

Southern Hudson Bay Polar Bear Subpopulation Harvest Re-assessment: Consultation Report

Report to Southern Hudson Bay Polar Bear Advisory Committee from
the Southern Hudson Bay Polar Bear Consultation Working Group

24 June 2020



Prepared by: Caryn Smith (Nunavut Department of Environment); Gregor Gilbert (Makivik Corporation); Paul Irngaut (Nunavut Tunngavik Inc.); Sam Iverson (Environment and Climate Change Canada); Alan Penn (Cree Nation Government); Marie-Claude Richer and Guillaume Szor (Ministère des Forêts, de la Faune et des Parcs du Québec); Angela Coxon (Eeyou Marine Region Wildlife Board)

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY	3
2. BACKGROUND	9
3. SOUTHERN HUDSON BAY POLAR BEAR USER-TO-USER MEETING	9
3.1. Purpose and Participants	9
3.2 User-to-User Meeting Sessions	11
3.2.1 <i>Opening remarks and meeting purpose</i>	11
3.2.2 <i>Subpopulation Status Report</i>	12
3.2.3. <i>Harvest Risk Analysis</i>	13
3.2.4. <i>Indigenous Knowledge Presentations</i>	16
3.2.5 <i>Eeyou Istchee Cree Perspectives</i>	21
3.2.6 <i>Review of Day 1; Presentation of Day 2 Agenda</i>	22
3.2.7 <i>Management Objectives Discussion</i>	24
3.2.8 <i>Non-quota Limitations Discussion</i>	25
3.2.9 <i>Allocation of Harvest between User Groups Discussion</i>	27
3.2.10 <i>Presentation of Recommendations of the User-to-User Group Participants</i>	30
APPENDIX A. USER-TO-USER MEETING INVITATION	34
APPENDIX B: USER-TO-USER MEETING PARTICIPANTS.....	38
APPENDIX C. USER-TO-USER MEETING PRESENTATION	41

ATTACHMENTS

1. Nunavik Inuit Community Engagement Report
2. Nunavut Inuit Community Engagement Report
3. Ontario Cree Community Engagment Report

1. EXECUTIVE SUMMARY

A new abundance estimate for the Southern Hudson Bay Polar Bear Subpopulation has been accepted by management authorities. This has triggered the re-assessment of current Total Allowable Harvest (TAH) / Total Allowable Take (TAT) limits within the range of this subpopulation.

To promote cooperation and coordinated decision-making, the Southern Hudson Bay Polar Bear Advisory Committee was formed (hereafter, Advisory Committee). Advisory Committee representatives include Federal, Provincial and Territorial Governments (Canada, Nunavut, Québec, Ontario) and Inuit/Cree Land Claim Organizations (Nunavut Tunngavik Incorporated, Makivik Corporation, Cree Nation Government), with Wildlife Management Boards (Nunavut Wildlife Management Board, Nunavik Marine Region Wildlife Management Board, Eeyou Marine Region Wildlife Management Board) and the Hunting, Fishing and Trapping Coordinating Committee participating as observers.

A Technical Working Group reporting to the Advisory Committee prepared two reports: (1) *Southern Hudson Bay Polar Bear Subpopulation Status Report, September 2019* and (2) *Provisional Harvest Risk Assessment for the Southern Hudson Bay Polar Bear Subpopulation, June 2019* (hereafter, Subpopulation Status Report and Harvest Assessment Report, respectively).

The two technical reports were shared by email attachment with Inuit and Cree local and regional hunting and trapping / wildlife organizations in January 2020 and community engagement sessions were conducted in Inukjuak, QC (January 27, 2020), Umiujaq, QC (January 28, 2020) and Kuujjuaraapik, QC (January 30, 2020) that were led by Canadian Wildlife Service and Makivik Corporation representatives (with input from Ministère des Forêts, de la Faune et des Parcs du Québec). A community engagement session was held in Sanikiluaq, NU (February 11, 2020) that was led by the Government of Nunavut Department of Environment and attended by representatives from Nunavut Tunngavik Incorporated, the Qikiqtaaluk Wildlife Board, and the Nunavut Wildlife Management Board. Outreach to Eeyou Istchee Cree was via written materials and teleconference and was led by the Eeyou Marine Region Wildlife Board, Cree Nation Government and Cree Trappers Association. Finally, outreach to Ontario Cree was by written materials and an in-person engagement session in Peawanuck, ON (December 10, 2020) that was led by Canadian Wildlife Service (with input from the Ontario Ministry of Natural Resources and Forestry).

On February 25-26, 2020 a user-to-user meeting was held in Montreal, QC. The meeting was co-chaired by Adamie Delisle Alaku from Makivik Corporation and James Eetoolook from Nunavut Tunngavik Incorporated and brought together users from throughout the region. In total, there were 57 participants at the meeting, representing the Sanikiluaq HTO, Inukjuak LNUK, Umiujaq LNUK, Kuujjuarapik LNUK, Cree Trappers Association (community level), Qikiqtaaluk Wildlife Board, Nunavik RNUK,

Nunavut Tunngavik Incorporated, Makivik Corporation, Cree Nation Government, Cree Trappers Association (executive), Nunavut Wildlife Management Board, Nunavik Marine Region Wildlife Board, Eeyou Marine Region Wildlife Board, Hunting, Fishing and Trapping Coordinating Committee, University of Washington (expert modeler), and the Governments of Canada, Nunavut Québec and Ontario.

The presentation delivered at the user-to-user meeting included the same technical information that was presented in the community engagement sessions, as well as discussion points to guide the conversation.

The morning of the first day included a welcome and opening prayer, opening remarks from the co-chairs, and presentations by management authorities explaining the meeting purpose, key findings of the Subpopulation Status Report, and key findings of Harvest Assessment Report.

The afternoon of the first day focused on hearing Indigenous Knowledge from Nunavut Inuit, Nunavik Inuit, and Eeyou Istchee Cree participants.

Several key statements capturing the overall message of the participants on the first day were noted. Among these was:

- Nunavut Inuit: *Our forefathers were constantly hunting seals and didn't see a lot of bear. Numerous bears are a nuisance to people. They endanger lives and impact eider colonies and seal populations. We feel that a higher removal rate will not lead to the extinction of polar bears. There will be a lot of debate between scientific views and Indigenous views. Not including Indigenous views is very frustrating to us. These are our lives that are at stake, and our hunters are not being heard.*
- Nunavik Inuit: *In the 1980s I harvested with my parents. Usually, there were no polar bear tracks and bears only had one cub. Now we see 2-3 cubs and there have been fatal maulings of Inuit (in Nunavut). Once the ice melts, the polar bear lands and disturbs the community. I don't know where the idea came from that as ice melts the polar bear declines. We want to manage ourselves, not to be told by people from other countries.*
- Eeyou Cree: *It is hard to come to grips with the numbers from the aerial surveys. I represent 6000 Cree hunters from the coast and they talk about polar bear. A hunter from Waskaganish, after he was married in 1947, went to Charlton Island and saw no polar bears in 40 years. He told me he saw 12 polar bears just this last spring. This supports what the people from the north are saying. The scientific knowledge doesn't correspond to what we see.*

The meeting facilitator (Carole Spicer) summarized the key points and outcomes of first day as follows:

Meeting purpose

- Government representatives and Inuit/Cree knowledge holders are here to share information. The objective of this exchange is so that users can make well-informed recommendations to the Wildlife Management Boards about the level of harvest and other non-quota limitations moving forward.
- Government representatives are not here to impose a quota or decide the number of tags that will be issued for each community. They are sharing information collected over the last few decades using a scientific approach. In the same way, Inuit and Cree are sharing the information gathered in their own way with other communities, jurisdictions and researchers.
- All of the information shared at this meeting is evidence that users can be applied to help them determine what their recommendations will be to the Wildlife Boards when the Wildlife Boards make harvest quota decisions.

Scientific observations

- The 2016 aerial survey estimate replaces the 2011/2012 estimate as the best available estimate of subpopulation size. It is lower, however the error estimates are overlapping.
- Other signs such as lower litter size, a low proportion of yearlings, declining body condition and declining survival, are concerns that coincide with environmental change.

Indigenous Knowledge

- Inuit and Cree communities have been experiencing a higher level of human – polar bear interactions. Human safety concerns and impacts of polar bears on other wildlife (seals, eider ducks) are severe.
- The increase in polar bear encounters could be a result of a higher abundance of bears, changing distribution of bears, or changing behaviour by bears (such as spending more time on land and closer to settlements). It could be a combination of all three.

Management considerations

- Polar bear harvest is culturally important to Inuit
- Communities must determine what level of risk they are willing to take regarding both:
 1. The potential for human - polar bear conflicts that might result from maintaining a large subpopulation to maximize harvest opportunity in the long-term

2. The impacts of a higher level of harvest, which could become detrimental to the survival of the subpopulation
- Everyone has the right to defend themselves
 - Harvest should be shared equitably between all users
 - Traditional methods of wildlife stewardship are of great importance to Nunavik Inuit and this should be part of the management
 - Improvements should be made to include users in the planning, conducting, and analysis of survey results.
 - There are concerns that collaring polar bears for research purposes is negatively impacting health of polar bears (especially females)

The second day was devoted to a discussion among users about recommended management objectives, views on non-quota limitations, and the allocation of harvest among user groups. The meeting facilitator summarized, and the participants agreed, that the key points and outcomes of the second day were as follows:

Agreement to Work Together

- Support for joint board/council hearings; Boards should work together – not just on overlapping issues, but on a shared resource
- Essential to work within the legal framework of the land claim agreements

New management objective

- Considering that:
 - Polar bear health is better than presented by scientists
 - There are concerns about the safety of people with the current abundance of polar bears
 - There is a need to ensure that Indigenous knowledge (Inuit and Cree) is properly included in management decision processes
- Users identified two management objectives:
 1. Increasing harvest level
 2. Increasing Indigenous participation in management of polar bears

- Users also noted concerns that collaring is negatively impacting the health of polar bears (especially females) and that research practices by scientists are interrupting mother bears and this should be discontinued.

Sex-selective harvest and other non-quota limitation considerations and concerns

- Sex-selective harvest targeting males at a 2:1 ratio is not based on Indigenous Knowledge; negative experience seen when this has been done in other species
- Concerns expressed about the potential impacts of ending male-biased harvest could have on trade.
- Training for younger hunters is important, as identifying sex requires experience
- There should be allowance to harvest more males than females, but it should not be fixed at a 2:1 ratio
- Always targeting the largest males is a concern
- Cubs are rarely hunted, in Nunavut it requires a permit and is for special occasions
- Polar bear harvesting is not just for trade
- Prefer to hunt when the animals are in their prime; in summer the taste is the best, but for fur, hunting in the summer is not good.
- Do not support polar bears in zoos

Proportional allocation of harvest

- The allocation of harvest should be discussed down the road with a joint hearing of the wildlife boards
- Allocation should be fair and equitable
- It should be taken into consideration that there are 3 communities in Nunavik versus 1 community in Nunavut
- There is a lack of clarity on the criteria used to allocate harvest
- The fact that the Inuit population is increasing should be taken into consideration
- Incorporate cultural knowledge and tradition
- Work with Inuit knowledge for accurate data analysis - current scientific data is outdated

- There is a need for more involvement with Inuit when determining TAH (rather than only basing the decision on given abundance numbers given by scientists)

In addition to the notes presented back to the participants by the facilitator, the participants had a discussion about recommended TAT/TAH. While Nunavut Inuit had previously indicated that TAH in Nunavut should remain the same or increase, Nunavik Inuit, led by Makivik, indicated that given there is no conservation concern, no limit on harvest need be established – Inuit traditional practices are sufficient to protect the population.

The meeting concluded with a summary of next steps in the process to re-assess TAH / TAT levels and commitment to continuing dialog to ensure collaborative information gathering, exchange, and decision-making. Next steps include:

- Preparation of a Consultation Report summarizing the information shared and feedback received at the user-to-user meeting, as well as community engagement meetings.
- A submission by the Governments of Nunavut, Quebec, and Canada to the Boards/HFTCC formally requesting that the Boards/HFTCC re-assess existing harvest limits in consideration of the information included in the Subpopulation Status Report, Harvest Assessment Report, and Consultation Report.
- Board/HFTCC determination if TAT/TAHs will be re-assessed and the format they will use to coordinate their efforts (e.g., joint public hearing, written hearing, etc).

2. BACKGROUND

In May of 2018, the Southern Hudson Bay Polar Bear Advisory Committee (hereafter, Advisory Committee) was formed. The purpose of the Advisory Committee is to promote cooperation and coordinated decision-making by co-management partners with responsibility for polar bear management in the Southern Hudson Bay Polar Bear subpopulation. The Advisory Committee is comprised of representatives from the governments of Canada, Nunavut, Quebec and Ontario, as well Nunavut Tunngavik Incorporated, Makivik Corporation, and Cree Nation Government (at the advice of Cree authorities, the Cree Trappers Association will be included in future deliberations). The Nunavut Wildlife Management Board, Nunavik Marine Region Wildlife Board, Eeyou Marine Region Wildlife Board and Hunting, Fishing and Trapping Coordinating Committee participated in Advisory Committee meetings as observers.

The first charge of the Advisory Committee was to coordinate information gathering to support a joint process for determining new Total Allowable Harvest (TAH) / Total Allowable Take (TAT) limits. To that end, a Technical Working Group, which reports to the Advisory Committee, was formed. The Technical Working Group completed two reports: (1) *Southern Hudson Bay Polar Bear Subpopulation Status Report, September 2019* and (2) *Provisional Harvest Risk Assessment for the Southern Hudson Bay Polar Bear Subpopulation, June 2019* (hereafter, Subpopulation Status Report and Harvest Assessment Report, respectively). The Subpopulation Status Report summarizes the best available scientific and Indigenous Knowledge information about polar bear abundance, estimated trend, body condition, reproduction and survival, behaviour, and environmental conditions. The Harvest Assessment Report forecasts the impact of a range of different potential harvest levels on subpopulation abundance in consideration of management objectives and projected changes in future sea ice conditions.

Engagement sessions were held during the fall of 2019 and winter of 2020, wherein the information included in the two technical reports was shared with Indigenous rights holders and questions were asked about community views about polar bear. Engagement occurred through the sharing of written documents, community meetings, and a user-to-user meeting, which brought together rights holder representatives from across the subpopulation. Attachments 1 (Nunavik Inuit), 2 (Nunavut Inuit), and 3 (Ontario Cree) summarize the outcome of community engagement sessions. This report summarizes the outcome of the user-to-user meeting itself.

3. SOUTHERN HUDSON BAY POLAR BEAR USER-TO-USER MEETING

3.1. Purpose and Participants

A user-to-user was held on February 25-26, 2020 at the Courtyard Marriott (Downtown), Montreal, Quebec. The purpose of the meeting was (1) for Indigenous rights holder representatives to meet with management authorities and receive up-to-date scientific and Indigenous Knowledge information from recently completed studies; (2) for

Indigenous representatives to share their views about the status and management of Southern Hudson Bay polar bear, including views relating to management objectives, non-quota limitations, harvest needs, and how harvest quotas are shared among Indigenous user groups (i.e., harvest allocation); and (3) to make consensus recommendations pertaining to management objectives, harvest needs, and harvest allocation (see Appendix A: Letter of Invitation).

The meeting was co-chaired by Adamie Delisle Alaku from Makivik Corporation and James Eetoolook from Nunavut Tunngavik Incorporated. A professional moderator, Carole Spicer, facilitated the meeting. In total, there were 57 participants, representing the following organizations:

Local Hunting and Trapping Organizations and Regional Wildlife Organizations

- Nunavik: Nunavik RNUK, Inukjuak LNUK, Kuujjuarapik LNUK, Umiujaq LNUK
- Nunavut: Qikiqtaaluk Wildlife Board, Sanikiluaq HTO
- Eeyou Istchee: Cree Trappers Association (community-level)

Indigenous Land Claims Organizations

- Makivik Corporation (Makivik)
- Nunavut Tunngavik Incorporated (NTI)
- Cree Nation Government (CNG) and Cree Trappers Association (CTA)

Wildlife Management Boards / Coordinating Committee

- Nunavik Marine Region Wildlife Board (NMRWB)
- Nunavut Wildlife Management Board (NWMB)
- Eeyou Marine Region Wildlife Board (EMRWB)
- Hunting, Fishing and Trapping Coordinating Committee (HFTCC)

Governments

- Environment and Climate Change Canada (ECCC)
- Nunavut Department of Environment (Nunavut DOE)
- Ministère des Forêts, de la Faune et des Parcs du Québec (Québec MFFP)
- Ontario Ministry of Natural Resources and Forestry (Ontario MNRF)

A complete list of user-to-user meeting participants is provided in Appendix B.

