Response by the Quebec-EMR-NMR Polar Bear Management Plan drafting team, to questions asked by the NMRWB and EMRWB

A response to each of the questions posed by the NMRWB and EMRWB has been provided below. For simplicity, both the original question (in black) and the answers (in blue) are provided.

Question 1: Lines 89-96. If 10 years pass and an updated plan has not been approved, will there no longer be a management plan in place? Would it be possible to change this section so that the Plan may extend past 10 years if no replacement has been developed?

<u>Answer:</u> If 10 years pass and an updated plan has not been approved, the current management plan will remain valid and active. The Working Group would like to propose adding the following underlined text to the Management Plan to clarify this:

"Prior to the end of this 10-year period, a new management plan will be tabled for adoption in accordance with applicable Land Claims Agreements, and all relevant laws and regulations in force at the federal, provincial, and territorial governments. <u>This</u> management plan will remain in effect until a new management plan has been adopted."

While the current plan can remain valid for more than 10 years if needed, partners are committed to preparing an updated plan within 10 years.

Question 2: The 10-year plan outlines 4 objectives and over 60 specific actions. Lines 115 and 116 state that the plan is subject to budgetary and priority constraints. Have the human and financial resources necessary to realize these objectives been determined? If so, are the existing resources sufficient to address these initiatives? In Section 10, starting at line 1859, the authors acknowledge that upon approval of the Plan, management partners will develop a companion document which will lay out a framework for action including an implementation plan.

- a. Will the parties be made responsible for each action be identified at the time of writing the companion document, and will the implementation plan include an evaluation component for the management plan?
- b. What will be done to ensure that activities which will require increased

budget and effort (ie: harvest monitoring) will be implemented?

- c. Once the Plan is approved, what is the commitment date for the various management bodies to come together to initiate work on the companion document?
- d. Would it be useful to add a sentence to this section to ensure that the companion document is developed in a timely manner?

Answer: The intention of this plan is to identify and obtain consensus on what needs to be done to ensure healthy polar bear populations. As soon as there is consensus and approval for the approaches and actions identified, budgets, timelines and responsibilities will be established. It is incumbent on governments to protect the wildlife in their jurisdictions and implement wildlife management plans. Each of the actions will be tasked in the companion document with an associated budget and timeline. There is no reason to expect delays in the preparation of the companion document. Indeed, the implementation of many aspects of the plan is already underway, and it is intended that some measures will be put in place before the next harvest season. The Quebec Government is in the process of identifying the necessary resources. Environment and Climate Change Canada has a Contribution Agreement in place with Makivik to implement actions identified in the management plan. Lastly, note that there is some elasticity built into the plan so that measures taken may be adjusted after review and assessment. Resources for implementation will then need to be adjusted accordingly.

Question 3: Lines 89-96. If 10 years pass and an updated plan has not been approved, will there no longer be a management plan in place? Would it be possible to change this section so that the Plan may extend past 10 years if no replacement has been developed?

Answer: this appears to be a repetition of question 1.

Question 4: We understand and appreciate that consultation efforts were extensive in producing this Management Plan. Were all of the Actions included in the consultation with both Inuit and Cree, and how was consultation conducted and prioritized for both Inuit and Cree? As it has been several years since consultations occurred, do the authors feel the consultations remain relevant? Are there any consultation records or reports from Cree consultations that could be shared with the Boards?

Answer: The drafting team has discussed this question and remain absolutely convinced that the consultations remain relevant despite the time that has passed. These consultations were extremely thorough and comprehensive. As well, in the time that has

passed since these consultations were conducted, there have not been major changes in the situation of polar bear or in the cultural or socio-economic context which may have caused a significant shift in the concerns and issues identified by Nunavik Inuit and the Cree of Eeyou Istchee.

To be clear, the specific actions were not drafted at the time of consultations. However, the management plan was written with the outcomes/"lessons learned" from the consultations in mind and is therefore responsive to what was heard. A simple illustration of this can be seen in the "Threats to Conservation" section: because community members were not comfortable ranking the threats to polar bears, they have been listed in alphabetical order in the management plan, rather than being by order of priority as is normally the case.

Summary reports from both consultation processes have been submitted to the NMRWB and EMRWB. Detailed reports were also developed for each Nunavik community; these will be made available to the communities if they wish to submit them to the NMRWB/EMRWB hearing.

