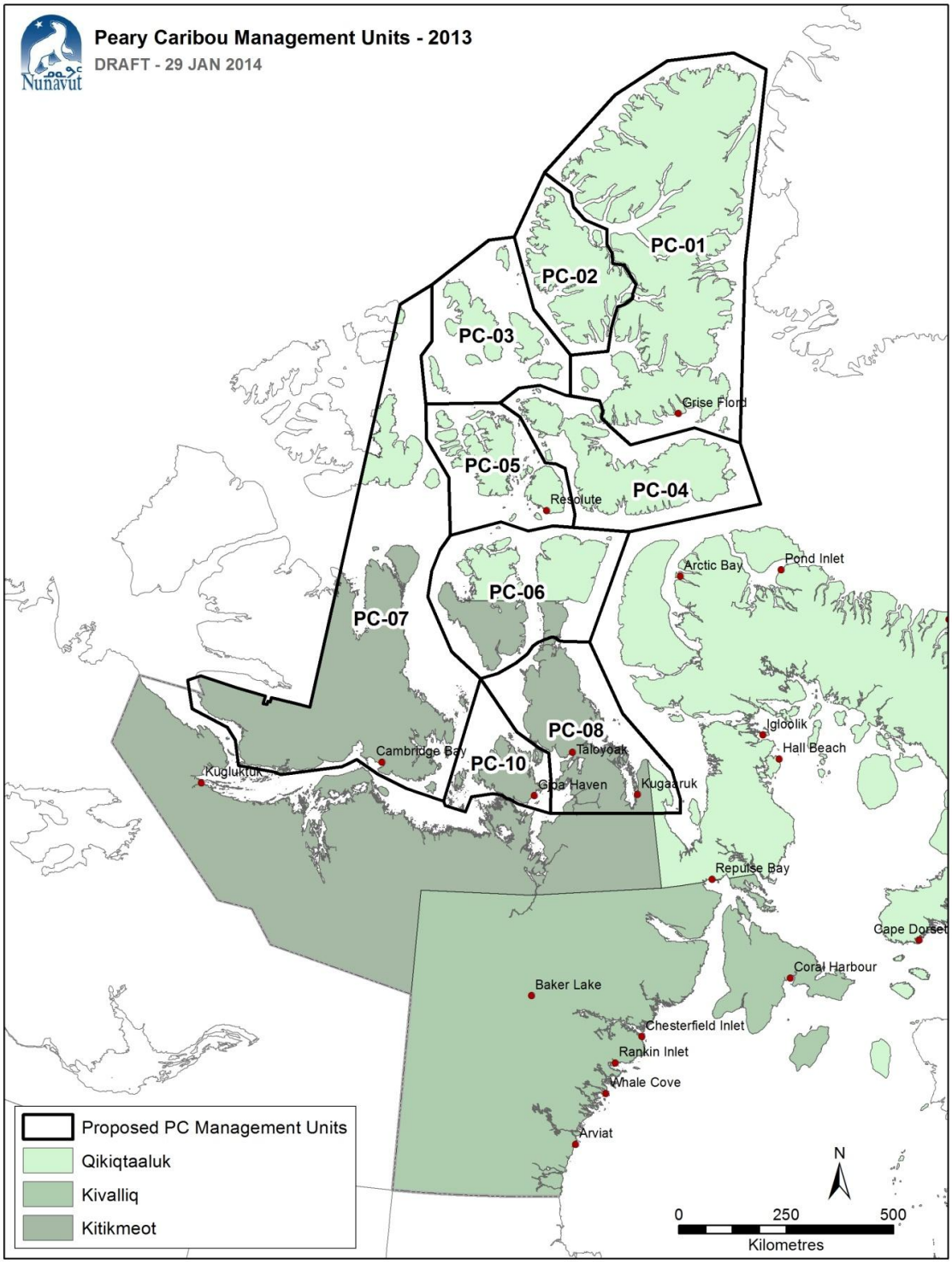
Endemic to Canada, the terrestrial range of Peary caribou is roughly 540,000 km^2 and extends across the Queen Elizabeth Islands in the north, the mid-Arctic islands and from the west of Banks Island to Somerset and the Boothia Peninsula in the southeast (Figure 1). Ice surrounds the islands for most of the year and caribou on some islands use the sea ice during seasonal migrations. The range is vast and the area is characterized by extreme weather, long periods of either continual darkness or continual light, and large expanses of ice, bare ground, and rock. The landscape is characterized by a polar desert and polar semi-desert where environmental conditions approach the physiological tolerance limits of plants.

5.2 MANAGEMENT OF PEARY CARIBOU BY ISLAND GROUPS

The GN DoE report “*Recent trends and abundance of Peary Caribou and Muskoxen in the Canadian Arctic Archipelago, Nunavut,”* is the most reliable study of Peary caribou in Nunavut to date on which to base this management plan. This report provides the baseline for scientific knowledge of Peary caribou, as well as providing the estimates of numbers of Peary Caribou and specific habitat for management purposes.

As outlined in the report, Peary caribou make seasonal movements among islands within their range, and are also known to make longer distance movements in response to severe weather. The following proposed island grouping (Figure 1) applies the best available scientific information and Inuit knowledge about Peary caribou movement and proposes geographic units that are useful for management of the species. This plan refers to each management group by the ‘Island Group’ name. For the purpose of the management plan, it is important to note that the island group management units are not to be considered as discrete populations or sub-populations as adequate genetic information is not available to define populations at this time.
The Queen Elizabeth Islands (QEI) form the majority of the island groups, with the Bathurst Island group, the Axel Heiburg Island group, the Ringnes Island Group, the Ellesmere Island Group and the Devon Island Group being wholly within the QEI.

Figure 1. Proposed Peary Caribou Management Units



Melville Island for the purposes of this management plan is placed within the Victoria Island group.

5.2.1 Ellesmere Island Group (PC-01). Ellesmere Island is the largest of the Queen Elizabeth Islands (197,577 km^2). The island is largely covered by mountain ranges and glaciers that are separated by a series of east-west passes. These features fragment the island, particularly where the north end of Vendom Fiord approaches the Prince of Wales Ice Cap, and divides the southern portion of the island from the north. Vegetation is sparse with mosses, lichens, and cold-hardy vascular plants such as sedges and cottongrass dominant at higher elevations while mosses and low-growing herbs and shrubs, such as purple saxifrage, *Dryas spp.,* arctic willow, kobresia, sedge, and arctic poppy more common at lower elevations.

5.2.2 Axel Heiberg Group (PC-02). Axel Heiberg Island (42,319 km^2) is separated from Ellesmere Island by Nansen and Eureka Sound. This island is mountainous and includes the Princess Margaret Range, which runs north to south through its center. Large ice caps cover much of the landmass and spawn many glaciers that flow primarily to the west. East of the Princess Margaret Range, vegetation progresses from an herb-shrub transition zone at higher elevations to an enriched low shrub zone along the low-lying coast. There, plant species are diverse and dense, dominated by shrubs and sedge meadows.