Ontario coastal First Nations were engaged prior to the meeting by ECCC. As Ontario Cree do not harvest polar bear under a formal TAT/TAH system, ECCC recommended that engagement would be most productive through a separate process focused on issues of interest in the communities, such as reducing human-polar bear conflict and sharing information about tourism best practices, rather than a user-to-user meeting focused on harvest.

At the user-to-user meeting, the agenda (English and Inuktitut) and presentation slides (English) were projected for all participants to see and follow along (see Appendix C: user-to-user meeting presentation). Copies of the presentation translated into Inuktitut were distributed to all participants requesting them.

In the synopsis below, the names of participants that asked questions for the presenters and/or made remarks are attributed to the organization or community that made them, but not individuals to respect privacy.

3.2 User-to-User Meeting Sessions

3.2.1 Opening remarks and meeting purpose

Welcome delivered by co-chairs Adamie Delisle Alaku (Makivik) and James Eetoolook (NTI). A prayer was delivered, and participants introduced themselves.

Caroline Ladanowski (ECCC) provided an overview about the organizations involved, past voluntary agreements to ensure sustainable harvest, and the decision-making process for determining new TAT/TAHs. It was noted that the completion of a new subpopulation abundance survey in 2016 was the trigger for re-assessing harvest levels. She explained that this meeting is an opportunity for Indigenous rights holders to meet with management authorities and discuss this recent science, as well as Indigenous Knowledge, and make their own recommendations. It was noted that harvest limits will not be determined at this meeting, rather they will be determined by the Wildlife Management Boards and the information shared here will help inform the Boards' decision processes.

Discussion

- Which survey was used to make the last TAT? Which year was the subpopulation abundance estimate of 943 number established?
 - Answer: The previous estimate was made in 2011-2012 and was the basis for the TAT/TAHs currently in place.
- Was this done without using Inuit Knowledge?
 - Answer: the 943 estimate was made from a strictly scientific survey. However, decisions about TAT/TAHs are made by the Boards and the Boards consider

both science and Indigenous Knowledge in their decision-making. The 943 was arrived at from a study that was strictly scientific.

- Who was involved in making this new abundance estimate – what governments and were Inuit involved?
 - Answer: the next presentation will go over this detail. There were a number of different studies that were completed by different groups of partners. This will be more clear after the presentation.

3.2.2 Subpopulation Status Report

Three presenters shared the information in Appendix C. Joe Northrup (Ontario MNRF) presented the most recent and historical population estimates, as well as information about changes in polar bear body condition, reproduction and survival. Mark Basterfield (NMRWB) presented information derived from several Indigenous Knowledge studies (Nunavik Inuit, Nunavut Inuit, and Eeyou Istchee Cree). Guillaume Szor (Quebec MFFP) presented information about current and historical harvest levels.

Discussion

- Nunavik Inuit representative: What is the basis for number for the estimates on the number of cubs?
 - Government of Ontario: some of the numbers come from aerial surveys, some from recapture studies. Because the methods were different you have to be careful about making direct comparisons of the estimates collected in different years.
- Nunavik Inuit representative: What is the status of the management plan for Quebec?
 - Government of Quebec: consultations have been conducted and a draft has been completed. A working group is making final revisions before the plan is submitted to the NMRWB, EMRWB, and HFTCC.
- A comment was made about the Male/Female ratio (the comment was not translated)
- Nunavik Inuit representative: Was there Inuit participation in aerial surveys?
 - Government of Quebec: Yes. Inuit representatives participated both in the 2012 and 2016 surveys, on the planes and helicopters.
- Nunavik Inuit representative: How close did the survey get to Puvurnituq?

- Government of Quebec: The survey went to the northern limit of the Southern Hudson Bay management unit, which is between Inukjuak and Puvurnituq, as per the flight path on the map.
- Nunavik Inuit representative: In what month were the 2011/2012 and 2016 aerial surveys done?
 - Government of Ontario: September. The survey is timed for when all bears are on shore, before females go into their dens
- Nunavik Inuit representative: How far inland did the survey go in Nunavik? In Ontario?
 - Government of Ontario: 30 km in Nunavik, 60 km in Ontario
- Nunavik Inuit representative: it should go 60km inland as well, more bears are observed inland now.
 - Government of Quebec: the only bears seen in the aerial survey in Quebec in the fall were around Long Island. Biologists intend to do more consultation with Inuit on these matters in order to ensure the best possible survey design in the future.
- Nunavik Inuit representative: How to you choose the Inuit observer?
 - Government of Quebec: in Nunavik, the LNUKs name the person.
- Nunavik Inuit representative: We are concerned this process wasn't respected last time
- Nunavik Inuit representative: did you also go around Bear Island between Kuujjuarapik and James Bay?
 - Government of Quebec: Not sure where Bear Island is, but all of the flight paths were recorded on the map.(Once the location of Bear Island was confirmed, it was confirmed to the participant that this island had indeed been surveyed).

3.2.3. Harvest Risk Analysis

Presentation by Eric Regehr, University of Washington (Appendix C). Eric Regehr is the modeler who conducted in harvest risk analysis in collaboration with the Technical Working Group. His presentation included a description of the modelling approach, the biological scenarios that were examined to account for projected changes in future sea ice conditions, and the model-derived predictions for the impact of harvesting at different levels of intensity.

Discussion

- Nunavik Inuit representative: government has moved very slowly. It is not meeting its own objectives in a reasonable time frame.
- Nunavik Inuit representative: In relation to the point that risk increases if the interval between surveys is lengthened: Inuit try to flag issues and changes in wildlife – it can take a long time for political will to act. Decisions are dependent on Ministers.
 - Eric Regehr: the Technical Working Group recommends that a new survey be completed every 5 years – this has been achieved recently and it is anticipated that they continue to happen every five years.
- Nunavik Inuit representative: Very difficult to work with Minister's view since it's our health and well-being is on the line every day. Minister efforts/timelines do not respect this fact whatsoever.
- Nunavut Inuit representative: What other species have been seen to benefit from this type of modelling?
 - Eric Regehr: This type of modelling approach has been used for many different species, notably waterfowl, and is a common model used in wildlife management. One conclusion of the modelling is that this subpopulation was able to sustain a fairly high level of harvest compared to other subpopulations in the past. It has been quite productive. Work done in the Chukchi Sea west of Alaska indicate that the population was overharvested by a sport hunt, but has increased as a result of stopping the sport hunt.
- Nunavut Inuit representative: Our forefathers were constantly hunting seals and didn't see a lot of bear. Numerous bears are a nuisance to people. They endanger lives and impact eider colonies and seal populations. We feel that a higher removal rate will not lead to the extinction of polar bears. There will be a lot of debate between scientific views and Indigenous views. Not including Indigenous views is very frustrating to us. These are our lives that are at stake, and our hunters are not being heard.
- Nunavik Inuit representative: The Inuit experience is completely different from the numbers.
- Nunavut Inuit representative: This presentation is lacking traditional knowledge.
- Nunavik Inuit representative: In Inukjuak, people are harvesting polar bear because they have to, not because they want to. Polar bears are arriving. Not comfortable with polar bears near homes. Can no longer use igloos because of polar bears. They are vicious animals.
- Nunavik Inuit representative: Regarding the aerial survey estimates of 943 bears in 2011 and 780 bears in 2016 – Why such a drastic drop? Because we caught too many, or because the bears were declined for other reasons, such as starvation or low reproduction, or are the numbers not exact? We didn't harvest many during

other years. Sometimes we harvested less than we agreed. We have to make a decision based on that study, we probably will have another study soon. What if they are down to 650 now? Inuit experience is an increase in sightings and an increase in interaction with polar bears, from almost nothing in the 1950s to polar bear warnings now. Why is there such a discrepancy?

- Eric Regehr: there is uncertainty in aerial survey estimates. We can't say the population has declined by an exact amount. The analysis did account for that uncertainty. Possible reasons the population may be in decline include scientific observations that females are in lower body condition now than in the 1980s and survival of young bears has been lower. The situation is similar in Western Hudson Bay. There may be more bears near the community because they spend a month longer on land now than they used to.
- Nunavik Inuit representative: The presentation shows a lack of use of traditional knowledge. We have experienced polar bears increasing in population. We moved to Inukjuak from camps in 1963. When I was a child in the camps, there were no polar bears, not even tracks. We would have been afraid if tracks had been found. When I was twenty in the 1970s the polar bears started coming back. We have been harvesting now, not because we want to, but because we have to. I'm only talking about Inukjuak. Did you start studying polar bears 100 years ago? When you talk about declining numbers, it means to us that they were in another region and then they moved to our region. In the past, we had dog teams and igloos. We did not worry about surprises because we had our dogs. They will notify you, because if a polar bear wants to attack a human being, it is vicious. We only use cabins now, because you never know what the reaction of a polar bear will be.
- Nunavik Inuit representative: In the 1980s I harvested with my parents. Usually, there were no polar tracks and bears only had one cub. Now we see 2-3 cubs and there have been fatal maulings of Inuit (in Nunavut). Once the ice melts, the polar bear lands and disturbs the community. I don't know where the idea came from that as ice melts the polar bear declines. We want to manage ourselves, not to be told by people from other countries.
- Nunavik Inuit representative: We have seen more and more cubs. Increasing numbers of bears. Bears are a disturbance on land. This is immediate issue and requires real-time strategy.
- Nunavik Inuit representative: Where did they get their Traditional Knowledge to work into the modelling scenarios? Only 3 communities of Traditional Knowledge? There are so many communities...frustration. Why not more?
 - Eric Regehr: In the model, Scenario 1, which assumed polar bear would not be strongly affected by sea ice reductions in the next 30 years, was included on the basis of Traditional Knowledge. Traditional Knowledge was not a big part of the modelling.

- Nunavut Inuit representative: The lack of Traditional Knowledge in the modeling is frustrating.
- Nunavik Inuit representative: We need to incorporate more traditional knowledge. How was Inuit knowledge put into the modelling?
 - Eric Regehr: in Scenario 1 – Inuit knowledge influenced this scenario, which predicts an optimistic future with a population capable of supporting a high level of harvest. This would be the most consistent with Inuit Traditional Knowledge. This is not a claim that all facets of Inuit Traditional Knowledge were incorporated, but one scenario is consistent with Inuit Traditional Knowledge.
- Nunavik Inuit representative: The Inuit Traditional Knowledge shouldn't just come from 3 communities. Was information gathered from Ontario and Sanikiluaq?
- Eeyou Cree representative: it is hard to come to grips with the numbers from the aerial surveys. I represent 6000 Cree hunters from the coast and they talk about polar bear. A hunter from Waskaganish, after he was married in 1947, went to Charlton Island and saw no polar bears in 40 years. He told me he saw 12 polar bears just this last spring. This supports what the people from the north are saying. The scientific knowledge doesn't correspond to what we see.
 - Eric Regehr: no scientific knowledge was gathered or used before 1980s. The only indications for decline are between 2011 and 2016. It is possible that the decline between 2011 and 2016 is the start of something, but it is possible that it is just a short term decline. There is no strong scientific evidence now that it is a long term decline.

3.2.4. Indigenous Knowledge Presentations

The Subpopulation Status Report included a summary of recent Indigenous Knowledge studies and consultations that have been conducted and written up as papers or reports. This session of the user-to-user meeting was intended to allow Inuit and Cree participants to state their views and observations and speak on behalf of their communities.

Lucassie Arragutainaq delivered a PowerPoint presentation on behalf of the community of Sanikiluaq which emphasized that Inuit in his community need to hunt for cultural and food reasons. He stated that there is a need to establish natural balance. He indicated that Nunavut Inuit do not hunt polar bear family groups. Cubs can be harvested with permit from the Government of Nunavut. One of the issues being seen is that polar bear are impacting bird colonies. Eider are very important for the diet of local people and one polar bear can eliminate a whole colony. There have been increasing observations of polar bears and bears are damaging human property. The Inuit conception is CREATOR>environment/wildlife>man. Honour the creator. But now we see MAN>environment/wildlife>creator. We are seeking a balanced system: Information > TK, science > Management decision.

Following Lucassie's presentation an open discussion occurred. Each bullet below signifies a different person making the comment.

Discussion

- Nunavik Inuit representative: We need to consider all harvesters in a management plan, not just Nunavut harvesters. Need to consider Nunavimmiut, Quebec and Ontario Cree.
- NTI co-chair: clarifies that Nunavut Inuit can't decide for Nunavik communities. Nunavik Inuit have their own organizations. The Nunavik Wildlife Board can make its own plan. Nunavut cannot tell Nunavik what to do. We have to work within our own Agreements. The Nunavik Inuit and the Cree have to make their own decisions. Our boundaries are an obstacle when we have to work together.
- Makivik co-chair: co-management does not work. We harvest the same wildlife. Wildlife Boards must work together. We need to improve our collaboration. We need to ensure that it can work. Right now, we are not at the same level in our management of the populations. We clash instead of co-managing these resources.
- Nunavik Inuit representative to Nunavut Inuit: your management plan, are you are still under NWT law/jurisdiction? Can you clarify this idea of pre-existing rules and Nunavut's new management plan? It sounds Nunavut does not disagree with the management system that is in place now in Southern Hudson Bay, but you are not alone with that subpopulation. Many groups are in the zone. We can only say that the whole zone needs a management plan. If only some do it, it will be ineffective. Put management plans together and have a common agreement.
- Nunavut Inuit representative: We are used to the management system now. At one time Nunavut was part of NWT, but all of the Nunavut communities got together and in 2019 they started applying a new management plan. Many Nunavut Inuit disagree about the need to harvest males at a 2:1 ratio compared to females. We were asked to kill too many males and want more balance. Now we have a management plan, not everyone agrees with it.
- Inuit representative: Animal rights groups are interfering with the daily life of Inuit. There is a need for more collaboration. Improvement is necessary. We are here because it's not working. Framework and structure is there, we just need to grease the gears and keep working. Very important: why is it that we share the same resources but operate with a lack of cohesion in resource management.
- Cree Trappers Association representative: if we do it piece by piece, it won't work. I'm here to come up with a global plan. We need to compromise, to find a plan that we can be comfortable with and implement it. I'm not going to just manage wildlife my way in my area, it's just not going to work.
- We must compromise and have one management plan that is accepted (regardless of losses/gains) by all.

- Request to see a copy of the Nunavut polar bear management plan.
- Nunavik RNUK: the agreements, from 1975, the implementation has not been completed. Hunters were charged by officers and police. In 2007, the NMRWB, when we reached the communities, we know what they value with respect to the Polar Bear. Knowledge was passed on from generation to generation. There are two systems of knowledge. We have management practices. We try not to hunt in June, July and August. There are islands where we hunt for food and other wildlife. If there will be decisions, there is data that goes into computers. The three communities in question, they try to follow. Not only polar bears; caribou are declining and waterfowl. Inukjuak has good hunters.
- Nunavik RNUK: We have established practices, even if they are not written. They will be written down. Once we get everything documented we should be set. We do tell our harvesters not to harvest cubs/females with cub, or bears in the den.
- In this discussion, SHB, JB, Sanikiluaq plus Cree nation. Scientists and Biologists have knowledge, and they provided us with data dated by 4 years. Inuit provide information that is up to date. We need to do something to resolve this issue.
- Cree representative: Not sure which way to go. Science provides numbers from 4 years ago, we are presenting real-time TK. We want up-to-date information. We do not have a limit, but would like a proper system. Question to Sanikiluaq PB population in the past years. Do you believe it fluctuates from year to year?
 - Nunavut Inuit Response: from 2011 the population estimate went down, but after a 2:1 implementation and in last two years we have seen that the population has increased.
- Cree representative: Are the bears healthy and do they produce multiple cubs?
 - Nunavik Inuit representative: Polar bears sometimes have 2 or 3 cubs now. The polar bears are healthy and abundant.
 - Nunavut Inuit representative: yes, lots of polar bears. They are abundant.
- Nunavik Inuit representative: Inukjuak hunters don't have funds to do monitoring. The survey and research that were done and models, we discuss this every day. Polar bear is not our main diet, but we want to hunt as a source of revenue. We did not have rules imposed on us, and the only rule we had was to get ear tags. The international community was concerned when we took 72 bears. We had to agree to kill fewer bears, and there was no compensation for the bears that we could no longer kill. We had to agree to the survey results. We need to work together to have a clear estimate. I do not agree with using the models. We need to work together. I guess the next survey will be in sept 2021. We should continue to harvest as we are and wait for new data. But we need a common management plan in the Hudson Bay zone.