Question 5: What is the distinction, if any, in terminology between management plan, management framework and management system? Are they used interchangeably ?

<u>Answer:</u> These terms are not intended to be used interchangeably, however, there are some similarities.

A **management plan** is a document that identifies measures for ensuring healthy bear populations in a specific context and geographical area. It may be legally required under provincial, territorial and/or federal legislation when a species is listed as 'at risk', in which case it would fulfill certain requirements outlined in the relevant legislation.

A **management framework** is a broader term which encompasses international agreements, committees, etc., in addition to domestic management plans and management systems.

A **management system** refers to the suite of tools that are used to implement the management framework and management plan, such as tags, quotas, etc.

Question 6: Polar bears are known to travel thousands of kilometres over their lifetime. In order to manage polar bears so that they will be present for the long term, the approach needs to encompass the range of the bears and involve the jurisdictions and administrative organizations charged with this responsibility. This Plan goes a long way in this regard however, portions of the three polar bear sub-populations under consideration and the associated key organizations involved in their management and harvesting, fall outside the geographic scope of the Plan.

- a) Will this adversely impact achievement of the goals and objectives?
- b) Are the authors aware of any inconsistencies between this Management Plan and those of adjacent jurisdictions in terms of management of shared subpopulations? If so, how will the inconsistencies be reconciled if the plan is approved as-is.
- c) Would it be helpful to create a specific action to address working together with organizations outside of the geographic scope of the plan, but with management responsibilities for the polar bear subpopulations?

Answer: While each partner involved in the management of these three subpopulations only has direct management authority within the geographical boundaries of their jurisdiction, there are a number of factors that mitigate any adverse impacts this reality might have on achieving the goals and objectives of this Management Plan. These goals and objectives were written with the understanding that portions of the three polar bear subpopulations and the associated key organizations involved in their management and harvesting fall outside the geographic scope of the plan.

While there could be some differences between the polar bear management plans and recovery strategies of various jurisdictions in Canada, this management plan is part of a compendium of polar bear management plans and recovery strategies (known as the National Polar Bear Management Plan) for all jurisdictions in Canada where polar bears occur. The management plans and recovery strategies in the National Polar Bear Management plans and recovery strategies are single management objective for the entire polar bear population (or 'Designatable Unit') in Canada, spanning across all jurisdictions where polar bears occur.

Governments, Wildlife Management Boards, and Indigenous Land Claims Organizations with management authority for the polar bear subpopulations across Canada (both inside and outside the geographic scope of this management plan) regularly work together through domestic committees such as the Polar Bear Administrative Committee (PBAC), the Polar Bear Technical Committee (PBTC), and advisory committees, such as the Southern Hudson Bay advisory committee. Approach 4.4 of Objective 4 of this management plan states that collaboration with other jurisdictions will occur to guide polar bear management on a national and international level.

Polar bear management is adaptive, and is informed by both science and Indigenous Knowledge on an ongoing basis. This is true for polar bear management both within and outside of the geographic scope of this management plan.

In short, we are confident that Canada's polar bear management framework is sufficiently robust to counter the risks and concerns that your question has identified.

Question 7: The Threats to Conservation section states that the number of bears has increased over the past 40-50 years. Increasing numbers of bears can lead to a shortage of their prey and a decline in their health, reproduction rates and survival. It can also lead to more bear/human interactions. This situation may be reflective of the population exceeding the carrying capacity of the bears' habitat. Existing literature has identified that this is already evident in Norway. It is not unreasonable to question if this already is, or will be, true for parts of Canada. Should this section be expanded to explain that this situation can, and may already be, occurring in some arctic regions?

<u>Answer:</u> The authors were unable to identify the passage that is referred to in your question. However, according to the latest scientific population surveys that were conducted over the range of the three subpopulations that occur within the scope of this management plan, the demographic trend (over the last 15 years) of one of the subpopulations was established as a likely increasing trend, one was established as stable, and was established as a likely declining trend. Indigenous knowledge suggests an increase in polar bear numbers compared to the 1960's and 1970's, and suggests that two of the three polar bear subpopulations that occur within the geographic scope of this management plan have increased, and one has likely increased in the last 15 years. The recent population trends of the ten polar bear subpopulations in Canada that do not fall within the geographic scope of this management plan vary from increased to likely declined. Due to this variation across the Canadian polar bear range, it would not be accurate for polar bear abundance to be identified as a "Threat to Conservation".