5.2.3 Ringnes Island Group (PC-03). This island group consists of Ellef Ringnes, Amund Ringnes, Lougheed, King Christian, Cornwall, and Meighen Islands, all situated to the west of Axel Heiberg Island and north of the Bathurst Island Complex. Lougheed Island (1,321 $km^{2)}$ has vegetation described as entirely herbaceous with rich vegetation patches. Ellef Ringnes Island (11,428 km^2) is sparsely vegetated with low plant diversity.

Amund Ringnes Island (5,299 km^2) is relatively low lying but features greater relief in the north. Vegetation is entirely herbaceous with the southern half of the island supporting more diverse vegetation, primarily herbaceous plants with some shrubs and sedges. To the south of Amund Ringnes is Cornwall Island, a small hilly landmass also dominated by herbaceous vegetation. Meighen Island (approximately 933 km^2), to the northeast of Amund Ringnes, is low-lying with sparse herbaceous vegetation and a large centrally located glacier. King Christian Island is located southwest of Ellef Ringnes, has an area of 647 km^2.

5.2.4 Devon Island Group (PC-04). Devon Island (55,534 km^2; including small proximal islands) is characterized by several mountain ranges (e.g. Cunningham Mountains, Treuter Mountains, and the Douro Range), coastal lowlands, and extensive glaciers. The Devon Ice Cap covers a large portion of eastern Devon Island. Extensive uplands stretch west of the Ice Cap across central Devon Island. Low-lying areas occur in

coastal areas, primarily along the north and western coast (the Truelove lowlands), but also other smaller areas. The landscape is predominantly polar desert with sparse cover of vascular plants; however low lying areas support a greater diversity of vegetation dominated by low shrubs and sedges.

5.2.5 The Bathurst Island Group (PC-05). This group of islands includes the Bathurst Island Complex (BIC), and Cornwallis and Little Cornwallis Islands. The BIC (19,644 km^2) includes Bathurst Island and five major satellite islands (> 200 km^2; Cameron, Vanier, Alexander, Massey, and Helena), and three minor satellite islands. These islands are low-lying with few areas exceeding 300 m elevation. The terrain is sparsely vegetated however low-lying wetlands such as at Goodsir-Bracebridge Inlet have a higher cover of sedges and low-growing willows. Cornwallis and Little Cornwallis Islands (7,474 km^2 including small proximal islands) are low-lying with uplands and hills below 300 m and mostly polar desert with sparse vegetation. Portions of the western coastline and Eleanor Lake watershed (Cornwallis Island) support more diverse vegetation, including prostrate shrubs in moderately moist habitats, and sedges in the wet areas.

5.2.6 Prince of Wales/Somerset Island Group (PC-06). Prince of Wales (33,274 km^2) is a tundra-covered island that features many small inland lakes. Although the island is generally below 300 m in elevation, some uplands occur along the eastern coast and across the north. Russell Island and Prescott Island are small proximal islands north and east of Prince of Wales, respectively. Somerset Island (24,548 km^2), separated from Prince of Wales Island by Peel Sound, is hilly with extensive uplands.

5.2.7 Victoria Island Group (PC-07). This group includes Victoria Island (217,291 km^2) and Melville Island (42,149 km^2). Both of these islands have a shared border with the Northwest Territories. The eastern two thirds of Victoria Island lie in Nunavut along with roughly the eastern half of Melville Island. The majority of Victoria Island lies within the Victoria Lowlands is characterized by a discontinuous upland vegetative cover dominated by purple saxifrage, other saxifrage *spp., Dryas spp.,* arctic willow, alpine foxtail, and wood rush. Wet areas have a continuous cover of sedge, cottongrass, saxifrage *spp.*, and moss. Remaining upland areas are largely devoid of vegetation. Besides the presence of Mount Pelly and Little Pelly, elevations lie predominantly below 100 m asl. except in central Victoria Island where elevations rise up to over 200 m asl.

A small portion of Victoria Island, along the northwest boundary with NWT, is composed of the Shaler Mountains. The Shaler Mountains are characterized by a 40-60% vegetative cover mixed with exposed bedrock. Tundra vegetation includes purple saxifrage, other saxifrage *spp., Dryas spp.,* arctic willow, alpine foxtail, and wood rush. Wet areas have a continuous cover of sedge, cottongrass, saxifrage *spp*., and moss. The centre part of the mountains reaches about 760 m asl.

Melville Island is predominately within the Parry Plateau. It has a sparse and discontinuous vegetative cover of moss, along with mixed low-growing herbs and shrubs such as purple saxifrage, *Dryas spp.,* arctic willow, kobresia, sedge, and arctic poppy. The terrain of this plateau is strongly ridged. Their elevations average less than 250 m asl. Separate, flat-floored, longitudinal valleys are transected by rugged, ravine-like cross valleys. On Melville Island, a few hills reach 760 m asl, and cliff-walled fjord-like bays and straits cut deeply into the uplifted plateau.

5.2.8 Boothia Peninsula (PC-08). Boothia Peninsula (32,331km^2) is predominately covered by the Boothia Plateau uplands. Vegetation is discontinuous, and dominated by tundra species such as purple saxifrage, other saxifrage *spp., Dryas spp.,* arctic willow, alpine foxtail, and wood rush. Wet areas have a continuous cover of sedge, cottongrass, saxifrage *spp*., and moss. It averages around 760 m asl. Bedrock outcroppings are common.

The eastern side of the Boothia Peninsula along the lowland coastal fringes of Boothia and Simpson peninsulas is composed of plains. It is characterized by discontinuous upland tundra vegetation, dominated by purple saxifrage, other saxifrage *spp., Dryas spp.,* arctic willow, alpine foxtail, and wood rush. Wet areas have a continuous cover of sedge, cottongrass, saxifrage *spp.*, and moss. The region slopes gently southward, ranging from sea level to about 300 m asl.

The south-western coastal portion of the Boothia Peninsula lies within the Victoria Lowlands which is characterized by a discontinuous upland vegetative cover dominated by purple saxifrage, other saxifrage *spp., Dryas spp.,* arctic willow, alpine foxtail, and wood rush. Wet areas have a continuous cover of sedge, cottongrass, saxifrage *spp*., and moss. Elevations lie predominantly below 100 m asl.

5.2.9 King William Island Group (PC-10). King William Island (13,111 km^2) is separated from the Boothia Peninsula by the James Ross Strait to the northeast, Rae Strait to the east, Victoria Strait to the west, and Simpson Strait to the south. Satellite islands include the Irving Islands, the Todd Islets, Matty Island, the Tennent Islands, and the Clarence Islands.