- Nunavut Inuit representative: polar bear numbers are increasing.
- Nunavik Inuit representative (Inukjuak): regarding surveys/research/models we don't understand or agree. In 2011, we harvested 72 for commercial purposes. There were a lot in our area and there were no rules or regulations at that time. The only rule was not to deplete the tags. So we started agreeing with the numbers but we had to take away from the harvesters/rights without being offered compensation. We do not agree with the old outdated survey results. We want to work together to get a concrete estimate and plan from there. I agree to working together but not with using those models as a foundation. We need new data to work with. And before we reach that stage we practice with what we know. If the numbers are declining then we can assess. But all TK suggests numbers are increasing. Science says no. We need a management tool that will work with all involved. We have to have a common management plan for the SH bay.
- Nunavik Inuit representative (Inukjuak): I haven't seen anything yet that works well for me. We are speaking for our Nunavik hunters. Sanikiluaq hunters always have 25 while we get less every year. They want additional catch to increase their number. We want the same allowable catch as Sanikiluaq. If our total is reduced, Sanikiluaq's should be also. The combined population of our 3 communities is greater than that of Sanikiluaq. Greater community population with less TAT
- Nunavik Inuit representative (Inukjuak): when we hunted 72 bears, Sanikiluaq was worried about the impact of the reaction of the International community and on their sale of polar bear skins. A number of young boys got their first catch. Sanikiluaq is becoming greedy. It is not thinking about any other communities. How can we better manage our polar bear harvest with our Indigenous knowledge? We had a meeting in our community and we did not agree to be trampled down, and we want instead to use our traditional knowledge.
- Nunavik Inuit representative (Inukjuak): Our community was a big focus, people came to our community because they said we were contributing to a decline. Sanikiluaq is now requesting an increase to their quota, with no thought for other communities. We are concerned about smaller surrounding communities because they are our family. There was no knowledge of zone etc. in 2011.
- Nunavik RNUK representative: The studies from 2011 and 2016 are way past and no longer count. If the next study is coming in the next two years, it would be good to have a workshop in the winter of 2022. We want to work with the most up-to-date information. In Nunavik, we had no quota as in Sanikiluaq. The community reps have an expectation to go home with good numbers for their communities. What will be the outcome of this meeting? We were told this morning that we aren't to talk about numbers, the co-management is up in the air, so what are we doing here? Next time we do a conference like this, I would like to have the most up-to-date figures.

- Nunavik Inuit representative: Government has not kept the agreements. We focus on TK and will not change.
- QWB representative: There seems to be a big difference between science and ITK. As a biologist, this concerns me, we are all studying the same thing. Maybe the pictures are not as different as we think. The scientists are not saying that the populations are declining. The two numbers are not statistically different. Looks like the population might be stable. Inuit mention safety. This needs to be addressed head on. Science has not put Indigenous knowledge into the modeling. Projections over 30 years is too long, 10 years might be more concrete. Maybe the Inuit and Cree should work together and make their predictions. There should be a shift in how the science and Indigenous knowledge work together.
- Cree representative: when there is new data it would be good to have a workshop with up to date information. We are not the same as Sanikiluaq. We need to discuss co-management for the whole area. What is the end result of this meeting? Co-management question is up in the air. No quota talks?
- Nunavik Inuit representative: concerned there is big difference between TK and science. But the difference isn't what we think. We are all talking about the same thing. RE: human conflict, then users are the ones who know. Science looking 30 years ahead...wow that's what an elder can do...perhaps look at 10 years and communities may listen.
- Perhaps Inuit and Cree should get together to make their own independent predictions about the future and come together with ideas on TAT. Shift in how Inuit and Cree work together.
- Cree representative: Started seeing polar bears ten years ago now see them annually. We hear that everyone says there are too many polar bears now we want to start our harvest but the Government distributes tags and we want our share. In 2021 there will be another study and we are anxious to hear what TAT we can have for our community.
- Nunavik Inuit representative (Umiujaq): Disagree with the allocation to Sanikiluaq, Umiujaq wants to have more bears. They expect that after the 2021 survey, more bears will be allocated to Umiujaq.
- Nunavik Inuit representative (Kuujjuarapik): Disagree with the 2016 survey. They see more bears in Kuujjuarapik than ever. We are not interested in using those numbers. We see Polar Bear all the time now. Numbers are already outdated.
- Nunavik Inuit representative: The management authorities should meet first to discuss how they will distribute the tags. Government just purposely fragments all the Inuit so there will never be a resolution. Government has no respect. We need to re-identify zones. The way the zones are marked it is almost impossible without a great amount of arguments about TAT and zones. It would be easier for Nunavik to be split in two regions to benefit the agreements.

- Nunavik Inuit representative: We have no choice but to use these stupid zones (referring to the map of the SHB sub population boundaries). The government did this. It doesn't satisfy the Inuit people. Would like to see zones change for the Inuit, for their self-respect and dignity. My father didn't care about borders and would hide from wildlife officers in the NWT. Polar bears aren't friendly like people down here think. We worry men will be attacked when they go on the land. Bears camouflage themselves by covering themselves with mud. A woman from George River was nearly killed by a camouflaged bear. Change the zones (the management units) to respect the limits of the agreement. Then hunters would manage their territory as caretakers. Not all hunters want pelts. The map (management units) should be something the Inuit of Canada are comfortable with.

3.2.5 Eeyou Istchee Cree Perspectives

Comments were delivered by Fred Tomatuk (CTA), Alan Penn (advisor to CNG), and Bert Moar (CTA)

Fred Tomatuk stated that the Cree of Eeyou Istchee feel: the number of encounters with polar bear has been increasing, especially in the south (Waskaganish). The bears that Cree encounter appear to be healthy. Workshops are being held to discuss and address defense of hunters, including new techniques for scaring off bears with blanks, etc. Encounters with polar bears are reported and forwarded to the Quebec Government. The Cree of the Eeyou Marin Region would like to have a quota allocated to them to take into account defense kills. Finally, the Cree Trappers Association could be a decision making body and participate in proceedings to see that Cree get a fair and equal chance to participate, understanding that the animal is culturally very important to the Inuit.

Alan Penn stated that the CNG is a signatory to EMRLCA, including the overlap area. There is a strong collaborative relationship with Makivik. The relationship with the Cree of the west coast of James Bay (Ontario) also should be considered. In terms of its role in the co-management process, CNG is similar to Makivik and CNG has an interest in ensuring collaborative management.

Bert Moar stated that the economics of trapping are difficult now. Reasons include forestry, moose hunting outfitters, anti-trapping activists, and pollution of rivers and lakes. The sale of fur doesn't pay. One lynx pelt was once worth \$1000, now only \$50. Now some don't sell the fur, they just trap for the meat. Younger people don't respect the animals, don't listen to elders. Charlton Island – about 10 families camp there. A polar bear once knocked a cabin door down, an old man shot his shot gun into the ceiling to scare the bear off. People are concerned and are now not visiting certain areas. Moose are now moving north so things are changing.

Discussion

- Nunavik Inuit representative: responding to the issue of human safety and the use of deterrents - don't use anything noisy. The polar bear can go deaf and it

needs its hearing for hunting seal. Better deterrents available: such as bear guards.

- Nunavut Inuit representative: Do you see more bears than before?
 - Response from Cree Trappers Association: yes. The waters around Charlton Island and Cape Hope aren't freezing anymore. There is a lot more water in winter months than there was before. Presence is increasing. More sightings and encounters. Some Polar Bear are not migrating. Also noted that just because there are more tracks doesn't mean more bears. So caution to use that as an indication for TAT ideas. We are having a lot more open water than in years before.
- Nunavut Inuit representative: How many bears have you killed since 2011? You want to have a higher number in the future, so how many have you killed for survival?
 - Cree Trappers Association: About five bears in the last ten years. The last excursion to get a polar bear was 10 years ago, only one taken, got \$350. Now, it's worth half of that. We want enough tags to be able to take one or two bears every year. But I am flexible. When we have a management plan we can all live with, what is important to me is that we have a small sentence at the bottom saying that the Cree have Defense of Life and Property kills.
- Question: do you have to kill for safety and how many since 2011?
 - Cree Trappers Association: yes a few times. Five kills in the last ten years. We are not going to kill for compensation because money is not there. More sightings, so we want the management plan to have a small sentence that Cree have opportunity to defend themselves.
 - EMRWB: we have summarized these data. 14 bears have been killed by the Quebec Cree since 1996. The last one was on Charlton Island in 2017.

3.2.6 Review of Day 1; Presentation of Day 2 Agenda

Summary of Key Points from Day 1

- Meeting Purpose
 - Government representatives and Inuit/Cree knowledge holders are here to share information. The objective of this exchange is so that users can make well-informed recommendations to the Wildlife Management Boards about the level of harvest or other non-quota limitations moving forward.

- Government representatives are not here to impose a quota or decide the number of tags that will be issued for each community. They are sharing information collected over the last few decades using a scientific approach. In the same way, Inuit and Cree are sharing the information gathered in their own way with other communities, jurisdictions and researchers.
- Scientific Observations
 - The 2016 aerial survey estimate replaces the 2011/2012 estimate as the best available estimate of subpopulation size. It is lower, however the error estimates are overlapping.
 - Other signs such as lower litter size, a low proportion of yearlings, declining body condition and declining survival, are concerns that coincide with environmental change.
- Indigenous Knowledge
 - Inuit and Cree communities have been experiencing a higher level of human – polar bear interactions. Human safety concerns and impacts of polar bears on other wildlife (seals, eider ducks) are severe.
 - The increase in polar bear encounters could be a result of a higher abundance of bears, changing distribution of bears, or changing behaviour by bears (such as spending more time on land and closer to settlements). It could be a combination of all three.
- Management Considerations
 - Polar bear harvest is culturally important to Inuit
 - Communities must determine what level of risk they are willing to take regarding both:
 1. The increased potential for human - polar bear conflicts that might result from maintaining a large subpopulation to maximize harvest opportunity in the long-term
 2. The impact of a higher level of harvest that could become detrimental to the survival of the subpopulation
 - Everyone has the right to defend themselves
 - Harvest should be shared equitably
 - Traditional methods of wildlife stewardship are of great importance to Nunavik Inuit and feel it should be part of management

- Improvements should be made in including users in the planning, conducting, and analysis of survey results.

The planned agenda for day two was then presented, focusing on the following three issues and questions:

- Discussion of user recommended management objectives
- Discussion of non-quota limitations
- Discussion on allocation of harvest among user groups
- Determine where there is consensus among users and where there are differences of opinion
- Describe the next steps

.....<End of day 1>

3.2.7 Management Objectives Discussion

Facilitator began the session by presenting the management options that were examined in the harvest risk analysis and asking for rights holder views about what the management objective should be for the subpopulation.

Discussion

- Makivik co-chair: we are all equal and all have the same goals so we should have equal collaboration in the processes. Our hunters are out there every day observing and collecting TK and so we want up-to-date data.
- Nunavik Inuit representative: do Nunavik and Nunavut want to work together and have a co-management plan? To discuss harvest limits would be detrimental if we do not have an agreement about working together. Is everyone on board to have these discussions (i.e. the one's put forward by the moderator?)
- Cree Trappers Association representative: we are here to support the process. We don't speak on behalf of the Cree of the west side of the bay. CTA and CNG will make a statement, we will support the process as long as we have protection, we won't insist on an increase of harvest.
- QWB representative: In the process in the past, the TAT was not imposed, but left to jurisdictions to manage their own way. But there is confusion because we were told at the beginning of the meeting that we were not here to discuss TAT.
- NWMB asked to provide clarity about the decision process.

- NWMB: we are here as observers. We are here to make decisions for Nunavut only. We need to collaborate with other jurisdictions. We do not have a direct role in the development of a management plan.
- Nunavik Inuit representative: Nunavut representatives have already made statements about the number of bears they want in a quota. But we are here because other communities share this population. The only way is to work together. Because Nunavut has an agreement, they can't just say, "Let's do what our agreement says". They have to be willing to work together on this. Where do we begin? Once we're done, we each will go back to our respective Boards.
- Nunavik Inuit representative: we are missing things. There is inequality. We haven't heard what the take will be, so it's hard to discuss.
- Nunavik Inuit representative: what we are doing here is not from us. We are here because of the government. We have never had a quota. This is all new. The Minister makes a decision and we are now in the picture. Jurisdictional complexities that make us clash. If the provinces and territories cannot come together and work with one another then how can we come to a resolution? We all have to come together. We have instructions and expectations from the government. The JBNQA did not talk about quotas. There is a guaranteed harvest level. There are more polar bears than ever before. It has become a dangerous situation for us. It shows that Quebec and Ontario do not work together. We need to be open-minded and to resolve the problems, because the agreements have so much over-lap. There are a lot of issues with jurisdictional complexities which make us clash because we are protective of our territories. Our safety is a big concern, we need to tackle our public hearings so we can move forward.

*At this point the Inuit representatives determined it would be most useful to discuss things in a closed session for the Inuit and Cree organizations only (no government or Board members) so there is no reporting for those discussions.

3.2.8 Non-quota Limitations Discussion

Facilitator opened the session by noting existing non-quota limitations, such as sex-selective harvest of male polar bears and asked for rights holder views.

Discussion

- Nunavik Inuit representative: In relation to sex-selective harvest, disagreement with applying a 2:1 ratio. This is not Inuit Knowledge.
- Nunavik Inuit representative: harvesting more males than females is okay, but we do not agree to mandated 2:1.
- NTI representative: when Nunavut changed its system to allow harvest of females at up to a 1:1 sex ratio, it doesn't mean that if you harvest one female for every male, it is just an option. It was also noted that some of our hunters want to hunt the biggest

bear they can for a hide to make more money, but Inuit have raised concern that hunting large males has an impact on the population. We have seen issues with male-biased harvesting in other species.

- NTI co-chair: the federal government has no enforceable regulations to restrict polar bear hunting. Nunavik has no government regulations. This is problematic.
- Nunavut Inuit representative: under the 2:1 sex ratio limitation, when the TAH is 25, it 17 males and 8 females. If we want to increase to thirty, that would be 10 females and 20 males. Asked, if we adopted a 1:1 ratio or increased harvest, what would be the impact on the international fur trade.
 - Environment and Climate Change Canada: Canada's CITES Scientific Authority reviews the impact of management decisions on the species and make a decision based upon whether the removal is sustainable or not. The ECCC officials here today cannot answer what the outcome of the CITES Scientific Authority review will be.
- Nunavik Inuit representative: there are a lot of younger hunters. It is hard for them to distinguish between male and female bears. Some hunters can determine the sex by the head and the nose. We would need to teach young people how to distinguish sexes.
- A question was asked of the Government of Nunavut, who explained that under the new harvest system that allows up to 1:1 harvesting, there are no penalties for killing more males than females
- Quebec MFFP noted that the harvest in Nunavik has been at approximately a 2:1 ratio over the years naturally, without it being a rule in the TAT.
- Nunavut Inuit representative: males and females prefer different habitats. Some communities may have more access to one sex than another and so will take more bears of that sex. His experience has been that some communities have no problem with hunting at a 2:1 ratio, but others have been forced to stop harvesting in a given year before their TAH is reached to avoid accidentally harvesting a female.
- Following a discussion about taste of big adults compared to females and compared to cubs, the NTI co-chair explained that in Nunavut cubs can only be harvested with special permission. The hides of big males are more valuable for trade and they are being used to make traditional clothing. The price of the hide has declined because of the wildlife activists. In the past, we harvested for money when we saw a polar bear. The population of Inuit is increasing. The children will be harvesters in 15 to 20 years.
- Makivik co-chair: explained there are many cultural practices in Nunavik that ensure harvest sustainability. These include that we don't harvest a female with cubs, we don't harvest bears in dens. When there are multiple cubs, some may be harvested, but it is rare. We know not to hunt females with cubs or in the den. But when there

are a few cubs, we know they won't all survive. So in the rare case that we harvest cubs then we take the one that is going to die. By sharing and incorporating our views we will do a lot of good.

- Facilitator asked, what other non-quota limitations do you recommend?
 - Makivik co-chair: some Inuit prefer to hunt animals when the fur is at its prime
 - Another representative noted that some Inuit prefer summer bears because they taste better. We are all different, there are different perspectives in different communities.
 - Nunavik Inuit representative: against polar bears in zoos. In the past, when a mother bear has been harvested biologists would send orphaned cubs to zoos. These become skinny, suffering bears. What is the position of the legislators on this question? Inuit say that this is not the way to treat animals. What is the law?
 - Environment and Climate Change Canada responded to this question and noted that in order to take a bear out of a province or territory it requires a permit. The draft Quebec-Eeyou Marine Region-Nunavik Marine Region Polar Bear Management Plan makes a very clear statement that this is a practice that is not supported. ECCC will take its policy direction from this plan and will not issue permits for orphaned cubs.
 - Nunavut government indicated their policy is the same.
- Cree Trappers Association representative: are months where you can refrain from hunting polar bears. For example, our hunters refrain from all hunting in July and August, there is only fishing during this time. Is this possible for the Inuit? Is there something like that with polar bear? If so, this should be in the management plan. With an exception for defense killing.

