

2. THE NWMB's INITIAL DECISION AND THE MINISTER REPLY AND REASONS

NWMB INITIAL DECISION: Increase the regional total allowable harvest by 9 bears, for a revised regional total allowable harvest of 12 bears, to be reviewed following the completion of the Government of Nunavut's three year genetic mark-recapture study, expected in 2017.

MINISTER'S REPLY AND REASONS: Reject the increase of 9 bears because (a) the current estimate for the subpopulation from simulations is 336. Even acknowledging that the population is increasing and generally healthy and that there are concerns with relying on modelling, the maximum harvest this population could sustain is 3 females and a maximum total allowable harvest of 9 bears (b) the Government of Nunavut has a genetic mark recapture study underway with results expected in 2017. It is premature to make a major change to the total allowable harvest without this information.

3. RATIONALE FOR THE NWMB'S FINAL DECISIONS

3.1 The NWMB's total allowable harvest decision

The NWMB's final decision:

1. Takes into account the seven points of consensus among the hearing parties ((see original decision letter, pg. 2 (Appendix B);
2. Takes into account that hearing parties agreed that the M'Clintock Channel polar bear subpopulation has likely increased, which is consistent with the 2013 M'Clintock Channel subpopulation assessment from Polar Bear Technical Committee and the International Union for the Conservation of Nature Polar Bear Specialist Group;
3. Reflects the Kitikmeot Wildlife Board, the three affected Hunters and Trappers Organizations and Qaujimaniliit evidence based on harvester observation and Inuit Qaujimajatuqangit that the M'Clintock Channel polar bear subpopulation is healthy and increasing;
4. Reflects the affected Hunters and Trappers Organizations and the communities of Cambridge Bay, Gjoa Haven and Taloyoak stated position that they are satisfied with the current abundance of the M'Clintock Channel polar bear subpopulation;
5. Should help address public safety concerns from problem polar bears entering the 3 communities;
6. Recognizes that using the 336 polar bear population estimate (the lowest estimate provided for the 2014 subpopulation size), that a total allowable harvest increase of 12 polar bears is still below the maximum sustainable harvest limit and should still allow for a population increase;

7. Considers the negative social, cultural and economic impact of the continued moratorium on Taloyoak residents and its impact on Cambridge Bay and Gjoa Haven residents with a reduced total allowable harvest;
8. Recognizes that the last population estimate for the M'Clintock Channel subpopulation is dated;
9. Considers the Minister's reasons for disallowance of the Board's decision;
10. Considers relevant comments from the hearing party submissions in response to the NWMB's initial decisions and the Minister's reply and reasons;
11. Takes into account the reasons supporting the NWMB's initial decision.

3.2 The NWMB's decision to review the total allowable harvest following completion of the Government of Nunavut's genetic mark-recapture study

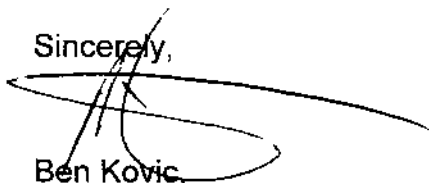
In 2014, the Government of Nunavut-Department of Environment began a three year polar bear genetic mark-recapture study in M'Clintock Channel. This study should provide an updated estimate of the subpopulation size by 2017. In its decision-making, the NWMB considered scientific evidence and Inuit Qaujimagatuqangit indicating a population increase, as well as the expected completion of an updated population assessment by 2017. The Board members agreed that increasing the total allowable harvest by nine bears, despite not having a current subpopulation estimate, is not considered a conservation concern since new information will be available in a short period of time. A review of the total allowable harvest following completion of the genetic mark-recapture study will provide an opportunity for the NWMB to make timely adjustments, if necessary.

4. Conclusion

The NWMB feels that their final decision demonstrates an approach to balancing scientific evidence and Inuit Qaujimagatuqangit, while also taking into consideration the ever-growing public safety concerns involving polar bears.

The NWMB looks forward to receiving your reply, as per Section 5.3.13 of the *Nunavut Land Claims Agreement*.

If you or your officials have any questions or concerns regarding the contents of this letter, please do not hesitate to contact the NWMB.

Sincerely,

Ben Kovic,
Chairperson of the
Nunavut Wildlife Management Board

Appendix A – Summary of M'Clintock Channel polar bear total allowable harvest public hearing record

Kitikmeot Regional Wildlife Board

Position: Requests a 15 polar bear increase in the total allowable harvest, resulting in a regional total allowable harvest of 18 bears (Kitikmeot Regional Wildlife Board request for NWMB decision (May 7, 2013) p. 1).

Evidence/Arguments:

- To help the M'Clintock Channel subpopulation to recover, there was a moratorium put in place between 2001 and 2003, followed by a quota of 3 shared between 2 communities for the subsequent years (Kitikmeot Regional Wildlife Board request for NWMB decision (May 7, 2013) p. 1).
- An Inuit knowledge study conducted by a local Hunters and Trappers Organization, as well as other studies in the area, have suggested that the number of polar bears in M'Clintock Channel has increased (Kitikmeot Regional Wildlife Board request for NWMB decision (May 7, 2013) p. 1)
- The moratorium and reduced total allowable harvest has had a huge and negative impact on Cambridge Bay, Taloyoak and Gjoa Haven (Kitikmeot Regional Wildlife Board request for NWMB decision (May 7, 2013) p. 1).
- The Moratorium and reduced quota has put a serious social strain on Inuit by restricting opportunities for hunters to teach their children the cultural importance of hunting polar bears, preparation of polar bear meat, and distribution of meat within the communities (Kitikmeot Regional Wildlife Board request for NWMB decision (May 7, 2013) p. 1).
- The moratorium and reduced total allowable harvest has changed the travel patterns and observation of traditional polar bear hunting areas.
- Knowledge from hunters indicates that polar bears move between the subpopulations of Gulf of Boothia and M'Clintock Channel (Kitikmeot Regional Wildlife Board request for NWMB decision (May 7, 2013) p. 2).
- Hunters and local knowledge indicate that there are more polar bears in this area (Kitikmeot Regional Wildlife Board request for NWMB decision (May 7, 2013) p. 2).
- The Government of Nunavut has begun consultations with communities and is planning to begin a new survey of the M'Clintock Channel subpopulation (Kitikmeot Regional Wildlife Board request for NWMB decision (May 7, 2013) p. 2).