This group is in the Victoria Lowlands region which is characterized by a discontinuous upland vegetative cover dominated by purple saxifrage, other saxifrage *spp., Dryas spp.,* arctic willow, alpine foxtail, and wood rush. Wet areas have a continuous cover of sedge, cottongrass, saxifrage *spp.*, and moss. Remaining upland areas are largely devoid of vegetation. Elevations lie predominantly below 100 m asl.

6.0 THE USERS

Inuit are the traditional and current users of Peary caribou. The communities of Resolute Bay and Grise Ford were established in the early 1950's by the Canadian government as part of an arctic sovereignty program. Inuit that were relocated to these communities relied on the availability of Peary caribou as a food source. This reliance continues today. Arctic Bay is also an occasional user in the Qikiqtaaluk region. In the Kitikmeot region, the communities of Cambridge Bay, Taloyaok, Gjoa Haven, and Kugaaruk are also occasional users of Peary caribou; when Peary caribou are available they are taken opportunistically by harvesters from these communities.

7.0 STATUS OF THE ISLAND GROUPS

7.1 SURVEY HISTORY

In 1961 the first comprehensive survey of Peary caribou done in a single season across the Queen Elizabeth Islands was completed. During this survey approximately 25,845 Peary caribou were estimated. The majority of caribou (approximately 94%) were located in the western Queen Elizabeth Islands (QEI) (Bathurst Island Complex, Cornwallis, Melville, Prince Patrick, Eglinton, Emerald, Borden, Mackenzie King, and Brock). Survey coverage of some island groups, particularly Ellesmere, was minimal.

The first population estimates for the western Arctic islands included a 1972 estimate of 11,000 Peary caribou on Banks Island, a 1974 estimate of 5,515 Peary caribou on the eastern islands of Prince of Wales and Somerset Islands and 561 Peary caribou on the Boothia Peninsula in 1974, and a 1980 estimate of 4512 Peary caribou on northwestern Victoria Island. Combined with the 1961 QEI estimate, these estimates of abundance reveal a historic number of 48,000 Peary caribou throughout their entire range.

The decline of Peary caribou is characterized by four major die-offs which were observed primarily in the western Queen Elizabeth Islands between 1970 and 1998. Die-off events have been associated with deep snow and icing, which can limit access to forage, increase energy requirements, and lead to extreme under-nutrition and death. Observations by local Inuit are in agreement, reporting up to 2 inches of ice in some years.

Although limited, the data suggests that periods of decline and recovery vary among island groups, and a variety of factors such as human activities, landscape changes, predation, hunting, and competition with other herbivores may also contribute to the fluctuation of caribou. Inuit in Resolute Bay and Grise Fiord have identified exploration activities (i.e. oil and gas, coal and base minerals) as an additional stressor for caribou during some winters. They suggest that during years of high snow accumulation, industrial activities can prevent caribou from moving into areas that may be vital for their survival.

7.2 STATUS OF ISLAND GROUPS

7.2.1 Ellesmere Island Group

Results from the first aerial survey in 1961 suggested that there were approximately 200 caribou on Ellesmere Island, but only a small portion of the island was studied. The most recent survey (2005 and 2006) for Ellesmere Island revealed extremely low densities of 8-9 caribou/1000 km^2 for Peary caribou, which implies approximately 1,000 animals. Unfortunately surveys of Ellesmere Island are infrequent and limited in their spatial coverage making the determination of a trend in number impossible in this group. By 2003, Inuit reported that numbers of caribou on southern Ellesmere were increasing.

7.2.2 Axel Heiberg Island Group

The 1961 estimate of about 300 caribou on the island was based on limited survey coverage. No other surveys of the island have occurred since that time until 2007. The last survey results show a higher number of caribou than the only previous description of caribou abundance for Axel Heiberg Island. Lack of data and this 50-year gap in monitoring make it impossible to discuss population status or trends for Peary caribou on Axel Heiberg Island.

The Axel Heiberg Group currently supports the largest population of Peary caribou in Nunavut, with an estimated 2,291 animals based on 2007 survey results. This population accounts for a significant portion of the total estimated Peary caribou population within the Nunavut range. This may be a consequence of the local climate, plant biomass and diversity of vegetation, the varied topography, and isolation from human disturbance.

7.2.3 Ringnes Island Group

The 2007 survey of the Ringnes Island Group estimated a total of 654 caribou. Survey results suggest that caribou abundance is lower than the historical value of 1,324 in summer 1961. Overall it is difficult to interpret trends or fluctuation within this Island Group as survey information is limited, typical seasonal movement patterns are unknown, and the only two surveys completed have occurred at different times of year. Nonetheless, the overall proportion of calves (14%) observed in 2007 is encouraging given the extreme northern latitude and the small calf crops recorded for other survey areas.

7.2.4 Devon Island Group

The few surveys conducted suggest that Devon Island supports only a low number of Peary caribou. During a full island survey completed in 1961, 150 Peary caribou were estimated. Minimum counts for western Devon Island in 2002 suggested that caribou

numbers were low. In 2008, the count remained low with 17 Peary caribou. Thus, it appears that Peary caribou have existed at low numbers in the Devon Island group, although numbers are decreasing from previous estimates or counts which indicate a declining trend.

Movement patterns for caribou on Devon Island are not well understood and it is possible that there were caribou in other areas of the island at the time surveys were conducted. Inuit knowledge indicates that there have been caribou on the northeastern coast of Devon Island, on the Grinnell Peninsula, and that they can reliably be found along the western coast of the island.

7.2.5 Bathurst Island Group

The 2013 survey showed a significant increase in Peary caribou numbers, more than 1200 caribou, over the previous 2001 estimate of 187, however it is still low in relation to historical values of over 3,000 individuals (including calves) in both 1961 and 1994. Although evaluation of trends in abundance is complicated by differences in survey design and the inclusion or exclusion of calves, the overall trend of decline and current recovery is apparent.

This group has seen sharp fluctuations in 1973-74, and again in 1995-1997. The first two surveys of the Bathurst Island Complex (BIC, which consists of Bathurst, Vanier, Cameron Alexander, Massey, and Marc islands) were separated by 12 years (1961-1973) and revealed an 83% reduction in this caribou population from 3,565 to 608 (both estimates including calves). Late winter and summer surveys in 1973 and 1974 respectively identified a further reduction in caribou numbers to 228 (no calves were observed). This additional 62% decline was attributed to deep snow cover and icing, which caused widespread mortality and resulted in little or no reproductive success. Subsequent surveys from 1985 to 1994 indicated an increase and by 1994 Peary caribou were estimated at 3,100 on the BIC. Aerial surveys in 1995, 1996, and 1997 revealed a second die-off with an all-time low estimate of 78 caribou in 1997. Based on carcass counts, it was estimated that 85% of the overall decline was directly related to caribou mortality (and not movement). During the survey in 2001, the number of caribou in this group was estimated at 187.

Since that time Inuit have reported a slow increase in Peary caribou numbers. In 2010, Parks Canada conducted a reconnaissance survey on Bathurst Island and counted 300 Peary caribou in a non-systematic survey with no estimate derived. An aerial survey was conducted of the entire Bathurst Island group in May 2013 which generated a preliminary updated estimate of 1300 caribou which corresponds to Inuit observation of recovery since 2001.