3.2.9 Allocation of Harvest between User Groups Discussion

Facilitator began the session by asking what should the proportional harvest be between the user groups moving forward?

Discussion

- Makivik co-chair: noted that this is a very difficult conversation. There is a context of a court case and appeal about limits imposed on us. We were not going to go into numbers, but we all concur that this will happen down the road once we have a joint meeting. We concur that there are too many bears and that there is a safety issue. Our approach is that we do not fear for these animals, because we do know that reports of skinny bears and poor body condition are misleading and result from the timing of your research (when the females are coming out of the

den) and the impact of collars. We are skeptical about your research, because we are hunting healthy animals. We are at an impasse here.

- Facilitator sought input about an earlier remark about harvest allocation needing to be equitable, that one group is not detrimental to another.
 - Makivik co-chair: the fact that there are 3 communities in Nunavik and 1 in Nunavut creates tension. It pits communities against each other, like children fighting over a portion of a pie. It is hard for us to establish where to draw the line on what is equitable. The pie has to be shared, but there are no tools to serve. So people serve themselves. No right balance, so it is tough to draw a line about what is equitable.
- Nunavut Wildlife Management Board representative explained the example of the Baffin Bay polar bear Joint Commission between Canada and Greenland. In that case there was agreement on what the harvest should be and how it should be shared between Canada and Greenland. Agreement was possible because there was support from Hunters and Trappers Organizations.
- Eeyou Cree representative: I spoke this morning of producing a skeleton of a polar bear management plan. We are going to have to deal with numbers eventually. I think we need to talk about numbers. The earlier we flag the numbers the better we can plan. For the sake of discussion we should have numbers and get on with a management plan.
- Nunavik Inuit representative: hunters must be well-informed. Allocation must be discussed to allow communities a chance to contribute. We have to discuss what we want to harvest. I think that numbers should be discussed. The representatives speak on behalf of the hunters. The discussion can be postponed, but we need to start sooner than later.
- Makivik co-chair: our wildlife management boards go through their decision process, but the decision is changed by government. Government always uses science, it doesn't take into account Indigenous Knowledge. We need to combine the two. If we must talk about numbers, so be it.
- Makivik co-chair: we always try to fit into a scientific approach but never get what we want. At the end of the day, it is left up to the Minister. Work with us and you will have the most up to date facts. We all want the best for our people.
- Nunavut Inuit representative: we submitted our proposal yesterday. We do not want a reduction in harvest.
- Nunavik Inuit representative: according to the last research results, 49 bears were taken. But we feel we need to raise the number of bears. We don't like it when we all agree and the government changes the decision later. Government authorities make the decision for us. The research data we have is so old, we are making uninformed decisions.

- Nunavik Inuit representative: our people are expecting decisions on TAT and we need decisions to be made in this room. What information are we to take back home? Because we don't want to argue amongst each other and have a negative meeting. It would be ideal to talk about our own perspective. Sanikiluaq has its 25 TAT established by the NMWB. There is no TAT in force on the mainland. What should our coastal area TAT be? We have caught 6 polar bear inland, will they be included in the counts? We need to decide what the take is, depending on the population. Whatever it is, it should be split equally. The population is increasing. If we were to follow the first scenario, the bears should be distributed according to the population. Ontario and Quebec can harvest any time and for defense. In 2021 there will be another count. We put up with a lot of things as Inuit people. Nunavut has said they don't want to change the number. If we don't make a decision, someone will make it for us.
- Nunavik Inuit representative: our people are expecting a TAT. Practice is not going to change until there is a decision. It would be nice to talk about our own perspective instead of what had been forced upon us. Government is trying to hide things in their writing. All harvest should be equal and our harvest levels should increase. Distributed according to the population. Anytime defense kills. If we cannot come to a decision then someone else will make a decision for us.
- Nunavik Inuit representative (Inukjuak): if we get a lower number, we will be unhappy, because Kuujjuarapik and Umiujaq need to be considered too. For the communities to split the catch evenly, it would be insufficient. What is the real purpose of Sanikiluaq not wanting to change that number?
- Nunavut Inuit representative: we mentioned earlier the number of 25. It is the number harvested according our management plan for over 40 years. The hunt starts in March, goes to June 30. The 25 bears can be harvested in a few weeks. Because of the dangerous encounters and the concern for eider ducks, we wanted to keep this number. We discussed this at a recent meeting.
- Makivik co-chair: do we believe the proposition that there is concern for the bear population? Do we all agree with the recent proposal that was given to us? If the population was to decline substantially, will the 25 have to change? We are talking about numbers we do not need to worry about the population as it is stable. If there was a concern and the population decline then quota will have to change. But if it is stable then we should come up with a higher number. We have had good hunting practices; we have been doing a good job for the past 40 years. They say we have a good management plan. If we don't agree there is a decline in bears, there should be no quotas.
- Nunavik Inuit representative: I don't know where the numbers come from. We have had good sustainable harvest this whole time.

- Makivik co-chair: we need to establish what we agree on. In essence bears are increasing if we do not see a cause for concern then we do not see a need for quota.
- Nunavik Inuit representative: I don't agree with the survey, a plan should be based more on traditional knowledge. We will avoid hunting mothers with cubs that won't survive if the mother is harvested. We need to continue Inuit hunting practices. We want what the Cree Trappers Association representative suggests: a nice and established management plan. If we don't need meat, we will not kill it. I think we have good practices. The non-beneficiaries should know that we have been looking after our own wildlife for a long time.
- Nunavik Inuit representative: we are in the same situation as with the beluga. If we can come up with a number as a starting point of the TAT. In this meeting, we will not discuss the numbers. But the recent surveys in the past, aerial surveys are a problem. The population of Inukjuak is higher than that of Umiujaq and Kuujjuarapik. They can establish a number as a starting point.
- Nunavik Inuit representative: our population is increasing. There are definitions in the land claims agreement about conservation. We are using different government terms. When you take that terminology and use it, should we adopt someone else's decision? Even if it's going to create conflict? The terminology that comes from a different language is used to establish our plan. Our parents have told us that the Inuit have to bring their own terminology, because we have our knowledge.
- Nunavut Inuit representative: we have understood that we can try the regulations from the government. If there are changes to be made, we can adjust them accordingly. We've been using quotas for the past 40 years.
- Facilitator asks for final thought on if there is a number that you want to recommend
- Makivik co-chair: No limit. We don't see a need for a number, given that there is no conservation concern.

3.2.10 Presentation of Recommendations of the User-to-User Group Participants

The facilitator used a large flip chart to write down the main conclusions of the discussion

Key outcomes

- Agreement to work together
- Suggestion of joint board/council hearings
- Essential to work within land claim agreements

- Joint board decisions to work together, not just on overlapping issues, but on shared resource

Management objective

- Considering that:
 - Polar bear health is better than presented (by scientists)
 - There are lots of concerns about safety of people with current abundance of bears
 - There is a need to ensure that all Indigenous knowledge is included (Inuit, Cree)
- Users identified two new management objectives:
 1. increasing the harvest level
 2. increasing indigenous participation in management of polar bears

During this discussion, users also stated that:

- They had concerns that collaring is negatively impacting health of polar bears (especially female)
- Research practices are interrupting mother bears and this should be discontinued

Sex-selective harvest and other non-quota limitation considerations and concerns

- Sex-selective harvest targeting males at a 2:1 ratio is not based on IK; negative experience seen when this has been done in other species
- Concerns were expressed as of the potential impacts that ending the male-biased harvest could have on trade.
- Training for younger hunters is important- as identifying sex requires experience
- There should be allowance to harvest more males than females, but it should not fixed at a 2:1 ratio
- Always targeting the largest males is a concern
- Cubs are rarely hunted, in Nunavut it requires a permit and is for special occasions
- Polar bear harvesting is not just for trade

- Prefer to hunt when the animals are in their prime; in summer the taste is the best, but for fur hunting in the summer is not good.
- Do not support polar bears in zoos

Proportional allocation of harvest

- The allocation of harvest should be discussed down the road with a joint hearing
- Allocation should be fair and equitable
- It should be considered that there are 3 communities in Nunavik vs 1 community in Nunavut
- The fact that Inuit (human) population is increasing should be taken into consideration

Incorporate cultural knowledge and tradition

- Work with Inuit knowledge for accurate data analysis - current scientific data is outdated
- Agreement's need to be discussed earlier than later
- There is a need for more involvement with Inuit when determining TAH rather than only basing the decision on abundance numbers given by scientists.

Next Steps

The meeting concluded with a summary of next steps in the process to re-assess TAH / TAT levels and commitment by all too continuing dialog to ensure collaborative information gathering, exchange, and decision-making. Next steps include:

- Completion of a Consultation Report summarizing the information shared and feedback received at the user-to-user meeting, as well as community engagement meetings.
- A submission by the Governments of Nunavut, Quebec, and Canada to the NWMB, NMRWB, EMRWB, and HFTCC formally requesting that the Boards/HFTCC assess existing harvest limits in consideration of the information included in the Subpopulation Status Report, Harvest Risk Analysis Report, and Consultation Report.
- Board/HFTCC determination if TAT/TAHs will be re-assessed and the format they will use to coordinate their efforts.

APPENDIX A. USER-TO-USER MEETING INVITATION

From: Ladanowski, Caroline (EC)

Sent: February 12, 2020 8:24 AM

To: qwbac@niws.ca; kpitsiulak@niws.ca; sani@baffinhto.ca; sani@baffinhto.ca; secretary@rnuk.ca; president@rnuk.ca; juupiow@hotmail.com; jqumaluk@hotmail.com; salamiva@gmail.com; john.lameboy@ctaoffice.ca; nlouttit@ctaoffice.ca; jeetoolook@tunngavik.com; pirngaut@tunngavik.com; vpdewr@makivik.org; ggilbert@makivik.org; apenn@cngov.ca; fred.tomatuk@ctaoffice.ca; allanhouse@ctaoffice.ca; danielle.st-pierre@mffp.gouv.qc.ca; DGissing@gov.nu.ca; Kirsten.Corrigan@ontario.ca; Jakearok@nwmb.com; DNdeloh@nwmb.com; mbasterfield@nmrb.ca; jean-pierre.savard@videotron.ca; acoxon@eeyoumarineregion.ca; phale@eeyoumarineregion.ca; gdcaron@eeyoumarineregion.ca; m.smart@cccpc-hftcc.com; Ladanowski, Caroline (EC)
Cc: dlee@tunngavik.com; marie-claude.richer@mffp.gouv.qc.ca; Guillaume.szor@mffp.gouv.qc.ca; csmith@gov.nu.ca; Iverson, Samuel (EC); Mdyck1@gov.nu.ca; Joseph.Northrup@ontario.ca; Eric V Regehr (eregehr@uw.edu); moconnor@makivik.org

Subject: Invitation to a User-to-User Meeting to Determine Recommended Polar Bear Management Objectives and Harvest Needs in the Southern Hudson Bay Management Unit on February 25-26, 2020 at the Courtyard Marriot-Downtown in Montreal, QC

Attachments: SH_Letter_of_Invitation_February_12_2020.pdf;
1a_SH_StatusReport_Summary_EN.pdf;
1b_SH_StatusReport_Summary_FR.pdf;
1c_SH_StatusReport_Summary_Inuktitut_Nunavut.pdf;
1d_SH_StatusReport_Summary_Inuktitut_Nunavik.pdf;
2_SH_StatusReport_full_EN.pdf;
3a_SH_HarvestAnalysis_Summary_EN.pdf;
3b_SH_HarvestAnalysis_Summary_FR.pdf;
3c_SH_HarvestAnalysis_Summary_Inuktitut_Nunavut.pdf;
3d_SH_HarvestAnalysis_Summary_Inuktitut_Nunavik.pdf;
4_SH_HarvestAnalysis_full_EN.pdf

Dear Southern Hudson Bay Polar Bear Subpopulation Harvester Representatives and Management Authorities:

I am writing to extend an invitation to your organization to participate in a meeting concerning polar bear harvest in the Southern Hudson Bay (SH) management unit. A copy of the letter is attached for your records. The meeting will take place in **Montreal, QC at the Courtyard Marriot-Downtown on February 25-26, 2020.**

Purpose of the meeting:

- (1) For Indigenous rights holder representatives to meet with management authorities and receive up-to-date scientific and Indigenous Knowledge information from recently completed studies.
- (2) For Indigenous representatives to share their views about the status and management of SH polar bear, including views relating to management objectives, non-quota limitations, harvest needs, and how harvest quotas are shared among Indigenous user groups (i.e., harvest allocation).
- (3) To make consensus recommendations pertaining to management objectives, harvest needs, and harvest allocation, which will be included in a report forwarded to the relevant wildlife management boards / advisory council with authority under existing land claims agreements to establish or recommend new Total Allowable Harvest (TAH) / Total Allowable Take (TAT) limits and Non-Quota Limitations (NQL).

Organizations involved

Management authority for the SH subpopulation is a shared responsibility of federal, provincial and territorial governments (Canada, Nunavut, Québec, Ontario), as well as wildlife management boards and an advisory council (Nunavut Wildlife Management Board, Nunavik Marine Region Wildlife Management Board, Eeyou Marine Region Wildlife Management Board, Hunting, Fishing and Trapping Coordinating Committee) and Indigenous organizations (Nunavut Tunngavik Inc., Makivik Corp., Grand Council of the Cree (Eeyou Istchee)/Cree Nation Government, and the Cree Trappers Association) that derive their respective mandates from land claims agreements.

Regional and local Indigenous organizations and associations also maintain important roles in the management and allocation of harvest limits. These groups include:

- Nunavut Inuit - Qikiqtaaluk Wildlife Board (QWB) and Sanikiluaq Hunters and Trappers Organization (HTO);
- Nunavik Inuit - Regional Nunavimmi Uumajulirijiit Katutjiqatigiinninga (RNUK) and Inukjuak, Umiujaq, and Kujjuaraapik Local Nunavimmi Uumajulirijiit Katutjiqatigiinningiit (LNUKs);
- Eeyou Istchee Cree - Cree Trappers Association (CTA) local chapters: Whapmagoostui, Chisasibi, Wemindjii, Eastmain, and Waskaganish;
- Ontario First Nation - Fort Severn, Peawanuck, Attawapiskat, Kashechewan, Fort Albany, and Moosonee.

Rationale and process for reassessing harvest limits

The reason for holding February's meeting is because management authorities have accepted a new estimate of subpopulation abundance based upon an aerial survey conducted in 2016. The current TAT/TAH limits in Nunavut and the Nunavik Marine Region (including the Inuit-Cree overlap area that is also included within the

Eeyou Marine Region) are based on a subpopulation abundance estimate derived from an aerial survey conducted in 2011 (now out-of-date). Moreover, new scientific information and Indigenous Knowledge information have recently been collected.

There is a need to assess harvest levels in consideration of the new abundance estimate, recently completed studies, and management objectives. Documents summarizing the status of the SH subpopulation and a harvest risk analysis are attached for your information. This information will be presented and discussed at February's meeting.

It is important for participants to be aware that **harvest limits will not be determined at this meeting**. Information and recommendations resulting from the meeting will feed into wildlife management board / advisory council decision/recommendation processes as specified by the relevant land claims agreements.

Formal TAT/TAH limits are not currently in effect in Ontario or Québec, nor in the Eeyou Marine Region south of the Inuit-Cree overlap area. However, Indigenous rights holders are responsible for the sustainable use of resources under treaties within these locations. Information regarding management objectives, along with the frequency of defense of life and property kills and/or harvest in Ontario, Québec, and the Eeyou Marine Region, will also be considered by the aforementioned wildlife management boards / advisory councils when assessing TAT/TAHs in Nunavut and the Nunavik Marine Region.

Meeting logistics and funding for travel associated expenses

Date/time: February 25-26, 2020; 8:30 am to 5:00 pm each day.

Location: Courtyard Marriott Downtown; 380 Rene-Levesque Boulevard West, Montreal, QC H2Z 0A6; (514) 398-9999, Toll free reservation center: (855) 398-9998.

Participants are responsible for booking their own rooms and need not stay at the meeting venue.

Travel cost: there are no fees for the meeting. Refreshments and snacks will be provided during morning and afternoon breaks. It is expected that government, wildlife management boards / advisory council, Land Claims Organizations, CTA executive, and regional wildlife organizations (QWB, RNUK) fund their own travel. Funding for transportation, hotel, and meal costs will be provided for community-level representatives (i.e., HTO, LNUK, community CTA).