While it is possible that the carrying capacity of polar bear habitat could be exceeded under certain circumstances, carrying capacity is an ecological limitation caused by a finite amount of resources and space in a given ecosystem. It is not a threat to conservation and therefore, would be not appropriate to include in this section of the management plan. Regular population monitoring is vital to accurately determine whether, and to what extent, polar bears may be experiencing decreasing prey populations, increasing bear/human interactions, and a decline in their health, reproductive rates and survival. Approach 2.1 of objective 2 in the management plan specifies the need to monitor the health and abundance of polar bears at a frequency that allows robust decision-making.

The drafting team is willing to amend the management plan text such that the notion of carrying capacity be more thoroughly developed in the species description (Section 4.). There is, however, a preference that this subject be dealt with in the population-specific appendices if and when there is evidence of density-dependence.

Question 8 : Approach 1.6 - Maintain age-selective and male-biased harvest (lines 1635-48 and 1869). In neighbouring jurisdictions, male-biased harvest has been removed as an explicit management measure. The Boards have identified some potential problems with being constrained to male-biased harvest: a. It may be difficult to achieve some of the actions under approach 4.4 if the Quebec-EMR-NMR jurisdiction is constrained to male-biased harvest in integrating sex selectivity in TAT and/or NQL decisions, while other jurisdictions are not.

Answer: The objective of Approach 1.6 (Maintain an age-selective and male-biased harvest) as labelled and described within the management plan aims mainly at ensuring that young bears, family groups and denning females continue to be protected as stated within the 1984 Anguvigaq Polar Bear Regulations. This approach does not intend to establish a rigid and regulated male-biased harvest but rather underlines the importance of protecting the female segment of the population if the objective is to maximize harvesting opportunities or restore a depleted population.

As mentioned above, Approach 1.6 does not imply a strict male-biased harvest and is based on similar principles to those considered in neighbouring jurisdictions where young bears, family groups and denning females are also protected. As identified in Approach 1.4, the management plan does, however, suggest monitoring the sex ratio of the harvest to ensure that it is in line with the management objective that has been established for a given subpopulation. The presence (or absence) of an imposed male-biased harvest in other jurisdictions who share a given subpopulation, does not in and of itself affect the management decisions that will be made in the management plan area. Nothing prevents the relevant authorities in QC-EMR-NMR from determining how they want to manage the sex-ratio of the polar bears harvested within the management plan area.

b. Further, it is possible/probable that in the future different management objectives may be put in place for the different polar bear subpopulations. Malebiased harvest works well in a situation where there is an aim to maximize harvest while maintaining or increasing the polar bear population. If management objectives focus less on maximizing harvest and/or aim to reduce the polar bear population, then being constrained to male-biased harvest will cause issues.

Answer: As identified in Approach 1.4, the objective is to ensure that the male:female harvest ratio is consistent with the management objective(s) in place. The management plan does not intend to impose a male-biased harvest when the management objective of the subpopulation does not require it, nor does it prevent the implementation of a female-biased harvest if doing so is warranted.

c. There is some uncertainty, especially considering IK on the subject, that targeting male polar bears will have the desired affects, especially in the long

term. The Angujjuaq (large male bear) may occupy a unique ecological niche, and disproportionate removal of them may cause ecosystem-level effects. Loss of important genetic diversity could also be an effect.

Answer: The potential impacts of an imposed male-biased harvest must certainly be considered when establishing harvest restrictions (TAT and/or NQL) in order to properly balance all risks that come with the establishment of (or the absence of) such regulations.

As explained previously, the objectives, approaches and actions identified in the management plan do not seek to force a disproportionate harvest of male bears, and even less so the largest bears. In jurisdictions where male-biased hunts have been established, there is no obligation to hunt the largest bears. It is therefore up to each individual hunter whether or not to harvest an Angujjuaq when the occasion presents itself.

Question 8 i) Does this objective amount to an NQL? Setting and removing of NQL's is the authority of the Boards. Are the authors of this management plan seeking to have such an NQL established for the area of application of this Management Plan through this approval of this plan?