For the Cornwallis Islands the only observation of live caribou in the 2001 survey was on northwest Cornwallis Island. Two caribou were seen on southern Cornwallis Island, and another single caribou on Little Cornwallis Island during the 2013 survey, but occasional tracks and local knowledge also suggest densities remain very low. Previous estimates that include both Cornwallis Island and Little Cornwallis Island are limited to the summer 1961 and 1988, when 43 and 51caribou (with calves) were estimated respectively. Earlier surveys of Little Cornwallis in 1973 and 1974, produced estimates of 8 and 12 caribou, respectively, with no calves observed. By the mid- to late 1960s, Inuit reported that it was difficult to find caribou on this island and that none were observed from 1990 to 2003. These observations are consistent with ground and aerial survey results from 2002.

7.2.6 Prince of Wales Island Group

Peary caribou in this Group declined from an estimated 5,682 caribou (one year or older) in 1974 to a minimum count of two in 1996. Current scientific knowledge indicates that there has been little recovery since 1996. During the 2004 aerial survey, no Peary caribou were observed on the Prince of Wales Island Group. These results are consistent with ground surveys of Prince of Wales Island in 2004 and Somerset Island in 2005, in which crews reported only four caribou after traveling a distance of 4,831 km. Local knowledge however, indicates that there has been some return or increase in recent years as they see more caribou on the coast of Prince of Wales Island however there is presently no monitoring in place to help determine if the herd is recovering.

7.2.7 Boothia Peninsula Group.

Boothia Peninsula has had aerial surveys from 1961 to 1995. During this time some surveys have counted both Peary and Barren ground caribou together and others have counted them separately so extrapolation of trend is difficult. Regardless, local knowledge indicates that Peary caribou numbers have always been relatively low with some fluctuation over periods of decades. Peary caribou have been seen primarily north of Taloyoak and less frequently north of Kugaaruk and at the north end of the Simpson Peninsula. Peary caribou are known to have used Lady Parry Island.

Hunters in Taloyoak harvest Peary caribou opportunistically with a couple taken every year. Historically more Peary caribou where taken in the 1960's and 1970's when they were more abundant. In Kugaaruk, harvest is also opportunistic with only a caribou harvested every few years. There is currently no system in place to report the Peary caribou harvested at these locations and thus monitor harvest rate.

7.2.8 Victoria Island Group.

Both Victoria Island and Melville Island have a long history of aerial surveys. Peary caribou have been more consistently observed, and at higher numbers on Melville

Island with a high of over 10,000 adults in 1961 and a low of 700 in 1972. A recent survey of Melville Island conducted by the Government of Northwest Territories (GNWT) has produced a new estimate of 2,990 adults in 2012 which suggests a recovery from the 1972 low. No harvest currently occurs in the Nunavut portion of Melville Island.

Local and scientific knowledge indicates that Victoria Island has consistently supported Peary caribou at low numbers. IQ also indicates that the distribution for Peary caribou in the Nunavut portion is largely in the north-east near Hadley Bay. The known high was 4,500 (including calves) in 1980 with a known low of 20 adults in 1993. The most recent estimate conducted by GNWT was 150 adults in 2010. Peary caribou are harvested by Inuit from Cambridge Bay opportunistically, usually in conjunction with polar bear hunters travelling to Hadley Bay. Harvest is low with only a few Peary caribou every few years although their harvest is not monitored. Caribou harvest is targeted to Dolphin and Union caribou which are typically closer to the community. Local preference even when Peary caribou are mixed with Dolphin-Union caribou is to harvest the latter.

7.2.9 King William Island Group

This group has little scientific data and most recent data indicates that this area lies outside the normal range of Peary caribou. Local knowledge indicates that Peary caribou occasionally move from Boothia Peninsula to the north coast of King William Island. Local knowledge suggests that here may also be mixing with Dolphin and Union caribou that migrate from Victoria Island.

8.0 MONITORING

The number of Peary caribou per Island Group shows fluctuation over time, with periods of abundance and periods of scarcity. Caribou are also known to move over time in response to environmental conditions. Monitoring programs collect information about changes in number, distribution, and changes in ecological factors that affect caribou numbers and health. It is important to involve both scientists and community harvesters in monitoring efforts. This plan seeks to ensure that both science and IQ are effectively collected and used for research and decision making.

The effects of individual factors, such as weather or human disturbance, can affect caribou both individually and at the Island Group level. These factors however can work in combination such that the total or cumulative effects may be greater than that which occurs from each factor on its own. These impacts may be either positive or negative.

8.1 MAIN CRITERIA FOR ASSESSING ISLAND GROUP STATUS

The main pieces of information on which management actions will be based include:

- Population size

- Recruitment
- Bull-to-cow ratio
- Body condition and health
- Harvest levels
- Number trend by management units

8.1.1 ISLAND GROUP STATUS

The main factor to assess island group status, and the key consideration when recommending the sustainable harvest level for any given island group, is the estimated number of animals in the Island Group. The current baseline survey completed by GN DoE was conducted with aerial distance sampling. Although effective and accurate for determining the number of Peary caribou in an Island Group, this method is costly. Aerial surveys will continue as required. However the implementation of a community-based monitoring program involving ground surveys can be conducted in predetermined areas, such as traditional hunting areas or areas where caribou are normally seen but absent, and provide data to help inform decision making in the interim between aerial surveys.

8.1.2 RECRUITMENT

Recruitment refers to the number of calves that survive to one-year of age. Calf/cow ratios are used as a measure of recruitment. Herd composition observed during community-based ground surveys and/or aerial surveys will be useful for determining the cow/calf ratio.

These ratios, while informative, are often difficult to interpret as they are influenced by various factors such as changes in cow mortality. Typically, recruitment rates are low before the number of animals begins to decline, whereas high recruitment rates, particularly several years in a row, may indicate an increase in herd size.

8.1.3 BULL-TO-COW RATIO

Caribou bulls can mate with many females within the same season. It is important to monitor the bull-to-cow ratio to help determine if there are enough bulls to impregnate cows. Monitoring herd structure can be done during the rut both by aerial surveys and ground based surveys, by scientists or harvesters, who can provide information on the number of bulls observed in relation to the number of cows.

8.1.4 BODY CONDITION AND HEALTH

The health and condition of individual caribou can affect productivity and survival of calves and adults. Sample kits are provided to harvesters to measure or collect: pregnancy (presence of fetus), back fat thickness, left kidney with the fat to assess contaminant levels and condition, blood samples to assess disease, body condition

score, collection of lower front teeth for age determination, and location, date and sex of the animal harvested. When a sample kit is not provided, harvesters typically have a general overview of the condition of caribou. Body condition information collected by community members, harvesters and scientists provides supporting evidence of health.