While strong participation by all groups is encouraged, meeting space is limited. Therefore, we request that each organization identify the individual(s) best positioned to represent their organization and determine who among those individuals requires financial support.

Confirmation of participation

Confirmation of the number of people from your organization that will attend must be received before February 14th, 2020.

To confirm your attendance (or that of someone else from your organization) or to raise any other questions, please contact Sam Iverson (EM: samuel.iverson@canada.ca; PH 819-938-5467).

I hope that your organization will be able to participate and look forward to continued collaboration on polar bear management.

Sincerely,

Caroline Ladanowski (Environment and Climate Change Canada) on behalf of the Southern Hudson Bay Polar Bear Advisory Committee

APPENDIX B: USER-TO-USER MEETING PARTICIPANTS

The Southern Hudson Bay Polar Bear Subpopulation Management and Harvest Recommendations: User-To-User Meeting; Courtyard Marriott – Downtown, Montreal, Canada, February 25-26, 2020.

Organization	Person	Title
Qikiqtaaluk Wildlife Board	James Qilliq	QWB Chairman
Qikiqtaaluk Wildlife Board	Michael Ferguson	Senior Wildlife Advisor
Sanikiluaq HTO	Eli Kavik	HTO Chairman
Sanikiluaq HTO	Lucassie Arragutainaq	HTO Manager
Sanikiluaq HTO	Charlie Takatak	
Sanikiluaq HTO	Puasi Ippak	
RNUK	Jimmy Johanes	RNUK Secretary
RNUK	Johnny Arnaituk Jr.	RNUK Vice-president
RNUK	Putulik Papigatuk	RNUK Treasurer
Inukjuak LNUK	Lasayusi Tukai	LNUK Vice-President
LNUK Inukjuak	Simeonie Ohaituk	LNUK member
LNUK Inukjuak	Billy Palliser	LNUK advisor
LNUK Inukjuak	Jobie Epoo	LNUK advisor
Umiujaq LNUK	Lucassie Cookie	LNUK member
Umiujaq LNUK	Johnny Kasudluak	LNUK Member
Kuujjuarapik LNUK	Willie Novalinga	LNUK Member
Kuujjuarapik LNUK	Jimmy Paul Angutiguluk	LNUK President
Cree Trappers Association - Cree communities	John Lameboy	CTA – EMR Local Officer
Cree Trappers Association - Cree communities	Natasha Louttit	CTA-EMR Wildlife Liaison Officer
Nunavut Tunngavik Incorporated	James Eetoolook	Vice President
Nunavut Tunngavik Incorporated	Paul Irngaut	Director of Wildlife
Nunavut Tunngavik Incorporated	David Lee	Wildlife Biologist
Makivik Corp	Adamie Delisle Alaku	Vice President
Makivik Corp	Gregor Gilbert	Director Department of Environment, Wildlife & Research
Makivik Corp	Mark O'Connor	Assistant Director, DEWR

Makivik Corp	Barrie Ford	Resource Management Coordinator
Cree Nation Government	Alan Penn	Science Advisor
Cree Nation Government	Cameron McLean	Coordinator
Cree Nation Government / HFTCC	Nadia Saganash	Wildlife Management Administrator
Cree Nation Government	Tania Couture	Biologist
Cree Trappers Association (executive)	Fred Tomatuk	President
Cree Trappers Association (executive)	Bert Moar	Executive Committee
Cree Trappers Association (executive)	Allan House	CTA Executive Director
Canadian Wildlife Service	Caroline Ladanowski	Director, Wildlife Management and Regulatory Affairs
Canadian Wildlife Service	Sam Iverson	Head, Polar Bear Management Unit
Canadian Wildlife Service	Michael Anissimoff	Biologist, Polar Bear Management Unit
Canadian Wildlife Service	Mark Mills	Indigenous Liaison Officer
QC MFFP	Danielle St. Pierre	Director, Expertise sur la faune terrestre, l'herpétofaune et l'avifaune
QC MFFP	Marie-Claude Richer	Biologist, polar bear provincial coordinator
QC MFFP	Guillaume Szor	Biologist, polar bear in the northern Québec region
Nunavut DOE	Drikus Gissing	Director of Wildlife
Nunavut DOE	Caryn Smith	Senior Wildlife Advisor
Nunavut DOE	Markus Dyck	Polar Bear Biologist II
Nunavut DOE	Jasmine Ware	
ON MNR	Joe Northrup	Research Scientist
NWMB	Jason Akearok	Executive Director
NWMB	Denis Ndeloh	Director of Wildlife
NWMB	Daniel Shewchuk	Chairperson
NMRWB	Mark Basterfield	
NMRWB	Jean-Pierre Savard	
EMRWB	Angela Coxon	Director of Wildlife
EMRWB	Peter Hale	
EMRWB	G. Daniel Caron	

HFTCC	Mandy Gull	President
HFTCC	Miles Smart	Executive Secretary
University of Washington	Eric Regehr	Research Scientist
Professional facilitator	Carole Spicer	

APPENDIX C. USER-TO-USER MEETING PRESENTATION

Southern Hudson Bay Polar Bear Subpopulation Management and Harvest Recommendations: User-to-User Meeting

[illegible]

Courtyard Marriott – Downtown
Montreal, Canada
February 25-26, 2020



Agenda Item
1

Opening Remarks

$$L \supset \Delta^{\epsilon_b} \gamma \sigma^{\epsilon} J^C \triangleright^{\epsilon_b} \triangleright^{\epsilon_b} \gamma^b \gamma^C$$

Meeting co-chairs

Adamie Delisle Alaku, Makivik Corporation
James Eetoolook, Nunavut Tunngavik Inc

$\triangle CEF \cong \triangle CED$, $LE = DE$. $LE + ED = ND$, $LD = ND$.



Agenda Item
2

Meeting Overview

$$bNL\sigma\triangleright^< a\Delta\dot{a}PN^aL$$

- Meeting purpose
- Organizations involved
- Past voluntary agreements and current decision making process



Meeting Purpose

- Management authorities have accepted a new estimate of subpopulation abundance based upon an aerial survey conducted in 2016.
- The current harvest limits in Nunavut and the Nunavik Marine Region (including the Inuit-Cree overlap area that is also included within the Eeyou Marine Region) are based on a subpopulation abundance estimate derived from an aerial survey conducted in 2011 (now out-of-date).

Purpose of the meeting:

1. For Indigenous rights holder representatives to meet with management authorities and receive up-to-date scientific and Indigenous Knowledge information from recently completed studies.
2. For Indigenous representatives to share their views about the status and management of Southern Hudson Bay polar bear, including views relating to management objectives, non-quota limitations, harvest needs, and how harvest quotas are shared among Indigenous user groups (i.e., harvest allocation).
3. To make recommendations about management objectives, harvest needs, and harvest allocation, which will be included in a report forwarded to the relevant wildlife management boards / advisory council with authority under existing land claims agreements to establish or recommend new Total Allowable Harvest (TAH) / Total Allowable Take (TAT) limits and Non-Quota Limitations (NQL).

[illegible]

Indigenous land claims organizations:

- Nunavut Tunngavik Incorporated
- Makivik Corporation
- Grand Council of the Cree (Eeyou Istchee)/Cree Nation Government and the Cree Trappers Assoc.

Regional and local indigenous organizations:

- Nunavut Inuit - Qikiqtaaluk Wildlife Board (QWB) and Sanikiluaq Hunters and Trappers Organization (HTO);
- Nunavik Inuit - Regional Nunavimmi Uumajurijirijt Katujiqatiginninga (RNUK) and Inukjuak, Umiujaq, and Kuujuaq Inuk Nunavimmi Uumajurijirijt Katujiqatiginninngit (LNUKs);
- Eeyou Istchee Cree - Cree Trappers Assoc. (CTA) local chapters: Whapmagooosti, Chisasibi, Wemindji, Eastmain, and Waskaganish;
- Ontario First Nations - Fort Severn, Peawanuk, Attawapiskat, Kashechewan, Fort Albany, and Moosonee

Government:

- Canada – Environment and Climate Change Canada
- Nunavut – Department of Environment
- Québec – Ministère des Forêts, de la Faune et des Parcs
- Ontario - Ministry of the Environment, Conservation and Parks / Ministry of Natural Resources and Forests

Wildlife management boards and an advisory council (observers)

- Nunavut Wildlife Management Board
- Nunavik Marine Region Wildlife Management Board
- Eeyou Marine Region Wildlife Management Board
- Hunting, Fishing and Trapping Coordinating Committee

*In 2011 and 2014 voluntary agreements were reached about polar bear harvest in Southern Hudson Bay

- The parties recognized the need to limit harvest levels and for the Wildlife Management Boards to collaborate in their decision-making in the future
- Harvest limits will not be determined at this meeting.
- The goal of this meeting is for harvesters in different areas to make consensus recommendations that are forwarded to the boards / advisory council for use in the board / advisory council decision/advice processes.

Inukjuak 2011

- *The Inukjuak meeting resulted in a voluntary agreement that was in place for the 2011/2012 to 2013/2014 hunting seasons.

Ottawa 2014

- 2016 decision

- Nunavut Settlement Area: 25 (Nunavut Inuit)
- Nunavik Marine Region: 23 (Nunavik Inuit, with at least one polar tag allocated to the Cree of Eeyou Istchee for harvest within the Inuit-Cree overlap area).

*At present, there are no take limits in the Eeyou Marine Region south of the Inuit-Cree overlap area, which is also part of the Nunavik Marine Region, or in onshore areas of Québec.

- *Since the listing of polar bear as a Threatened species under the Ontario Endangered Species Act in 2009 the sale of polar bear parts within Ontario has been prohibited. Most polar bear take in Ontario is now defense kills.


$$\triangleright \sigma^c \sigma^d \triangleright \sigma^{cb} \sigma^{ca} \triangleright \sigma^{cb} \sigma^{ca} \Delta c^a \sigma^a \sigma^c \triangleright \sigma^{cb} \sigma^{ca} / L R^c$$


13

Southern Hudson Bay Polar Bear Subpopulation Status Report

USER TO USER MEETING

25 FEBRUARY 2020 – MONTREAL (QC)

JOE NORTHRUP, BIOLOGIST, GOVERNMENT OF ONTARIO
MARKUS DYCK, POLAR BEAR BIOLOGIST, GOVERNMENT OF NUNAVUT
GUILLAUME SZOR, BIOLOGIST, GOVERNMENT OF QUÉBEC
MARK BASTERFIELD, NUNAVUT MARINE REGION WILDLIFE BOARD

Outline

- ▶ Subpopulation overview
- ▶ Polar Bear Technical Committee Assessment
- ▶ Indigenous Knowledge summary
- ▶ Scientific Assessment
 - ▶ Abundance estimates
 - ▶ Reproduction, body condition, survival and movement
 - ▶ Ice conditions
- ▶ Current and historical harvest

Re-Assessment of the Southern Hudson Bay Polar Bear Subpopulation

Report to the Polar Bear Technical Committee
Submitted by the Southern Hudson Bay Polar Bear Working Group
November 12, 2019



Prepared by: Southern Hudson Bay Polar Bear Working Group, an inter-jurisdictional group of scientists and Indigenous knowledge holders from Ontario, Nunavut, Québec, and the Northwest Territories. The group includes: Joe Northrup (Ontario), Markus Dyck (Nunavut), Guillaume Szor (Québec), and Mark Basterfield (Nunavut Marine Region Wildlife Board). The report was reviewed by the Polar Bear Technical Committee on November 12, 2019.

14

1. Subpopulation overview

15



2. Polar Bear Technical Committee Assessment

16

- ▶ Current estimate (2016):
780 polar bears
(95% CI: 590–1029)
- ▶ Replaces previous (2011/2012) estimate:
943 polar bears
(95% CI: 658–1350)
- ▶ Harvest levels are currently based upon the 2011/2012 estimate

PBTC assessment type	Definition	Assessment result	Primary rationale
Indigenous Knowledge (IK)	Knowledge generated from the cultural practices, lived experiences and traditions of local and Indigenous peoples	Stable in James Bay; Likely Increased in east Hudson Bay	Interviews and consultations with Indigenous people describing changes over time in the number of polar bears observed, polar bear behavior, and other factors
Recent trend	Changes in abundance over the last 15 years according to scientific surveys	Likely declined	Comparison of the most recent estimate of abundance to the previous estimate collected in 2011/2012, as well as information about declines in polar bear body condition and survivorship in association with an increasing ice-free season.

3. Indigenous Knowledge

17

► Three sections summarize the available IK

1. Nunavik Marine Region Wildlife Board - 2018 Report

- Increase in the numbers since the 1970s
- Wider distribution, including the use of inland areas
- Polar bear described as very healthy
- Traditional stewardship practices are sufficient for conservation (hunting only based on need and not wasting any of the animal killed, not hunting polar bears during the summer, and not harvesting cubs or known mothers).
- <https://nmrb.ca/resources-and-education/>



3. Indigenous Knowledge

18

2. Nunavut Inuit Qaujimajatuqangit (IQ)

- Shared at the 2018 NWMB public hearing for the Nunavut Polar Bear Co-Management Plan
- Emphasized that the polar bear population is increasing in Nunavut, including in the area around Sanikiluaq.
- Climate change will not cause the disappearance of polar bears. According to IQ, it is normal for the polar bear population to increase and decrease in a cycle.

3. Indigenous Knowledge

19

3. Traditional Ecological Knowledge of Polar Bears in the Northern Eeyou Marine Region

- Study is being finalized.
- Preliminary results include concerns about an increase in the abundance of polar bears in the Eeyou Marine Region and a growing number of human-polar bear interactions.
- Climate change, and more specifically changes in sea ice dynamics, mentioned as potential causes for the observed changes.

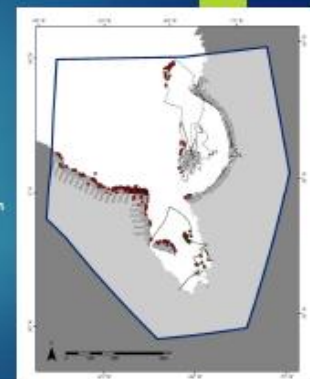
4. Scientific Assessment

20

► Three sections summarize the available science

1. Abundance estimates

- 1984-1986: First formal scientific estimates of abundance and survival (~1,000 bears)
- Stable population trend suggested from the mid-1980s to 2012
- 2011/2012 aerial survey: **943 bears** (95% CI: 658-1350);
- 2016 aerial survey: **780 bears** (95% CI: 590-1029)
- The difference in estimates suggests that the subpopulation may have declined (but confidence intervals overlap).
- Decline in body size/condition and numbers in Western Hudson Bay (WH) over same period supports a potential decrease in SH
- Supplementary aerial survey in 2018 of the coastline also indicated a lower abundance in 2016 and 2018 than in 2011/2012

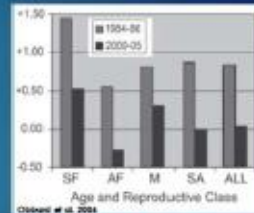


4. Scientific Assessment

21

2. Information about reproduction, body condition, survival, and movement

- Reproduction (average litter size) has decreased:
 - 2.0 (1970s)
 - 1.575 (early 2000s)
 - 1.56 (2011/12)
 - 1.46 (2016)
- Fewer yearlings in 2016 than 2011 (down from 12% to 5%)
- Body condition:



Data from Ontario (ice-free season) indicated a decline in Body Condition Index from 1984-1996 to 2000-2006 to 2007-2009 based upon capture work.
Data from Nunavut (ice season, harvested bears) indicated no change in Body Condition Scores since 2010. 92.7% of the harvested bears had a BCS of average and better. (But WH showed decline in BCS over same period)

4. Scientific Assessment

22

2. Information about reproduction, body condition, survival, and movement

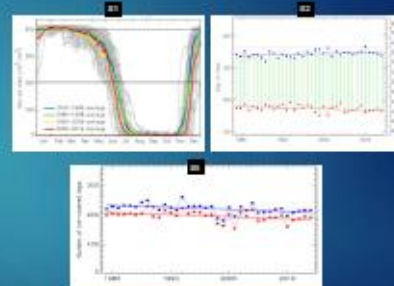
- Survival: declines for all age and sex classes (overall decrease) from the 1980s through 2000s
- Movement
 - Bears move mainly within subpopulation boundaries
 - Bears move into other subpopulations regularly when on sea ice
 - Preliminary analysis of marked and subsequently harvested bears suggests some movements between SH and WH

4. Scientific Assessment

23

3. Ice conditions

- In Southern Hudson Bay, the ice free period has increased over time; sea ice generally freezes later and begins to melt earlier. Sea ice loss is not the same for all polar bear subpopulations and others have greater sea ice changes than SH.
- Sea ice loss is projected to continue.