Answer: Approach 1.6 does not directly aim to establish a (Non-Quota Limitation) NQL related to male:female harvest ratio. Establishing such an NQL is only a possible management action identified under Approach 1.4 in circumstances where the male:female harvest ratio is inconsistent with the management objective for a given subpopulation. Other possible management actions include developing relevant educational tools or any other means to achieve the established management objective. The establishment of such an NQL would necessarily follow the proper processes established under relevant land claim agreements and respecting the roles and responsibilities of each wildlife board and government.

Question 8 ii): Given the above, is it more appropriate to rephrase Approach 1.6 to identify sex-selective harvest as a tool which could be used in management, rather than constraining management to using male-biased harvest?

Answer: 8 ii) Establishing a NQL relating to male:female harvest ratio is already identified as one possible tool among others which can be used to reach a male:female harvest ratio consistent with the identified management objective for a given subpopulation. There is no intent for this to be a constraint unless management objectives and decisions requires. Question 8 iii): Approach 1.6 is "Maintain... male-biased harvest". The word "maintain" could be interpreted as constraining the Board's management flexibility and defining the use of a NQL, which the Boards may wish to avoid. Again, can the terminology in this section be re-framed to identify age and sex-selective harvest as possible management tools, and avoiding terminology which could be seen as defining (even in-part) an NQL?

Answer: 8 iii) The QC-EMR-NMR Polar Bear Working Group is open to change the label of Approach 1.6 to better reflect the general principle that it seeks. We propose to rename this approach: "Ensure, as appropriate, the protection of young bears and females."

Question 9: Approach 2.2, Action 2.2.2 - "Identifying the gaps" seems to fall short of what is needed to document Indigenous Knowledge. Should it go further, and have an action to address these gaps?

Answer: Approach 2.3 deals with addressing the knowledge gaps and it is implicit that this includes gaps in Indigenous Knowledge. ITK and science are complimentary, each informs the other. Specifically, if gaps are identified that require the documentation of Indigenous Knowledge, it is expected that steps will be undertaken to address them just as might be the case for scientific knowledge.

Question 10: Action 2.4.2 Community Based Monitoring Programs are welcome, but Community-Driven Research Projects are more in line with what is called for by most indigenous groups. Could this section be reworded to include this focus?

Answer: We agree with this statement and consider that, taken as a whole, Approach 2.4 provides the necessary basis to support community-driven research projects. There was no intention of limiting the options to community-based monitoring, this was simply given as an example in light of existing funding opportunities such as Canada's Indigenous Community-based Climate Monitoring Program.

The building of local capacity to undertake research and inclusion in the planning of projects are conducive to community-driven projects. Projects like the Arqvilliit protected area initiative and its accompanying monitoring project are already supported by governments and will contribute towards achieving this objective.

Question 11: Action 3.3.3 seems to be missing a category, as some residents of the region are non-indigenous. Should this be rectified, do all non-indigenous count as visitors, or is there a different reason it is worded this way?

Answer: We agree with the identified gap and, in order to address it, propose rewording this action as follows:

"Ensure that Inuit, Cree and non-beneficiaries in the region are aware of their rights concerning DLP kills and of other means to deal with problem bears".

Question 12: Approach 3.4.

a. Action 3.4.1 is to "reaffirm the engagement of management partners not to send polar bear cubs... to zoos and aquariums." Is there already a policy or regulation indicating this is not allowed?

Answer: There is no formal regulation preventing polar bear cubs from being sent to zoos. However, the spirit of this action is encompassed in the 1984 Anguvigaq Polar Bear Regulations (i.e. no sale of polar bear cubs without Anguvigaq approval) which was supported by governments. Ambiguity on this matter in recent years suggests the need to clarify the position of all parties.

b. Was any consultation done specifically on this matter?

Answer: This subject was raised many times during consultations, particularly in Inuit communities where most participants were opposed to the idea of keeping polar bears in zoos.

c. Depending on the answer of A and B, should there be an action added for developing policy or understanding on how to deal with orphaned cubs?

Answer: This action has not been added due to several reasons. First, the lack of consensus about the role that zoos can play must be addressed in order to identify the suite of options when faced with an orphaned cub. Perhaps more importantly, it is not clear how orphaned cubs will be dealt with whenever a TAT is established and under any policies on the defense of life and property. Therefore, while we agree that clarity around this question is necessary, we consider that it will come from a combination of the management plan's actions, rather than from one that is specific to this question. That said, the parties are not opposed to the addition of a specific action on this matter should the boards request it.

d. What is the author's point of view on how the management of orphaned cubs should interact with any TAT limitations that may be put in place?