8.1.5 HARVEST

Long term monitoring of harvest levels is very important for management decisions, and to help determine sustainable harvest rates. However, there is currently no obligation to report harvest of Peary caribou in the communities. Establishing a harvest monitoring program is a priority and fundamental to the overall monitoring of caribou. Harvest reporting is also a means of participation in management by the users at the individual level.

8.1.6 ISLAND GROUP TREND AND RATE OF CHANGE

The trend or the rate of increase or decrease is also a key indicator of island group status. Trend can be determined by comparing island group estimates over many years. When a population estimate is not possible, we can look at other data to help determine the trend, such as recruitment, body condition and health, harvest levels, and bull-cow ratio. Beyond the scope of scientific studies, information on the changes in abundance, movement, and distribution of caribou on an Island Group can be provided by Inuit Qaujimajatuqangit.

8.2 ADDITIONAL CRITERIA FOR ASSESSING ISLAND GROUP STATUS

In addition to information on caribou such as population size and cow/calf ratios, there is important information about habitat and land use that should be considered. This can include habitat quality and quantity, predation, and human disturbance that may limit caribou access to parts of their range. Co-management partners can support long-term research and monitoring of these factors that will allow provide greater information for decision making and more effective review into land use permitting processes.

8.2.1 PREDATORS

Predators affect caribou behaviour and mortality. Predator numbers tend to decline as caribou decline but usually there is a delay of one or two years.If other prey species are available, predator numbers may not decline at all. When caribou numbers begin to decrease, the impact of predation may become proportionately greater. Caribou users have requested increased monitoring of predator populations, measurement of predation and the impact of predation on the populations.

8.2.2 ENVIRONMENT AND HABITAT

Better understanding of cumulative effects at the ecosystem level can be obtained through long term research on habitat quality and quantity and impacts of human

activities. Co management partners can continue to call for and support such long-term research and monitoring. With improved understanding there is a better opportunity to use regulatory management tools to limit disturbance on caribou.

Community workshops held in Grise Fiord and Resolute indicate that a combination of heavy snow and increased oil exploration and activity (particularly Bent Horn) in the early 1970s created a combined effect that may have impacted caribou more than either would have on their own. Caribou can move in response to changes in local environmental conditions such as increased snow or severe ice events. However at this time the increased activities on the land, including seismic activity, may have disrupted this ability to move. It was this combination of weather and human activity that caused die-offs during this period. This information highlights the importance of improving our understanding of cumulative effects and collection and use of local knowledge.

Some steps to assess habitat conditions for each island group are:

- Develop and monitor key habitat indicators of quality and quantity using remote sensing and ground surveys;
- Monitor trends in climate and weather; and
- Define seasonal and occasional movement patterns.

8.2.3 HUMAN DISTURBANCE

Disturbance of caribou from human activities such as aircraft over-flights and resource development can influence caribou behaviour and energy use, which in turn can affect condition and health. Indirect effects can also include a reduction in quality and quantity of habitat or access to quality habitat. Particularly when caribou numbers are low, human activities have the potential to alter the rate and extent of the decline or length of time it takes the population to recover.

The range of Peary caribou extends over lands that are protected from development and lands where exploration is occurring. Concern about the impacts of non-renewable resource development has increased as changing ice and weather patterns encourage a renewed surge in exploration and potential resource development.

9.0 TOOLS FOR DECISION MAKING

9.1 HOW CARIBOU POPULATIONS CYCLE OVER TIME

Inuit Qaujimajatuqangit and scientific knowledge agree that caribou populations rise and fall over time. The length of the phases varies, particularly the length of time that a population stays at a low level. Scientific evidence, the journals of missionaries and trading post managers, and IQ all suggest that caribou populations go through cycles 30-60 years long. The causes for these population cycles in caribou are not well

understood, but likely result from several factors such as habitat quality and quantity, climate, and disease. In addition to population cycling, caribou can also move over time.

Although Peary caribou have existed at higher levels than today, they have never existed at numbers such as the large barren ground herds found to the south. The climate and topography of their range favours smaller groups dispersed over the landscape. These groups move with weather and food availability and are more susceptible to extreme weather events which can cause large die offs.

9.2 WHEN TO TAKE ACTION

Actions to ensure the future of Peary caribou will be determined in part by the number of Peary caribou found in each island group, and whether it is increasing or decreasing. Management decisions will also be influenced by other information from harvesters and research and monitoring programs, such as recruitment, bull-to-cow ratio, body condition and health.

In this management plan there are four levels of island group status and associated management actions. These are colour-coded green, yellow, orange, and red. The island group status provides a trigger for specific management actions.

Green:	The population level is high
Yellow:	The population level is increasing
Orange:	The population level is decreasing
Red:	The population level is low

9.3 USING MONITORING INFORMATION TO MAKE DECISIONS

Accurate and timely information is necessary for making good management decisions. Because the island groups are shared between communities and regions, it is also important that information is collected and shared by all harvesters and managers.

Island group status (e.g. green, yellow, orange or red) will be determined based on information including:

- Estimate of the overall population size of the island group
- Previous estimates to provide a trend (increasing, decreasing, or stable)
- Additional monitoring indicators such as ground based surveys to supplement the interpretation.

It is important to have up-to-date information so ensuring sufficient frequency of research and monitoring effort is very important. Certain monitoring will take place regardless of whether the island group status is green, yellow, orange or red. However, the frequency and intensity of monitoring will vary in response to island group status.

Long-term monitoring of environmental factors, including range quality and quantity, development activity and trends, and disturbances that influence caribou populations are important in understanding changes in caribou health and abundance.
Some of these indicators of population status can be difficult or expensive to measure. In these cases there may be some information available through long-term research programs or methodical collection of IQ. All of this information will be considered by the co management partners.

Working with all stakeholders an ongoing community based ground survey program will be established with the appropriate financial and technical support. This would occur, due to the spatial scale, on a rotating basis so that areas will be monitored at least every two or three years, unless observations of decline trigger more intensive efforts. The ground based surveys will be primarily in areas where regular community harvest occurs. Surveys should be followed with an annual meeting of stakeholders to review the results and recommend management changes if required.

Further changes observed from community monitoring programs (observations of die offs, starvation, population increase or decrease) can trigger:
1) Aerial surveys if declines are considered significant,
2) Increased frequency and coverage of community ground survey if declines are considered less significant but still of concern,
3) Community-based changes in harvest level that would occur within a predetermined upper and lower limit.

9.4 WHAT MANAGEMENT ACTIONS CAN WE TAKE

The NWMB has the responsibility for decision making as the primary instrument of wildlife management under the NLCA. Regional Wildlife Organizations (RWOs) have the authority to allocate harvest among their member HTOs, and in turn the HTOs can regulate their harvesters and allocate their share of a Total Allowable Harvest (TAH). Through regular annual meetings of the stakeholders, consensus on recommended actions can be reached and submitted to the NWMB for decision. Further, HTOs can make decisions to regulate local harvest through seasons, sex selectivity, area restriction, or reduction. These consensus-based recommendations can also be made to government and land use agencies following the general management actions described below.