5. Current and Historical Harvest

24

- Voluntary Agreements from 2011 and 2014
 - Partners recognized the need to limit the level of take and for WMBs to collaborate in their decision-making
 - Included voluntary limits
 - Not all of the coastal Cree communities in Ontario were represented and thus unable to agree to the limits.
- Cree Nation Government
 - The Cree of Eeyou Istchee periodically take bears for defense of life and property.
 - Cree communities on both coasts need to be included in decisions involving the reporting of defense kills, or the introduction of specific measures to reduce defense kill mortality.

5. Current and Historical Harvest

25

Nunavut

- Sanikiluaq
- Harvest managed under flexible quota system
- ~100% reporting

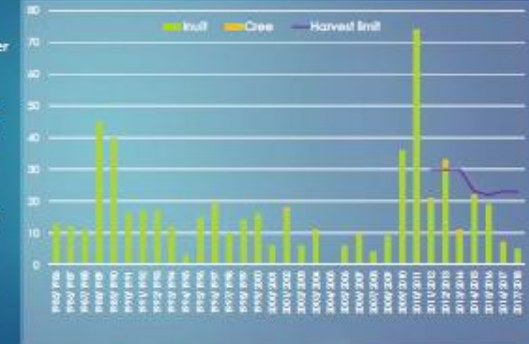


5. Current and Historical Harvest

26

Québec

- No legal requirement under JBNQA to report
- QC MFFP has compiled harvest reports and issued tags since 1985 (provincial regulations, international trade)
- Proportion of the harvest being reported is currently unknown (estimated between 50 to 90%)



5. Current and Historical Harvest

27

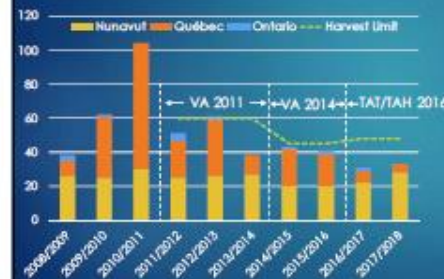
Ontario

- No formal quota in place
- A voluntary quota of 30 bears was established in 1976 through an informal agreement between the Ontario Government and coastal Cree First Nation communities, whereby a maximum of 30 hides would be sealed in any year.
- In September, 2009, polar bears were listed under Ontario's Endangered Species Act, which prohibits the sale of polar bear parts within Ontario.
- Ontario's reported harvest averaged 4.2 polar bears annually from 1994/1995 to 2016/2017, and 1.8 polar bears annually from 2011/2012 to 2016/2017.
- Currently, Ontario has no formal means of tracking harvest from defense of life and property kills.

5. Current and Historical Harvest

28

Total **reported** harvest within SHB compared to voluntary agreements and established TAT/TAH



Hunting season	Nunavut Limit	Nunavut H	Québec Limit	Québec H	Ontario Limit	Ontario H
2008/2009	25 (TAH)	24	None	9	None	3
2009/2010	25 (TAH)	25	None	34	None	1
2010/2011	30 (TAH)	30	None	74	None	0
2011/2012	25 (TAH)	25	30 (VA)	22	None	4
2012/2013	25 (TAH)	24	30 (VA)	33	None	2
2013/2014	25 (TAH)	27	30 (VA)	11	None	0
2014/2015	20 (VA)	20	23 (VA)	22	None	1
2015/2016	20 (VA)	20	22 (VA)	19	None	2
2016/2017	25 (TAH)	22	23 (TAH)	7	None	2
2017/2018	25 (TAH)	26	23 (TAH)	5	None	0

Modelling Approach

33

- ▶ Based specifically on the biology of Southern Hudson Bay Polar Bears
- ▶ Considers population data – abundance, survival and reproductive rates
- ▶ Population processes are modelled for females only
- ▶ Incorporates potential impacts of changing environment (sea ice decline)

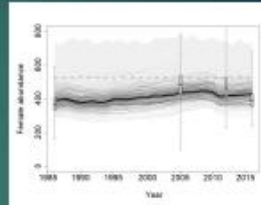


Figure 1. Population reconstruction (for female polar bears in Southern Hudson Bay based on modelling).

Modelling Approach

34

- ▶ Also considers:
 - ▶ Carrying Capacity (K) – Number of polar bears the environment can support.
 - ▶ Harvest Strategies – Harvest level and composition (age, sex), timing, and precision of future surveys, management interval.



Future Biological Scenarios

35

- ▶ Uncertainty in the current and future status was accounted for by developing three biological scenarios representing a range of conditions, from optimistic to pessimistic, based on the available science and documented Indigenous Knowledge.



Future Biological Scenarios

36

SCENARIO	DESCRIPTION
Scenario 1	Optimistic hypothesis that the future will be similar to the past 30 years, with only gradual declines in carrying capacity (number of bears SH area can support) proportional to projected declines in the number of ice-covered days per year.
Scenario 2	Middle-of-the-road hypothesis that the future will be similar to the past decade, during which there is some evidence of changes in population characteristics (e.g. reproduction, survival, body condition, etc.), and that both carrying capacity and population growth rate (how fast a population adds individuals) will decline gradually in the future.
Scenario 3	Pessimistic hypothesis that the subpopulation experiences either:
Scenario 3a	A rapid decline in abundance (declining population growth rate) which is directly linked to the declining quality of sea ice (i.e. Polar bears will not be able to maintain growth rates in the current environment with poor ice quality).
Scenario 3b	A rapid decline because the environment (sea ice) will not be able to support polar bears at the same level as in the past (carrying capacity will decline) even though the population maintains its growth rate.

Management Objectives

37

- ▶ The harvest risk model evaluates the probability of achieving three potential management objectives at different levels of harvest
 - ▶ **Management Objective 1:** maintain a subpopulation size that achieves maximum sustainable yield
 - ▶ **Management Objective 2:** maintain current abundance
 - ▶ **Management Objective 3:** maintain a subpopulation size above a minimum threshold, below which there is a high risk of depletion

Risk Tolerance

38

- ▶ "**Low**" risk = 90% chance of success (10% failure)
- ▶ "**Medium**" = 70% chance of success (30% failure)
- ▶ The same levels of risk tolerance should not be applied to all three alternative management objectives because the consequence of failing to meet each objective is different.



State-Dependent Harvest Management

39

- ▶ The harvest strategies in the report assume that harvest levels do not remain constant into the future, and are updated periodically using new data from scientific studies or other sources on the current status of the subpopulation.
- ▶ The analysis assumes that new aerial surveys will be completed every 5 years.
- ▶ If we are not able to carry out this level of monitoring, a more conservative approach to harvest (i.e., a lower allowable harvest) will be necessary to avoid unsustainable harvest risk.

Main Conclusions – Scenario 1 (Optimistic)

40

Harvest strategies with an 80% probability of meeting **Management Objective 1** (maintaining a subpopulation size that achieves maximum sustainable harvest)

- ▶ **21 female bears/year.**
 - Similar to the mean observed harvest of females from 1986-2016.
 - 5.5% female harvest rate
 - The subpopulation would have a low possibility of crossing below the minimum abundance threshold and almost no possibility of extirpation.
 - Under **2:1 male to female** harvesting: **43 bears/year initially**
- ▶ Some concern that this scenario is overly optimistic with regard to future environmental conditions. It was evaluated in consideration of the Indigenous Knowledge information and associated IK assessment of the PBTC

Main Conclusions – Scenario 1 (Optimistic)

41

Harvest level (female bears/year)	Female Harvest rate	Total Harvest rate (2:1 males to females)	Mean Female abundance	Mean Carrying Capacity	Mean female harvest level	Percent chance of local extinction (%)	Percent chance of meeting Obj. 1 (%)	Percent chance of meeting Obj. 2 (%)	Percent chance of Meeting Obj. 3 (%)
0	0.000	0.000	424	437	0	0	99	97	100
2	0.005	0.008	421	437	2	0	99	97	100
4	0.010	0.015	418	437	4	0	99	97	100
6	0.015	0.023	414	437	6	0	99	97	100
8	0.020	0.030	410	437	8	0	99	97	100
10	0.025	0.038	404	437	10	0	99	97	100
12	0.030	0.045	398	437	12	0	99	95	100
14	0.035	0.053	391	437	14	0	98	92	100
16	0.040	0.060	382	437	16	0	97	85	100
18	0.045	0.068	372	437	17	0	94	76	100
20	0.050	0.075	359	437	18	0	87	63	100
21	0.055	0.083	343	437	19	0	78	50	99
23	0.060	0.090	324	437	20	0	67	36	97

Main Conclusions – Scenario 2 (Middle)

42

Harvest strategies with an 80% probability of meeting **Management Objective 1** (maintaining a subpopulation size that achieves maximum sustainable yield)

► 10 female bears/year.

- 2.5% female harvest rate
- The subpopulation would have a low probability of crossing below the minimum abundance threshold and a negligible probability of going extinct
- Under 2:1 male to female harvesting: **30 bears/year initially** (20 male and 10 females), which equates to a 3.8% harvest rate for all bears

► This is the option recommended by members of the Technical Working Group

Main Conclusions – Scenario 2 (Middle)

43

Harvest level (female bears/year)	Female Harvest rate	Total Harvest rate (2:1 males to females)	Mean Female abundance	Mean Carrying Capacity	Mean female harvest level	Percent chance of local extinction (%)	Percent chance of meeting Obj. 1 (%)	Percent chance of meeting Obj. 2 (%)	Percent chance of Meeting Obj. 3 (%)
0	0.000	0.000	466	474	0	0	100	100	100
2	0.005	0.008	456	474	2	0	99	99	100
4	0.010	0.015	443	474	4	0	99	98	100
6	0.015	0.023	429	474	7	0	97	96	100
8	0.020	0.030	412	474	8	0	92	89	100
10	0.025	0.038	392	474	10	0	84	81	99
12	0.030	0.045	369	474	11	0	75	70	98
14	0.035	0.053	344	474	12	0	63	57	96
16	0.040	0.060	316	474	13	0	51	43	90
18	0.045	0.068	286	474	13	0	38	29	83
20	0.050	0.075	255	474	13	0	26	19	74
21	0.055	0.083	222	474	13	2	17	11	64
23	0.060	0.090	190	474	12	6	10	06	52

Main Conclusions – Scenario 3 (Pessimistic)

44

► Scenario 3a (strong decline in population growth potential)

- **4 female bears/year.**
- Probability of violating Management Objective 3 increased at 8 female bears/year, and the probability of extinction increased at a harvest level of 18 female bears/year.
- Demonstrates the potential for overexploitation when a subpopulation's capacity for growth is compromised by severe decline in habitat quality.

Harvest level (female bears/year)	Female Harvest rate	Total Harvest rate (2:1 males to females)	Mean Female abundance	Mean Carrying Capacity	Mean female harvest level	Percent chance of local extinction (%)	Percent chance of meeting Obj. 1 (%)	Percent chance of meeting Obj. 2 (%)	Percent chance of Meeting Obj. 3 (%)
0	0.000	0.000	492	518	0	0	99	100	100
2	0.005	0.008	463	518	2	0	91	95	100
4	0.010	0.015	432	518	4	0	79	81	100
6	0.015	0.023	400	518	6	0	67	70	100
8	0.020	0.030	367	518	8	0	56	59	98
10	0.025	0.038	332	518	9	0	46	48	90
12	0.030	0.045	297	518	9	0	36	39	80
14	0.035	0.053	262	518	10	0	25	29	69
16	0.040	0.060	227	518	10	0	15	18	58
18	0.045	0.068	192	518	9	1	7	08	48

Main Conclusions – Scenario 3 (Pessimistic)

45

► Scenario 3b (rapid, nonlinear decline in K)

- Relatively insensitive to harvest because decline in carrying capacity guaranteed that abundance would decline as well, and natural mortality due to density effects could be largely replaced by harvest without accelerating subpopulation declines.

Harvest level (female bears/year)	Female Harvest rate	Total Harvest rate (2:1 males to females)	Mean Female abundance	Mean Carrying Capacity	Mean Female harvest level	Percent chance of total extinction (%)	Percent chance of meeting Obj. 1 (%)	Percent chance of meeting Obj. 2 (%)	Percent chance of meeting Obj. 3 (%)
0	0.000	0.000	107	126	0	56	41	9	30
2	0.005	0.008	107	126	1	56	41	9	30
4	0.010	0.015	107	126	1	56	42	9	30
6	0.015	0.023	108	126	2	55	42	9	30
8	0.020	0.030	107	126	3	55	42	8	30
10	0.025	0.038	107	126	3	55	43	8	30
12	0.030	0.045	107	126	4	54	43	8	30
14	0.035	0.053	106	126	4	54	43	7	30
16	0.040	0.060	105	126	5	54	44	6	30
18	0.045	0.068	104	126	5	53	44	4	30
20	0.050	0.075	102	126	6	53	43	3	29
22	0.055	0.083	100	126	6	53	43	2	28

Technical Working Group Recommendation

46

- The Technical Working Group suggests **Scenario 2** at a moderate degree of risk tolerance with respect to Management Objective 1.
- This would suggest female harvest levels of **8-12 female bears/year** ($h = 0.02-0.03$).
- This is equivalent to a total (i.e., female and male) harvest rate of approximately **16-24 bears** (2.0-3.0%) assuming a **1:1 male-to-female ratio** in the harvest
- or approximately **24-34 bears** (3.0-4.5%) assuming a **2:1 male-to-female ratio**.

The mid-range harvest strategies indicated above likely have the benefit of limiting lost opportunities for subsistence use if conditions are more like Scenario 1, while reducing the chances of severe overexploitation if conditions are more like Scenario 3.

ᑭᓄᓐᓂᓐ
THANK YOU
QUANAQUTIN
MERCI

47

Agenda Item

5

Indigenous Knowledge Presentations

ᓄᓇᑭᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ
ᓄᓇᑭᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ


- Nunavut Inuit
- Nunavik Inuit
- Eeyou Istchee Cree

- ᓄᓇᑭᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ
- ᓄᓇᑭᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ
- ᓄᓇᑭᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ




Agenda Item
6

Eeyou Istchee Cree perspectives on management and defense of life kills
 ᐃᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ
 ᐃᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ
 ᐃᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ




Agenda Item
7

Closing comments from Day 1
 ᐃᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ



Agenda Item
8

Review of Day 1; Presentation of Day 2 Agenda
 ᐃᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ
 ᐃᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ



Key points registered on Day 1

1. Meeting Purpose
2. Science
3. Indigenous Knowledge
4. Management Considerations

Meeting purpose

- Government representatives and Inuit/Cree knowledge holders are here to share information. The objective of this exchange is so that users can make well-informed recommendations to the Wildlife Management Boards about the level of harvest or other non-quota limitations moving forward.
- Government representatives are not here to impose a quota or decide the number of tags that will be issued for each community. They are sharing information collected over the last few decades using a scientific approach. In the same way, Inuit and Cree are sharing the information gathered in their own way with other communities, jurisdictions and researchers.
- All of the information shared at this meeting is evidence that users can apply to help them determine what their recommendations will be to the Wildlife Boards.

Scientific observations

- The lower aerial survey estimate of abundance in 2016 compared to 2012 had overlapping error estimates.
- Other signs such as lower litter size, a low proportion of yearlings, declining body condition and declining survival, are concerns that coincide with environmental change.

Indigenous Knowledge

- Inuit and Cree communities have been experiencing a higher level of human – polar bear interactions. Human safety concerns and impacts of polar bears on other wildlife (seals, eider ducks) are severe.
- The increase in polar bear encounters could be a result of a higher abundance of bears, changing distribution of bears, or changing behaviour by bears (such as spending more time on land and closer to settlements). It could be a combination of all three.

Management considerations (1)

- Polar bear harvest is culturally important to Inuit
- Communities must determine what level of risk they are willing to take regarding both:
 1. The potential for human - polar bear conflict that might result from maintaining a large subpopulation to maximize harvest opportunity in the long-term
 2. The impact of a higher level of harvest could become detrimental to the survival of the subpopulation

Management considerations (2)

- Everyone has the right to defend themselves
- Harvest should be shared equitably
- Traditional methods of wildlife stewardship are of great importance to Nunavik Inuit and feel it should be part of management
- Improvements should be made in including users in the planning, conducting, and analysis of survey results.

- ## Management considerations (2)
- Everyone has the right to defend themselves
 - Harvest should be shared equitably
 - Traditional methods of wildlife stewardship are of great importance to Nunavik Inuit and feel it should be part of management
 - Improvements should be made in including users in the planning, conducting, and analysis of survey results.

Do these comments summarize the key points of yesterday's discussion?