Answer: The authors consider that the determination of whether/how the management of orphaned cubs should be considered when TAT limitations are put in place is under the authority of the Boards. This explains the absence of opinion and recommendations on the matter within the management plan.

Question 13: Starting on Line 269 of Appendix A, there is a statement that reads "There are three Nunavik Inuit communities (Inukjuak, Umiujaq, and Kuujjuaraapik) and three coastal Cree communities (Whapmagoostui, Waskaganish, and Chisasibi) that potentially harvest from this subpopulation". The 5-year average reported harvest for the 2014/15 to 2018/19 period is 12.4 bears per year."

a. Why was this worded to imply that there is a deliberate harvest by 3/5 coastal Cree communities, when this is in fact not true? The polar bear is not actively harvested for sustenance or cultural practices by the Cree of the EMR and this text leaves the reader the impression that the Cree purposely harvested some of these bears. Data compiled by the Quebec government for the period 2001 to 2016/17 do not show any harvest by the Cree. Rather all bears killed by the Cree during this period were Defense of Life and Property kills. This distinction is important. Further, perhaps mention of the Nunavik communities should be kept separate from the EMR communities to illustrate the distinction between deliberate harvest vs DLP kills applied to the TAT?

Answer: In this paragraph, the word "harvest" is used to describe all types of human-caused mortality of a polar bear, whether it is the result of a targeted hunt or a kill in defense of life and property. Whether a reported harvest results from a subsistence hunt or a kill in defense of life and property does not have an impact on the information presented in Appendix A, it is the numbers themselves that are important.

While there is no intent to suggest that Cree deliberately hunt polar bears, the authors considered it important that the language used reflects the fact that the Cree have the Right to hunt polar bears, as was illustrated by the fact that the JBNQA sets the guaranteed level of harvest of polar bears at 4 for the Crees. The harvesting rights of the Cree of Eeyou Istchee are not limited to DLP kills.

b. Why were just 3 of the 5 coastal Cree communities singled out if the potential to encounter polar bears exist along the entirety of the EMR coastline and offshore islands? There is the potential for all 5 coastal Cree communities in the EMR to kill polar bears in defense of life and property. In order to avoid confusion, perhaps this sentence could be re-written to clarify that the coastal Cree communities in the EMR do not actively harvest polar bears, that the only kills to occur over the past two decades have been DLP kills, and that all 5 coastal EMR Cree communities risk human-bear interactions while practising seasonal activities?

Answer: The text will be adjusted to add all 5 coastal Cree communities, as it is true that the Cree from all coastal communities have the chance of encountering a polar bear. As stated in the previous answer, the fact that the Cree do not actively hunt polar bears has no incidence on the inclusion of DLP kills in harvest statistics. The human-polar bear encounters are addressed in the Management plan, including DLP kills.

These final two questions are very general, and are intended to give the authors/parties the opportunity to point to relevant sections of the management which may not have been addressed in the questions above.

Question 14: We understand that this plan is not intended to infringe upon the full range of responsibilities of the Boards to set TAT and NQL. Were there any sections of the Management plan where this needed to be especially carefully considered?

Answer: As expressed in previous responses, there was certainly no intention to infringe upon the roles and authorities of the Boards. Throughout our efforts to develop this plan, the drafting team has been particularly careful to fully acknowledge and respect the roles and authorities of all organizations involved in the management of polar bears in the EMR, NMR and JBNQA territories (see Section 6).

Consequently, the drafting team does not consider that there are particular sections of the plan that are susceptible to infringe upon the roles and authorities of the EMRWB and NMRWB.

Question 15: In what specific ways will this management plan lead to better available information if the Board must make TAT or NQL decisions?

Answer: The management plan sets out the framework within which the availability of information can be assessed on an ongoing basis. It provides objectives, approaches and actions directed towards ensuring that all relevant information has been gathered, that knowledge sharing and communication between stakeholders is improved and, ultimately, that the decisions of the NMRWB and EMRWB are based on reliable and up-to-date knowledge.

The structure of the plan itself, including the 'evergreen' nature of the appendices, ensures the content relative to each subpopulation can be revised on an ongoing basis, as soon as new information has been collected/documented. Working collaboratively and within a framework which is agreed upon multilaterally is a good way to ensure that access is given to the best available information. This will help to guide and facilitate future TAT and NQL decisions.