9.4.1 HARVEST

As an Endangered species under SARA, Peary caribou are automatically protected from harvest, with the exception of Inuit harvest which would require a decision by the NWMB. Any decision of the NWMB should be informed by the consensus based recommendations of the co management partners developed through annual stakeholder meetings or as recommended in this plan. Recommendations can also take the form of harvest composition (e.g. sex selective) or seasonal restrictions or other Non-Quota Limitations (NQLs).

9.4.2 LAND USE ACTIVITIES

Increasing land use activity demands that meaningful input and review be provided into the various permitting process in Nunavut, whether it be the Nunavut Impact Review Board (NIRB), Nunavut Water Board (NWB), or the Nunavut Planning Commission (NPC) land use plan. Effort should be made to ensure capacity is available within all co management agencies to ensure effective participation. The community-based ground surveys will gather valuable information for both HTOs and DOE to effectively participate in these permitting processes. Co management partners can continue to recommend actions to help reduce the negative impacts of exploration and development on caribou. Advice can be given to avoid important caribou seasonal ranges like calving grounds, and how to mitigate disturbance from noise and access.

9.4.3 COMMUNICATION AND EDUCATION

Co management partners can work together to provide active and accessible communication programs, and recommend education programs. This can include different programs and approaches for elders, harvesters and youth to encourage traditional harvesting practices, use of alternate species and increased trade and barter of traditional foods. It can also include work with members of industry including resource developers.

9.4.4 HABITAT

Co management partners can continue to encourage and support increased research and monitoring related to seasonal range use, key habitat indicators, trends in climate and weather, and delineation of calving grounds.

9.5 MANAGEMENT ACTIONS BASED ON STATUS

The type of management action and the degree of management intervention will vary depending on the status of each island group. There are four levels of island group status which are colour-coded green, yellow, orange, and red. The island group status will trigger specific management actions or a change in the frequency of action, as described below:

Green: the population level is high
Management actions include:

- Support harvest
- Provide standard advice on mitigation of the impacts of exploration and development activities to proponents and regulators
- Provide active and accessible communication, and recommend education programs for all

Yellow: the population level is increasing
Management actions include:

- Recommend easing limits on harvest
- Provide standard advice on mitigation of industrial impacts to proponents and regulators
- Provide active and accessible communication and recommend education programs for all

Orange: the population level is decreasing
Management actions include:

- Recommend a TAH
- Recommend a majority-bulls harvest
- Recommend harvest of alternate species and encourage increased trade and barter of traditional foods
- Recommend increased community monitoring
- Provide active and accessible communication and recommend education programs for all

Red: the population level is low
Management Actions include:

- Recommend no harvest
- Work directly with proponents and regulators of exploration and development activities to advise on mitigation measures
- Recommend harvest of alternate species and meat replacement programs, and encourage increased trade and barter of traditional foods.
- Recommend increased enforcement including increased use of community monitors.
- Provide active and accessible communication and recommend education programs for all.

9.6 PROCESS TO MAKE DECISIONS

The co management partners shall meet annually to discuss results of all recent research and monitoring efforts which may include harvest reporting, caribou health monitoring, and ground or aerial surveys. The purpose of this annual meeting is to review information and reach consensus-based recommendations, if required, for

submission to the NWMB. Action may also be taken at the local level by HTOs based on the information reviewed.

9.6.1 GUIDING DOCUMENTS: ACTION PLAN

This Management Plan is supported by an Action Plan which outlines the management actions to be taken and how they will be implemented. Based in large part on the island group status, the Action Plan will outline specific management actions and how they will be implemented, by whom, and within what timeframe. Funding for the management action will be discussed by the co management partners. A third document, the GN DoE report "*Recent trends and abundance of Peary Caribou (Rangifer tarandus pearyi) and Muskoxen (Ovibos moschatus) in the Canadian Arctic Archipelago, Nunavut,"* will provide the technical baseline for decision making. Inuit Qaujimajatuqangit will be provided by the participating HTOs in the Stakeholder Working Group (See Appendix B). New information will be reviewed as it becomes available ensuring decisions are based on the most up to date scientific and local knowledge.

Implementation of the Action Plan is cooperative, and ongoing community input and support will help to develop and implement management actions. Each co management partner will be responsible for approving the Action Plan for its implementation. The effectiveness of the Action Plan will be reviewed annually.

9.6.2 STAKHOLDER MEETINGS

Stakeholders will meet annually after survey work has been completed and annual data summarized to review all new information and implementation of the Action Plan. It will be presented with the best available IQ and scientific knowledge and community based monitoring information. The Action Plan will be reviewed, and possibly updated, at the same time that the stakeholders review the current status of the Island Groups. Although normally revised only following an aerial survey, an Island Group's status or Action Plan may be revised more frequently if, for example, there has been some extreme change observed through community-based ground surveys.

9.6.3 ALLOCATION OF HARVEST

If a Total Allowable Harvest (TAH) is recommended it shall be determined and allocated in accordance with processes described in the NLCA.

10.0 COMMUNICATION BETWEEN STAKEHOLDERS AND WITH USERS

Communication is the responsibility of all parties engaged in wildlife management. Knowledge must flow both ways - between local knowledge holders and management agencies. There will be varied communication and education techniques used depending on the message and the intended audience. They may include local radio

programs, visits to schools, posters or presentations, public meetings, and on-the-land gatherings.

Stakeholders will meet on an annual basis to discuss survey results and island group status and to take appropriate actions when needed. Further details on the annual meeting will be provided in the Action Plan.

The information communicated to the public will include island group status; any voluntary or management limits on harvesting; what is being monitored and why; the results of the monitoring programs; why harvesting mostly bulls rather than cows may be preferable; and education of youth in traditional hunting practices.

11.0 UPDATING THE MANAGEMENT PLAN

The Plan will first be reviewed after seven years (i.e. 2020) and at ten-year intervals thereafter. Any party may request a review, at any time, through a letter to the other signatories.

12.0 SIGNATORIES TO THE PLAN

Iviq Hunters and Trappers Association
Resolute Bay Hunters and Trappers Association
Ikajutit Hunters and Trappers Organization
Spence Bay Hunters and Trappers Organization
Ekaluktutiak Hunters and Trappers Organization
Kurairojuark Hunters and Trappers Organization
Gjoa Haven Hunters and Trappers Organization
Nunavut Tunngavik Inc., Wildlife Department
Qikiqtaalik Wildlife Board
Kitikmeot Hunters and Trappers Association
Nunavut Department of Environment, Wildlife Management Division

APPENDIX B
Recommended stakeholder working group for annual meetings

The stakeholder working group consists of the Chairpersons (and/or their alternates) of:
Iviq Hunters and Trappers Association
Resolute Bay Hunters and Trappers Association
Ikajutit Hunters and Trappers Organization
Spence Bay Hunters and Trappers Organization
Ekaluktutiak Hunters and Trappers Organization
Kurairojuark Hunters and Trappers Organization
Gjoa Haven Hunters and Trappers Organization
Qikiktaalik Wildlife Board
Kitikmeot Hunters and Trappers Association
And staff from the:

- Nunavut Wildlife Management Board
- Nunavut Tunngavik Inc.
- GN DoE, Regional Biologists and Regional Managers

Additional experts, either scientists or qaujimanilik, will be invited as required for support.