Agenda for Day 2

- Discussion of user recommended management objectives
- Discussion of non-quota limitations
- Discussion on allocation of harvest among user groups
- Determine where there is consensus among users and where there are differences of opinion
- Describe the next steps


- ## Agenda for Day 2
- Discussion of user recommended management objectives
 - Discussion of non-quota limitations
 - Discussion on allocation of harvest among user groups
 - Determine where there is consensus among users and where there are differences of opinion
 - Describe the next steps

Agenda Item

9

Discussion of user recommended management objectives


► ንጽህናት ምዃን ዓባይ ብክርነት
 ► ንጽህናት ምዃን ዓባይ ብክርነት
 ► ንጽህናት ምዃን ዓባይ ብክርነት

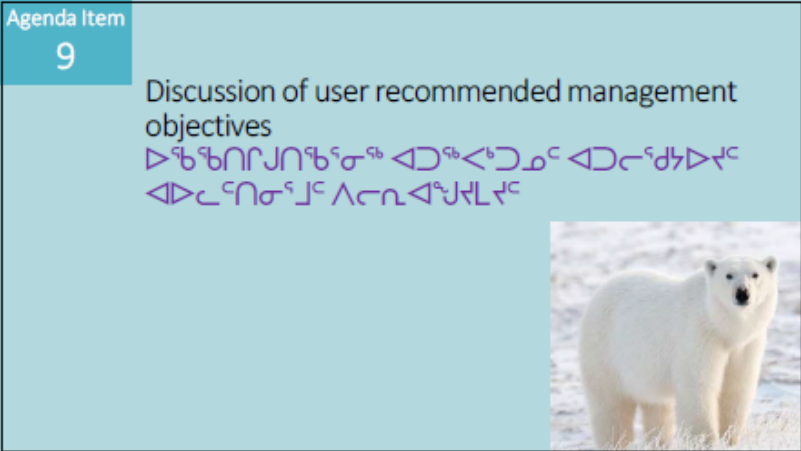


Agenda Item

9

Discussion of user recommended management objectives
ᐅᓃᓂᑎᒋᕈᑏᓂᓃᓂ ᐱᐅᓃᓂᐸᑐᓄᓥ ᐱᐅᓇᓦᐳᔭᐅᓯᓙ
ᐱᐅᓚᓥᑎᓂᓣᓵ ᐱᓇᓴᐱᐅᓯᔪᒫᓴᓙ



[illegible][illegible]

Non-quota limitations

In both the Nunavut Settlement Area and the Nunavik Marine Region, existing harvest limits were established assuming a sex selective harvest of two males for every female and a flexible quota system to adjust for over-harvest (subtract from base allocation the next year) or under-harvest (accumulation of credits for use in future years).

Sex-selective harvesting was implemented to allow the maximum possible number of bears to be removed sustainably each year, recognizing that the removal of breeding-age female polar bears has a larger effect on population dynamics than the removal of male polar bears in most situations.

Should sex-selective harvest (2 males per 1 female) be implemented in this subpopulation?

Would users prefer that harvesting of up to 1 female per 1 male be implemented if it means a lower total harvest?

For example,

In the harvest risk model, under the middle of the road scenario for future environmental conditions and a maximum sustainable yield objective there was support for a harvest of up to

- 12 females per year
- This equates to 24 bears in total assuming a 1:1 male-to-female ratio
- This equates to 36 bears in total assuming a 2:1 male-to-female ratio

What other non-quota limitations do you recommend users make to the Boards?

Agenda Item

11

- Discussion on allocation of harvest among user groups

[illegible]

Previous harvest limits: Total Allowable Harvest (TAH)/Total Allowable Take (TAT)/Voluntary Agreement (VA) and reported harvest (H) over the last 10 years

Hunting season	New Brunswick (N)		Quebec (Q)		Ontario	
	Number	H	Limit	H	Limit	H
2008/2009	25 (TAH)	26	None	9	None	3
2009/2010	25 (TAH)	25	None	36	None	1
2010/2011	30 (TAH)	30	None	74	None	0
2011/2012	25 (TAH)	25	30 (VA)	22	None	4
2012/2013	25 (TAH)	26	30 (VA)	33	None	2
2013/2014	25 (TAH)	27	30 (VA)	11	None	0
2014/2015	20 (VA)	20	23 (VA)	22	None	1
2015/2016	20 (VA)	20	22 (VA)	19	None	2
2016/2017	25 (TAH)	22	23 (TAT)	7	None	2
2017/2018	25 (TAH)	28	23 (TAT)	5	None	0

* In 2016/2017, a ban on harvesting substantially reduced their harvest: quota to 20 polar loons (from the change to 50 – 20 in 2016/2017). In 2016/2017, Sanikiluaq invented the line that was established by the NWMP before the industry reduction.

Ontario:

4.2 human-caused polar bear deaths were reported per year in average from 1994/1995 to 2016/2017

1.8 human-caused polar bear deaths have been reported per year in average since polar bear was listed as Threatened species in Ontario (2011/2012)

Québec:

0.7 human-caused polar bear deaths were reported per year in average from 1994/1995 to 2017/2018.

1.1 human-caused polar bear deaths have been reported per year in average since 2011/2012.

Non-Inuit areas combined:

2.9 human-caused polar bear deaths have been reported per year in average in non-Inuit areas of Southern Hudson Bay since 2011/2012

Agenda Item

12

Presentation of recommendations of the user-to-user group participants for validation

$\Delta^{b^c} \subset \Delta^{b^c} \cap \Delta^{a^c} \subset \Delta^{a^c} \subset \Delta^{a^c} \cap \Delta^{b^c} \subset \Delta^{a^c} \cap \Delta^{b^c}$
 $\Delta^{a^c} \subset \Delta^{a^c} \cap \Delta^{b^c} \subset \Delta^{a^c} \cap \Delta^{b^c} \subset \Delta^{a^c} \cap \Delta^{b^c}$
 $\Delta^{a^c} \subset \Delta^{a^c} \cap \Delta^{b^c} \subset \Delta^{a^c} \cap \Delta^{b^c} \subset \Delta^{a^c} \cap \Delta^{b^c}$
 $\Delta^{a^c} \subset \Delta^{a^c} \cap \Delta^{b^c} \subset \Delta^{a^c} \cap \Delta^{b^c} \subset \Delta^{a^c} \cap \Delta^{b^c}$



Agreement to Work Together

- Suggestion of joint board/council hearings
- Working within land claim agreements
- Joint board decisions to work together not just on overlapping issues but on concerns that collaring is negatively impacting health of polar bears (especially female)
- Feel health is better than science is saying
- shared resource

New management objective – increase the harvest

- Discontinuation of interrupting mother bears
- Health is better than presented
- Concern about safety
- Collaring is negatively impacting health of population
- Ensure all Indigenous knowledge is included (Inuit, Cree)

Sex-selective harvest : Concerns

- Based on IK
- Experience seen in other species
- How would sex selective harvest impact trade?
- Training for younger hunters (identify sex)
- Some allowance to harvest more males than females
- Not always largest male
- Not fixed on sex 2:1 ratio
- Application to hunt cubs for special occasion
- Not just harvesting for trade
- Prefer to hunt when the animals are in their prime
- For best taste (in summer)
- For fur (not too good in summer)
- Abandoned cubs?
- Don't support polar bears in zoos

Proportional allocation

- Discuss down the road with joint councils
- Fair and equitable
- 3 communities (Nunavik) vs 1 community (Nunavut)
- What are the criteria?
- Inuit population increasing
- Incorporate cultural knowledge and tradition
- Work with Inuit knowledge for accurate data analysis - current data is outdated
- Agreement #s need to be discussed earlier than later
- More involvement with Inuit when determining TAH (rather given #s by science)

13

$$\Lambda^{\mathfrak{g}} \mathbf{b} \mathbf{C} \sigma \quad \Lambda \mathbf{c} \mathbf{n} \triangleleft^{\mathfrak{g}} \mathbf{j} \mathbf{n} \triangleleft \mathbf{c}^{\mathfrak{c}}$$


- Report summarizing the information shared and recommendations made by users in community consultations and at this meeting will be prepared
- Southern Hudson Bay Polar Bear Advisory Committee to forward the Subpopulation Status Report, Harvest Risk Analysis, and Consultation Report to the NWMB, NMRWB, EMRWB, and HFTCC
- Boards to assess the information and determine their decisional processes (for example, joint written hearings, public hearings, etc)
- Interested parties to participate in Board decisional processes
- Boards to render initial decisions (HFTCC – advice) on new TAT/TAHs and forward them to responsible Ministers in accordance with Land Claims Agreements
- Government agencies to make initial/final decisions based on the information received and implement the final decisions

April 2020

To be determined

- Some significant changes have been made to how information is gathered and shared among co-management partners to support Wildlife Board decision-making about harvest levels
- The Southern Hudson Bay Polar Bear Advisory Committee would like to hear your views about additional improvements that can be made:
 - Study design and data collection
 - Consideration and use of Indigenous Knowledge throughout the process
 - Community consultations and user to user meeting
- Your comments can help us to collectively do a better job in the management of the Southern Hudson Bay Polar Bear Subpopulation
- They will also help to inform approaches in other shared subpopulations such as Foxe Basin and Davis Strait.

- Thank you to the people that worked to organize this event and to the community representatives for taking the time to consider the information, speak for their communities, and work together in a collaborative spirit

Agenda Item

14

Concluding remarks and closing of meeting

⁶p⁶ɾɿɾŋ^C >sup>6</sup>b>ɾ>ɾ^C ^LL> L>ɿ>σ<sup>a^L^L
 bŋLσ></sup>



ATTACHMENT 1: NUNAVIK INUIT COMMUNITY ENGAGEMENT REPORT

Inukjuak

January 27, 2020; Inukjuak Rec-Centre 7:15 – 9:30pm

Participants:

- Seven community participants
- Management authorities: Mark Mills (CWS), Barrie Ford (Makivik), Mark Basterfield (NMRWB)

Comments and questions:

- Tag Rules? When is a tag needed? Is it only when the hide is sold or only if someone is planning on taking it out of province? Action Item: Mark to contact MFFP to find out and let LNUK know.
- Who decides eventually on TAH on land? ANSWER: Quebec government
- What are the difference in rules for main land and offshore bears? If a bear is shot on ice is it still a “Quebec” bear?
- Nunavut IQ study is it all Nunavut or specific to Sanikiluaq? ANSWER: All of Nunavut including Sanikiluaq
- 50-60 years summed up by an elder: (translated by Jobie Epoo) He lived with his parents on the sea ice. No polar bears around while he was young. In his life only a few people were hunting polar bear, now more people are hunting and there seems to be more polar bear.
- Only a few spots good for bear, not more places. People who aren’t “polar bear hunters” are now harvesting. There are more tracks seen and he believes the population has increased.
- Just this year there have been ~ 5-6 bears taken inland of Inukjuak thus far (not on the sea ice).
- There was a time when bears were rarely encountered, now people must always be vigilant when they go on the land. Inukjuak needs to have more people hunting polar bears.
- In the early days only Shaomic’s father, Jobie Epoo’s father and Lucassie were polar bear hunters.

- Very rare observations in the 1950's could be because less people and covering less land/sea area. It was rare to see tracks. In the 1960s the price of fur increased and more people are likely looking for polar bear. There was a real excitement in the community when someone came back with a polar bear, as it was such a rare event.
- When the value of the pelt increases more people are out hunting and when the value decreases less people hunting.
- More young people are coming back with polar bear.
- Inukjuak geographically naturally has more polar bear.
- It is difficult for people to accept number shown of decline when they see so many bears.
- Inukjuak is under a polar bear warning right now – possible Killer Whale carcass near by.
- As seen in slide 8, with the voluntary agreement, harvest actually decreases because of traditional management systems.
- Inukjuak is currently in the process of protecting the Ottawa Islands. This will protect future generations of polar bear. Bears are seen more inland. We need to protect the Ottawa Islands so they will have a safe haven. Bears will have a safe summer habitat and will keep off the mainland. Safer for bears and safer for Inuit campers.
- Habitat protection is a better solution than TAT.
- The regulatory regime is too complicated. There are too many jurisdictions and they are not working together. There are rules for some and not for others and it's not equal.
- Last meeting (2011) called by Sanikiluaq they wanted 25 bears, they got what they wanted and we went from 74 to 22. The people should have been compensated (or the community or Hunter Support Program etc.). If hunters were compensated for the value of the pelts of bears they must refrain from hunting, it would help protect the bears. A sum of maybe \$100 000 to reduce the hunting pressure and protect the population would be good value.
- Sanikiluaq was not reasonable: for example, if the TAT for the population was 60 they got 25 even though they are just 1 community. They didn't want to work well with others.
- It will be difficult for Inuit to accept a low number from the working group.
- Decreasing the TAT makes it hard to pass on the culture to the younger generation

Umiujaq

January 28, 2020 Umiujaq NV Office 9:30-12:00

Participants:

- 9 community participants
- Management authorities: Mark Mills (CWS); Barrie Ford (Makivik)

Comments and questions:

- Will this meeting in Montreal be similar to the meeting in Ottawa that was held in the past? ANSWER: It would be similar. We hope the approach this time – seeking consensus from the communities up – will be better.
- How will the meeting in Montreal be facilitated?
- Why are the Cree involved since they are new to hunting polar bears? “They don’t even go on the ice” Will their participation influence the TAT? ANSWER: While the Cree may not actively hunt the bears, they do have defence of life and property kills and they are looking for solution to the problem of bear-human conflicts and should be part of this discussion.
- Inuit do not like to eat bears that have been tranquilized.
- Is a defence kill taken from quota? ANSWER: It will have to be discussed in Mtl, but it would be taken from quota.
- When harvested we must thank “the lord” for the successful harvest.
- People would like to see Umiujaq get involved in polar bear population management and the TAT process.
- It was noted that some feel that the decision has already been made by the Government and that the consultation/meeting doesn’t matter since others have made up their mind regardless of the input from Inuit.
- Regarding the modelling can there be more than 3 scenarios and 3 objectives? ANSWER: It is their meeting and the recommendations belong to them. Intermediate objectives, scenarios and TAT numbers are possible. If the users can come to a consensus, it makes the decision of the boards easier.
- The feeling of the group was that the polar bear population is going up and expanding its range.
- There are more bears seen in the summer. Cubs are born on the nearby islands. Snow caves are seen on the islands
- Can Inuit legally “adopt” polar bear cubs as pets?
- What should the two people who are selected from the community discuss to get ready for the meeting? ANSWER: Suggested that they think about what kind of TAT they want, how it should be allocated between the communities and what management objectives and climate scenarios they support.

- The group felt that it would be useful to see the Agenda before the meeting. We reviewed together draft v.3 of the Agenda to give them an idea what to expect.
- Is it possible to not support the recommendations ie. No quota? Is this an option? ANSWER: It's not clear what the Boards would do with such a recommendation. One participant said that recommending no TAT would probably not be realistic.
- Barrie suggested that the Inuit members attending the meeting have a teleconference together to go over the agenda a few days earlier.

Kuujuaraapik

January 30, 2020; Kuujuaraapik Katittavik Hall 9:30-11:00

Participants:

- 11 community participants
- Management authorities: Mark Mills (CWS); Barrie Ford (Makivik)

Comments and questions:

- When they check for polar population why do they only check the coastline, when we have been seeing polar bear inland? ANSWER: There may have been transects inland, this can be clarified at the user-to-user meeting. There are ways of estimating the number of bears missed and this is calculated in the confidence interval.
- When is the next planned aerial survey? ANSWER: Not certain. There was a 2018 partial survey using the same method as in 2016 over the area where there was the largest concentration of bears. The results were similar to the 2016 survey. Since they are watching this population closely due to signs of decline it should be done if possible, every 5 years.
- The Risk Analysis assumes that there will be surveys every five years and mentions that the longer the period without surveys, the higher the risk. Action Item: Mark to find out and get back to Salamiva.
- When trophy hunting, do they report the catch?
- Why does Sanikiluaq get 1/3 of TAT? ANSWER: This will be an important subject during the user-to-user meeting.
- One participant mentions that when he goes out he often sees polar bear, but can't shoot them because Kuujuaraapik only gets 1 or 2 TAT. 5-6 would be more appropriate for the community. People would go out more if this was the case. This is not right and he hopes Kuujuaraapik will get a larger quota.
- We would want Kuujuaraapik's quota increased, instead of sharing with Umiuuaq. (They get 1 and we get 2 or vice versa)
- Aerial survey: bears can be dirty with ground/soil and can camouflage themselves in the summer. This information should be given to the surveyors.
- One person mentioned never having tasted polar bear meat because so few bears are taken. She mentioned that three bears were taken in December. Someone

corrected her, saying that three bears were close to the community in December but only two were killed.