RECOMMENDATIONS AND TOTAL ALLOWABLE HARVEST BY ISLAND GROUP

General Recommendations

It is recommended to establish management units based on the proposed nine Island Groups. This includes six as presented in "*Recent trends and abundance of Peary Caribou (Rangifer tarandus pearyi) and Muskoxen (Ovibos moschatus) in the Canadian Arctic Archipelago, Nunavut"*, and three additional management units in the Kitikmeot region. This will facilitate future collection of consistent data for comparison and management decisions. However there is a need for provisions within the management plans to allow for finer scale management in response to changes in Peary caribou numbers, such as those observed through community observations or by additional survey work where warranted. In particular, the HTOs should control local harvesting within an agreed upon herd size, thus allowing for management at the community level.

Working with all stakeholders, an ongoing community-based ground survey program should be established with the appropriate financial and technical support. This would occur, due to the spatial scale, on a rotating basis so that areas will be monitored at least every two or three years, unless observations of decline trigger more intensive efforts. The ground based surveys would be primarily in areas other than where regular community harvest occurs as normal harvest areas will be monitored through harvest reporting. Surveys should be followed with an annual meeting of stakeholders to review the results and recommend management changes where required.

Observed changes from the community monitoring program (observations of die-offs, starvation, population increase or decrease) would trigger:

1) Potential aerial surveys if declines are considered significant,
2) Increased frequency and coverage of community ground survey if declines are considered less significant but still noteworthy,
3) Community based changes in harvest level that would occur within a predetermined upper and lower limit.

Predominately all island groups have declined and remain at low density with the exception of Bathurst and Melville, which are both showing signs of recovery. Caution must be exercised to prevent local extirpations. As harvest restrictions may only be to the level to address a valid conservation concern, there is currently a strong argument to maintain harvest restrictions for several island groups.

Harvest restrictions must allow communities to have input and control over how harvest will be allocated by allowing flexibility for HTO's to respond to changes in Peary caribou numbers that they observe and monitor through community-based ground surveys. These surveys may trigger more extensive ground or aerial surveys in the case of observed declines. An annual survey/meeting structure will allow for management action at the community level to occur in a timely and responsive manner.

Harvest reporting and sample collection is critical information for management. Each harvest should be reported through a hunter report. Information collected on the reports should include date, location (Latitude and Longitude), hunters name, tag number, sex, approximate age, and size of group harvested from. A Peary caribou health monitoring program should be established and sample kits provided to the hunters. The information provided will further our understanding of survival rates, diet, health, and space use. There is also a need to indentify population boundaries to better manage Peary caribou.

With the current low numbers of Peary caribou in some of the island groups it is suggested to consider male sex selective harvests to help conserve females in the effort to reduce impacts and promote potential recovery.

Specific Island group TAH recommendations

Ellesmere Island Group (PC-01)
It is recommended to maintain existing harvest levels with a TAH of 45- 50 (allowing community to adjust as required within that amount). This harvest rate may impact caribou on south Ellesmere negatively; to alleviate this effect there should be encouragement and support to increase harvest on north Ellesmere. Harvest reporting and sample submission for genetics will assist greatly in understanding the dynamics of Peary caribou genetics and movement.

Axel Heiburg Group (PC-02)
No harvest occurs here and the population is abundant, therefore no TAH is required. Should harvest start to occur here, as determined through harvest reporting, the stakeholder working group should discuss potential harvest limits. Recommend no harvest by non- Inuit.

Ringnes Islands Group (PC-03)
No harvesting occurs here, therefore no TAH is required. Should harvest start to occur here, as determined through harvest reporting, the stakeholder working group should discuss potential harvest limits. Recommend no harvest by non- Inuit.

Devon Island Group (PC-04)
With only 17 animals observed in 2008 and no abundance estimate, this group should be under a moratorium until such time as an increase is observed through community-based ground surveys. Harvest reporting and sample submission for genetics will assist greatly in understanding the dynamics of Peary caribou genetics and movement.

Bathurst Island Group (PC-05)
Managing for recovery, a conservative TAH based on the preliminary results of the 2013 estimate of 1200 caribou would be 36 caribou (a 3% harvest rate). Although scientific knowledge and local knowledge agree that there is recovery in this group caution is warranted in order to not jeopardize that recovery. Harvest reporting and sample submission for genetics will assist greatly in understanding the dynamics of Peary caribou genetics and movement.

Prince of Wales Group (PC-06)
With too few caribou to support harvesting at current numbers, this group should be under a moratorium until such time as an increase is observed through community based monitoring. Survey frequency should be increase to monitor sign of recovery. Harvest reporting and sample submission for genetics will assist greatly in understanding the dynamics of Peary caribou genetics and movement.

Victoria Island Group (PC-07)
As there is no targeted harvest in the area and only an occasional caribou is taken opportunistically, no TAH is required. Harvest reporting and sample submission for genetics will assist greatly in understanding the dynamics of Peary caribou genetics and movement. Should harvest reporting indicate an increase over the current rate of sporadic opportunistic harvest the stakeholder working group should discuss potential harvest limits. Recommend no harvest by non- Inuit.

Boothia Peninsula Group (PC-08)
As there is no targeted harvest in the area, and only an occasional caribou is taken opportunistically, no TAH is required. Harvest reporting and sample submission for genetics will assist greatly in understanding the dynamics of Peary caribou genetics and movement. Should harvest reporting indicate an increase over the current occasional harvest, the stakeholder working group should discuss potential harvest limits. Recommend no harvest by non- Inuit.

King William Island Group (PC-10)
As there is no targeted harvest in the area and only an occasional caribou is taken opportunistically, no TAH is required. Harvest reporting and sample submission for genetics will assist greatly in understanding the dynamics of Peary caribou genetics and movement. Should harvest reporting indicate an increase over the current rate of

sporadic opportunistic harvest, the stakeholder working group should discuss potential harvest limits. Recommend no harvest by non- Inuit.