- Polar bears are seen more often in December (twice on December 15th). Bears were not seen in December in the past, but now it's regular.
- More bears are seen every year.
- If a bear in Kuujjuarapik is not taken, it should not be given to another community.
ANSWER: That is a good example of allocation that should be discussed at the user-to-user meeting.
- One person expressed that he personally believes that polar bear population is increasing and healthy (good condition)
- When they were hunting beluga at Long Island recently, some of the carcass was left left behind. The when they went back they saw polar bears around. They haven't seen an unhealthy bear.

ATTACHMENT 2: NUNAVUT INUIT COMMUNITY ENGAGEMENT REPORT

**Consultation with Sanikiluaq Hunters and Trappers Organization on the
Southern Hudson Bay Polar Bear Survey Results, Status Report, and Harvest
Risk Assessment**

February 11, 2020



Department of Environment, Government of Nunavut, Iqaluit, Nunavut

Executive Summary

Government of Nunavut (GN), Department of Environment (DOE) representatives conducted consultations with Sanikiluaq Hunters and Trappers Organization (HTO) on February 11, 2020.

The intent of this consultation was to ensure the HTO was informed on the results of the 2016 aerial survey to estimate the abundance of Southern Hudson Bay (SH) Polar Bear, the status of the subpopulation, including Traditional Knowledge collected in the relevant jurisdictions, and the results of the Harvest Assessment Report that was completed using recent and historical survey results, historical harvest records, and population demographics. The results of the Harvest Assessment Report produced several management options based on a selection of proposed future population trends based on differing environmental scenarios. The management objective options and scenarios were presented to the HTO members. A DOE recommended management action or objective was not given during the consultation, but the DOE representatives highlighted the management objective option and scenario that was recommended by the Technical Working Group that prepared the Status Report and Harvest Assessment Report.

The consultation was also intended to ensure the HTO was well informed on all the most recent information for this subpopulation before sending representatives to an inter-jurisdictional User-to-User meeting in Montreal, Quebec from February 25-26, 2020. The purpose of the User-to-User meeting was to bring the users of the SH polar bear subpopulation together to discuss the desired management objective for this polar bear subpopulation and to determine what the allocation of harvest should be between jurisdictions/user groups.

The HTO expressed that the first scenario presented in Harvest Assessment Report, which was based more on Traditional Knowledge, was more likely to represent what the future trends in the environment and the polar bear subpopulation will be. There was consensus that polar bears are able to adapt well to changes in their environment, but a looming question was whether they should consider the idea of a reduced population to have healthier bears.

The feedback collected during this consultation will also aid the GN in future management and of the SH Polar Bear subpopulation.

This report attempts to summarize the comments made by participants during the consultation.

Preface

This report represents the Department of Environment's best efforts to accurately capture all of the information that was shared during a consultation meeting with the Hunters and Trappers Organization of Sanikiluaq on February 11, 2020.

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

1.0 Report Purpose and Structure

This report is intended to collate and summarize comments, questions, concerns and suggestions provided by the Sanikiluaq HTO in response to the 2016 Southern Hudson Bay (SH) Polar Bear aerial survey results, the subpopulation Status Report and the completed Harvest Assessment Report.

Representatives from the Department of Environment (DOE), the Nunavut Wildlife Management Board (NWMB), Nunavut Tunngavik Inc. (NTI), and the Qikiqtaaluk Wildlife Board (QWB) attended the consultation.

2.0 Purpose of Consultation

The purpose of the consultation was to work with the Sanikiluaq HTO and ensure that they are well informed of the results of the 2016 aerial survey on the SH Polar Bear subpopulation, the status of the subpopulation (as outlined in the Status Report), and the results of the Harvest Assessment Report completed by the Technical Working Group. In addition, the meeting also served the purpose to provide an opportunity for the HTO members to ask questions and to obtain clarifications on the reports and results. The results of the Harvest Assessment Report produced several management options based on a selection of proposed future population trend scenarios under various environmental scenarios. The management objective options and scenarios were presented to the HTO board members. A DOE recommended management action or new harvest limitations were not given during the consultation, but the DOE representatives highlighted which management objective option and scenario was recommended by the Technical Working Group that prepared the Status Report and Harvest Assessment Report.

The consultation was also intended to ensure the HTO was well informed on all the most recent information for this subpopulation before sending representatives to a User-to-User meeting in Montreal, Quebec from February 25-26, 2020. It was important that the Users work together to establish Management Objectives and how they want to manage this subpopulation in the future.

2.1 Format of Meetings

The meeting was held in the evening and ran for approximately 3 hours. The meeting was facilitated and led by the DOE Polar Bear Biologists, Markus Dyck and Jasmine Ware, and the DOE Senior Wildlife Advisor, Caryn Smith. The presentation started with opening remarks from Caryn Smith on the purpose of the consultation and the intent to ensure the HTO was prepared to send representatives to the User-to-User meeting in Montreal. This was followed by a presentation on the status of the SH polar bear subpopulation, given by Markus Dyck, and a presentation on the Harvest Assessment Report, given by Jasmine Ware. The participants were invited to ask questions, raise concerns, or provide advice during the presentation but were

advised there would be breaks for questions. After the presentations, questions/discussion continued until no further questions were raised. DOE asked the HTO to internally discuss the management options and future scenarios and to share this information with their local harvesters for further input.

3.0 Summary of Consultation

The objectives of the consultation were made clear to the HTO members prior to and at the start of the meeting.

Date: February 11, 2020

Representatives:

- GN-DOE, Polar Bear Biologist II, Markus Dyck
- GN-DOE, Polar Bear Biologist I, Jasmine Ware
- GN-DOE, Senior Wildlife Advisor, Caryn Smith
- GN-DOE, Senior Manager of Operations, Jason Aliqatuqtuq
- GN-DOE, Conservation Officer II, Daniel Qavvik
- NTI, Director of Wildlife, Paul Irngaut
- NWMB, Wildlife Management Biologist, Kyle Ritchie
- QWB, Chairman, James Qillaq
- Translator, Dinah Kavik
- Sanikiluaq HTO Board members
 - Eli Kavik, Chairman
 - Lucassie Arragtainaq, Manager
 - Puasi Ippak, Board Member
 - Joe Arrangutainaq, Board Member
 - Alec Ippak, Board Member
 - Johnny Oqaituk, Board Member

Comments and questions:

- The long history of high compliance harvest reporting and harvest management by the community of Sanikiluaq was commended and the high quality of harvest samples sent to the DOE polar bear lab was emphasized.
- The HTO members pointed out their disappointment in the lack of a system for regular harvest reporting in Quebec and they feel that the reported average harvest is much higher than 12.8 bears.
- There were concerns that the underestimated harvest in Quebec makes the harvest in Nunavut look more unsustainable, even though it is based on a near 100% reporting rate, and there will be pressure on Sanikiluaq to reduce their harvest.
- One of the elders on the board pointed out that this year's harvest season, and the ice conditions have not been as safe as compared to previous years and that some areas of

water have not frozen over completely because of snow cover. These changing ice conditions are a concern for the future harvest of polar bears in their area.

- The HTO manger expressed concern over how the HTO would decide which scenario, as presented in the Harvest Assessment Report, would be the appropriate one. The DOE representatives elaborated on the information that was used to develop the environmental scenarios, including varying emphasis on the Traditional Knowledge and the Science based on historical trends. It was up to the HTO and community members to assess what scenario they felt would best reflect the future environmental trends, as they were more familiar with their environment and how well bears would be able to adapt to environmental changes.
- The HTO manager pointed out that Inuit and polar bears are able to adapt well to changes and that Scenarios 1 and 2 would be the best to focus on. There were concerns regarding the impact of polar bears on the environment if there were too many for the habitat to support (e.g. the destruction of egg colonies), and there were also concerns about the impacts of environmental changes on the animals that are part of the polar bear diet. No one wants to see starving bears and would much rather see the habitat supporting healthy bears. They also want to ensure a higher population wouldn't negatively impact bird colonies. The NTI representative, Paul Irngaut, stated that NTI would support the HTO on whatever scenario they decided was most appropriate.
- The HTO members felt there was a need to consult with their local hunters before they could make any decisions on the environmental scenario and management option they chose to support.
- An elder from the HTO expressed that the future trends that their forefathers had predicted, before there were survey reports, seemed to be coming true and his generation was now able to have reports and meetings to discuss these changes.
- The HTO manager pointed out that local hunters were beginning to feel that hunting polar bears might not be worth it going forward because of low prices for the hides. If meat becomes the only thing driving the polar bear hunt, the harvesters will likely turn to hunting other species. Even though it is becoming financially difficult to continue hunting polar bears, there is a desire to ensure that the traditions and skills involved with hunting bears is carried forward into the next generations. This translates to a desire to ensure the existing polar bear subpopulation is conserved at a level to allow future harvesting.
- The DOE Senior Manager of Operations, Jason Aliqatuqtuq, pointed out that many Inuit want the traditions and skills involved in hunting polar bears to carry on in future generations so it is important that the Users of the subpopulation determine whether or not they want the population to grow (maximum sustainable yield), stay the same (maintain a stable population), or to lower (a managed decrease).
- It was discussed that under Scenario 1 from the Harvest Assessment Report, the sustainable harvest options (harvest numbers that would achieve a maximum sustainable yield) would not necessarily result in a reduced TAH recommendation for the subpopulation. The current harvest is approximately 50-55 for the subpopulation

and a possible overall TAH for the subpopulation assuming Scenario 1 would be 63 bears at a 2:1 harvest sex ratio (42 bears at a 1:1 harvest sex ratio).

- There was discussion on the desire to try to maintain a reasonable harvest limit even though there is a current drop in the interest to hunt; there may be increased interest to hunt in the future, especially if the price of polar bear hides improves.
- The HTO would like to see a harvest that everyone is comfortable with but would not limit opportunities down the road.

4.0 Summary

The HTO Chairman expressed that the DOE had provided them with a clear presentation, and they felt more prepared, with better information, to meet with their hunters and come up with a position before attending the User-to-User meeting in Montreal. The biggest concerns for the hunters in their community was the low price for polar bear pelts, which has made polar bear hunting financially difficult for people and now there may need to be a shift to hunting other species. The reduced interest in harvesting polar bears conflicts with the community's desire to maintain traditional harvesting practices and skills for future generations and the insurance that their families will be able to continue to consume traditional country foods. The HTO members felt that the first scenario presented by Harvest Assessment Report, which was based more on Traditional Knowledge, was more likely to represent what the future trends in the environment and the polar bear subpopulation will be. There was consensus that polar bears are able to adapt well to changes in their environment, but a looming question was whether they should consider the idea of a reduced population to have healthier bears. The habitat may not be able to support higher numbers as environmental changes occur. The HTO members were reminded that they could contact the DOE representatives if they needed any further clarity on any of the information presented, before they attended the User-to-User meeting in Montreal.

ATTACHMENT 3: ONTARIO CREE COMMUNITY ENGAGEMENT REPORT

Community engagement meetings were arranged by the Canadian Wildlife Service, in consultation with Ontario Ministry of Natural Resources and Forestry, in the communities of Fort Severn, Peawanuck, and Attawapiskat, Ontario. These are the three northern most Ontario coastal Cree communities and ones that most frequently interact with polar bear. In advance of the community meetings, written materials were shared with the Chief and Council in each location and polar bear issues were discussed with community leaders (Chief, band staff) over the phone. Outreach materials concerning polar bear management also were shared with the Chief and Council in the communities of Kashechewan, Fort Albany, and Moose Cree; however the communities did not respond to express an interest in an in person consultation. Finally, written materials were shared with the Mushkegowuk Council and advice about polar bear management and outreach to Ontario Cree rights holders was obtained from Vernon Cheechoo (Director Lands & Resources).

Fort Severn

A consultation meeting in Fort Severn was confirmed for December 12 and 13, 2019; however the meeting was postponed at the request of the community several days before. A rescheduled meeting, planned March 2020 was also postponed due to COVID-19 concerns. Telephone conversations with Chief Paul Burke focused on community interest in holding a workshop to discuss and share information about what to do in a polar bear encounter, developing a community plan for reducing attractants and training/funding guardians to deter bears from coming into the community during certain seasons, collecting data about polar bear observations/denning areas. In late November and early December, a polar bear had been shot in town and another tried to break into someone's house. 4-5 bears have been in town in the weeks before the planned consultation – making polar bear issues front of mind.

Canadian Wildlife Service intention is to work with Ontario Ministry of Natural Resources and Forestry to schedule an in person meeting when COVID-19 conditions allow, with a focus on co-developing programs with the community reduce human-bear conflict and ensure all take is reported to management authorities.

Peawanuck

Department of Environment, Government of Nunavut, Iqaluit, Nunavut

December 10, 2019; Band office and community hall

Participants:

- Community: Linda Hunter (Peawanuck Band Council, Land Use Planner), 12 community members attended evening session meeting
- Management authorities: Sam Iverson and Stephanie Rowley (CWS)

Comments and questions:

- Many questions about the status of polar bears and changes in behavior.
- When asked about observations of numbers, 3 different people said they were about the same as in the past. No other responses given
- One man sees 10-20 yearlings per year; not declining
- They see them moving around inland more often than they used to, sometimes far from the coast
- Property damage was mentioned as a concern by 4 people. Polar bear often bite into cached fuel, they go after snowmobile seats, they often damage cabins and camping equipment
- One elder noted that the further north they go, the better to prevent property damage
- Generally, there is not an interest in harvesting polar bear. One young hunter indicated that there might be if there was a market for the fur
- Many questions about climate change and sea ice loss across the entire range. Are the affects the same throughout Canada?
- Adults will eat the yearlings – some have seen adults in good condition, but the younger bears are not
- The bears come in around Christmas time to den
- In the past, we hunted polar bear for pelts, but then a quota of 10 bears per year was put in place. We needed tags at that time
- When we do have a defense kill, we use the bear for moccasins and mitts
- There were questions about the Quebec side, and whether or not they see as many as those in Peawanuck do
- Questions about polar bear biology, i.e. how do they navigate in the wild? Why do we see some in the same location every year?
- Would bear spray work to deter a polar bear?
- Differences in behaviour of young vs. old bears – young and thin are the most dangerous .Two years ago there was a bear outside a home, it was shot through a window
- Two people said that to their knowledge, every bear that comes into town needs to be killed
- Tourism – Sam Hunter used to run excursions to see bears. They would watch the bears eat seals. It was too expensive for tourists to travel to Peawanuck. A person could fly to Europe twice for the same cost.
- One man spoke of his experiences watching polar bears – once he saw a bear swimming and holding its foot. He thought it was funny, but when the bear got out of

the water, it disappeared into the grass. Grasses are becoming more diverse and dense

- We moved to Peawanuck in 1986, why do the bears travel so far south now. They never used to
- Peawanuck only kills for safety reasons
- Comments from Linda hunter:
 - 4 polar bear interactions this year in the community: December 2018, passing through town, chased away, March 2019: female with cubs walked through town, no incident; August/Sept 2019: young bear, skinny, walking between two houses, came toward a kid and was killed by a community member; End of October/early November 2019, young looking bear (three year old bear) on a trash bin at the airport. Chased away.
 - When asked about change from the past with regard to bears in town – replied same in numbers, just skinnier. Seeing more orcas in the bay, orcas hunting beluga.
 - When a polar bear kill occurs by a community member, it requires a 12-page report, whereas police only have one page report. Other communities don't have to do this lengthy report, as they are not within a provincial park. The report includes information on the bear and why it was killed – dimensions, general condition, proximity to town, tooth sample taken, etc.
 - Noted that Peawanuck under 1976 agreement Peawanuck has a quota of 12 (Fort Severn 12, down the coast 4).
 - Community knows where denning locations are and when, where, why polar bear pass through, thinks that further south they don't always know this. This is the time of year mothers will start walking and denning in the forest, so you might see them near town. Older bears are less likely to interact with humans, but the younger ones are more curious.
 - Best way for Canada and Ontario governments to contribute reporting of kills and reduce their frequency would be to fund the monitoring that occurs through the guardians program.

Attawapiskat

A consultation meeting in Attawapiskat was confirmed for December 9 and 10, 2019; however the meeting was postponed at the request of the community. A rescheduled meeting, planned March 2020 was also postponed due to COVID-19 concerns.

Telephone conversations with Chief David Nakogee focused on defense of life and property concerns and the possibility of holding a workshop to share information about what to do in a polar bear encounter and developing a community plan for reducing attractants. Canadian Wildlife Service intention is to work with Ontario Ministry of Natural Resources and Forestry to schedule an in person meeting when COVID-19 conditions allow, with a focus on co-developing programs with the community reduce human-bear conflict and ensure all take is reported to management authorities.