APPENDIX B
Recommended stakeholder working group for annual meetings

The stakeholder working group consists of the Chairpersons (and/or their alternates) of:
Iviq Hunters and Trappers Association
Resolute Bay Hunters and Trappers Association
Ikajutit Hunters and Trappers Organization
Spence Bay Hunters and Trappers Organization
Ekaluktutiak Hunters and Trappers Organization
Kurairojuark Hunters and Trappers Organization
Gjoa Haven Hunters and Trappers Organization
Qikiktaalik Wildlife Board
Kitikmeot Hunters and Trappers Association
And staff from the:

- Nunavut Wildlife Management Board
- Nunavut Tunngavik Inc.
- GN DoE, Regional Biologists and Regional Managers

Additional experts, either scientists or qaujimanilik, will be invited as required for support.

ACTION PLAN

The following action plan supports the implementation of the management plan. It lists essential tasks that the co management partners recommend for the ongoing monitoring and management of Peary caribou. The actions support and emphasize programs and projects that will be invaluable in decision making and recommends what needs to be done to achieve the goals of the management plan.

The Action Plan assigns responsibilities for conducting programs and projects and covers the following categories:

1. Aerial survey program
2. Community-based ground survey program
3. Establishing harvest reporting and caribou health monitoring programs
4. NWMB Decision on Regulatory Changes
5. Annual Stakeholders meeting

1. Establishing an Aerial Survey Program

Background:
Aerial surveys are expensive and require significant logistic preparation. An aerial survey will be used in two fashions, as part of a cyclic program over the long-term to monitor population size and trend as well as other indices such cow/calf ratio and bull/cow ratio.

Problem Statement:
GN DoE has limited funds available for research of all species under its mandate for all of Nunavut. Regular surveys are expensive both in terms of financial and human resources. Co management partners need to agree on a monitoring cycle that is financially viable and still allow for surveys to occur in emergent situations when ground-based surveys observe significant die-offs or declines.

Objectives:
1. Seek support from NWMB for Nunavut Wildlife Research Trust (NWRT) funding for a long term survey as well as seek out other funding sources, such as INAC, and Environment Canada under federal funding programs for species at risk.
2. Stakeholders will agree upon an aerial survey schedule and thresholds that will trigger aerial surveys in emergent situations.

Methods:

1. GN DoE proposal to NWMB for NWRT with inventory schedule and maximum three year term request.
2. GN DoE to make formal requests to other third parties, via letter, for additional financial support for monitoring programs

Schedule:
Upon acceptance of Management Plan – GN DoE to seek support from third parties
January 2015 – GN DoE proposal to NWMB
January 2015 – Letter from co management partners to NWMB supporting DoE proposal

Evaluation: Ongoing at annual Stakeholder meeting

Lead Role: GN DoE

Support Role: HTOs, QWB

2. Establishing a Community-Based Ground Survey Program

Ground surveys are expensive and require significant logistic preparation. Community-based ground surveys will be used as part of a cyclic program over the long term to monitor population size and trend as well as other indices such as cow/calf ratio and bull/cow ratio.

Problem Statement:
HTOs have limited capacity to conduct monitoring programs. Regular surveys are expensive both in terms of financial and human resources. Co management partners need to agree on a monitoring cycle that is financially viable and has the financial and technical support to succeed.

Objectives:

1. Seek commitment from NWMB for HTO proposals to the Community Studies Fund for support of community based ground surveys on an annual and cyclic basis. HTOs to seek out other sources such as Habitat Stewardship Program and Aboriginal Fund for Species At Risk.
2. Stakeholders will agree upon a ground survey schedule and thresholds that will trigger additional ground surveys such as observed die offs and extreme weather events.

Methods:

1. HTOs submit proposal to NWMB for Studies Fund.
2. Co management partners to provide technical, logistic and financial support.

Schedule:
Upon acceptance of Management Plan – HTOs to seek support from third parties
January 2015 – HTO proposals to NWMB
January 2015 – Letter from co management partners to NWMB supporting HTOs proposals.

Evaluation: Ongoing at annual Stakeholder meeting

Lead Role: Each HTO that wishes to participate in the ground-based survey

Support Role: QWB, NIWS, GN DoE

3. Establishing Harvest Reporting and Caribou Health Monitoring Programs

Background:
Harvest monitoring and caribou health monitoring are identified in the Plan as important factors for management decisions. Collection of harvest data and condition and health data are means of Inuit involvement at the individual level

Problem Statement:
Currently harvest monitoring is not official or well-organized. Efforts have been made at establishing a general caribou health monitoring program, but this needs to be expanded to Peary caribou.

Objectives:

1. Get commitment from stakeholders to implement a harvest reporting program.
2. Harvest reporting will include sample submission that will be utilized in the health and condition monitoring program.

Methods:

1. NIWS, NTI and GN DOE to assist QWB, KRWB in preparing Management Plan
2. NTI and GN DOE to provide letters of support

Schedule:
Upon acceptance of plan - Determine harvest and sample collection needs and design reporting form

Evaluation: Annually at stakeholder meeting

Lead Role:
QWB/ KRWB / HTOs/ GN DOE / NTI Wildlife

4. NWMB Decision on acceptance of the Plan and Regulatory Changes

Background:
The co management partners are responsible for the protection, conservation, and management of Peary caribou in a sustainable manner. However the NWMB has the mandate to make decisions under the NLCA with regards to changes in TAH and approval of management plans. GN DoE has the responsibility to develop regulations under the *Wildlife Act*. This Plan will serve as the basis for development of Regulations for the management of Peary caribou under the *Wildlife Act*.

Problem Statement:
The NWMB must approve the proposed management plan, action plan and recommended changes to the regulations. The plan is the result of consultation with the co-management partners.

Objectives:
The co management partners have developed the Management Plan and Action Plan in regard to implementing changes in the management of Peary caribou. The objective is to have the plan approved by NWMB so that the plan can be implemented and regulatory changes can be implemented.

Methods:
1. DoE will submit the draft plan to the NWMB for decision.

Schedule:
Upon completion of an acceptable draft plan submit the draft and briefing note to NWMB for first available regular meeting
January 2014 –submit briefing note and supporting documents to NWMB

Lead Role: GN DOE

5. Annual Stakeholder Meeting

Background:
The co-management partners need to ensure that all information gathered annually on Peary caribou, such as harvest and survey results, are shared fully and reviewed

collaboratively for the purposes of taking action when needed. The action plan shall undergo annual review at this meeting and be amended as required.

Problem Statement:
Scheduling and financing meetings in the remote communities of Nunavut is a challenge. Support is needed by all co management partners to ensure that the parties can meet and discuss, by whatever means available, the current information available.

Objectives:
To ensure that participants are adequately supported to effectively participate in the annual stakeholder meeting.

Methods:

1. Co management partners will seek to plan and budget the adequate resources for their respective participants to effectively participate in the annual meeting.
2. Where possible the participants may already be in joint attendance at other meetings (i.e. NWMB) and this should be capitalized upon.

Schedule:
The annual general meeting shall occur at a mutually convenient time that allows for the data collected in the previous year to be analyzed and summarized for use by the co management partners.

Evaluation: Annual stakeholder meeting

Lead Role: QWB/KRWB / GN DOE / NTI Wildlife/ HTOs