- The Kitikmeot Regional Wildlife Board does not feel that there is a conservation concern for this subpopulation by increasing the total allowable harvest while waiting for the completion of the Government of Nunavut's survey (Kitikmeot Regional Wildlife Board request for NWMB decision (May 7, 2013) p. 2).
- The Memorandum of Understanding states that the total allowable harvest will be based on the "guided harvest rate" after seven years when the total allowable harvest had been first established based on the "conservative harvest rate". The "guided harvest rate" is based on Inuit Qaujimagatuqangit, perception of trend, and probability of increase or decline (Kitikmeot Regional Wildlife Board request for NWMB decision (May 7, 2013) p. 2).
- It was Inuit that first notified the government that the M'Clintock Channel polar bear subpopulation had decreased; again it is Inuit now saying that the population has increased (Kitikmeot Regional Wildlife Board written submission (May 20, 2014) p.1).
- Two population viability analyses were conducted with RISKMAN (version 1.9.007), which resulted in a result of 390 animals based on a number of assumptions but primarily influenced if a stable age distribution was assumed and 490 animals if a stable age distribution was not assumed. (Kitikmeot Regional Wildlife Board written submission (May 20, 2014) p. 2).
- According to the 2013 Polar Bear Administrative Committee approved Polar Bear Technical Committee Polar Bear Status table, the recent trend for M'Clintock Channel was assessed as likely to have increased (Kitikmeot Regional Wildlife Board written submission (May 20, 2014) p.2).
- According to the 2013 World Conservation Union Polar Bear Specialist Group Polar Bear Status table, the current trend for M'Clintock Channel was assessed as increasing (Kitikmeot Regional Wildlife Board written submission (May 20, 2014) p.2).
- Van Coeverden de Groot et al. 2013 detected 59-82 individuals from a relatively small area in M'Clintock Channel using a non-invasive polar bear hair snagging project (Kitikmeot Regional Wildlife Board written submission (May 20, 2014) p.2).
- The bears that are sighted in M'Clintock Channel appear to be healthy (Public Hearing Transcript (June 17, 2014) p. 26 lines 12-15).

Government of Nunavut – Department of Environment

Position: Supports an increase in the total allowable harvest of up to 6 bears (Public Hearing Transcript (June 17, 2014), p.72, lines 21-23; Government of Nunavut written submission (May 3, 2014), p.3).

Evidence/Arguments:

- A new population estimate will be tentatively available in 2017 which will allow the re-evaluation of the status and sustainable harvest levels for the M'Clintock Channel subpopulation (Government of Nunavut written submission (May 3, 2014), p.3).
- Agrees with the Regional Wildlife Organization that the M'Clintock Channel subpopulation has increased (Public Hearing Transcript (June 17, 2014), p.70, lines 19-25)
- Using vital rates from the 1998 to 2000 research and harvest data between 2000 and 2012 in simulation models, the estimated number of bears in M'Clintock Channel is 336 (SE 130) (Government of Nunavut written submission (May 3, 2014), p.2).
- At the current harvest levels, it would take until 2027 to reach the target number of 750 bears as per the 2005 Memorandum of Understanding, assuming the vital rates of the 2000 study did not change significantly (Government of Nunavut written submission (May 3, 2014), p.3).
- The development of the new Nunavut Polar Bear Management Plan will bring opportunities to discuss and consider future desired management objectives and goals for the M'Clintock Channel polar bear subpopulation (e.g., target number for M'Clintock Channel) (Government of Nunavut written submission (May 3, 2014), p.3).
- During consultations for the development of a new polar bear co-management plan, the Hunters and Trappers Organization boards and members of the communities of Cambridge Bay, Gjoa Haven and Taloyoak stated they were satisfied with the current abundance of the M'Clintock Channel subpopulation (Public Hearing Transcript (June 17, 2014), p.72, lines 14-18).
- Will support an increase in the total allowable harvest of up to six polar bears to address the public safety concerns (Public Hearing Transcript (June 17, 2014), p.72, lines 21-23; Government of Nunavut written submission (May 3, 2014), p.3)
- A small increase in the total allowable harvest for a short period of time over three years (until the release of the survey results) is not considered a conservation concern (Public Hearing Transcript (June 17, 2014), p.73, lines 5-7)
- The predicted population trend for the M'Clintock Channel subpopulation with a total allowable harvest of 18 bears over a 12 year period shows a decline in abundance (Government of Nunavut written submission (May 3, 2014), p.5 (figure 2)).

- The currently available data for the M'Clintock Channel polar bear subpopulation is dated. It is uncertain how environmental changes, low polar bear densities and current sex and age structure of bears have affected population growth and distribution, even though the population was managed for an increase since 2000 (Government of Nunavut written submission (May 3, 2014), p.3).
- Using very outdated information in modelling is very risky and could create a conservation problem if used and used too liberally (Public Hearing Transcript (June 17, 2014), p.73, lines 11-14).
- Recognizes that an increase in the total allowable harvest for a subpopulation that was in decline without updated scientific information may be difficult to defend on an international level (Public Hearing Transcript (June 17, 2014), p.74, lines 16-24)

Nunavut Tunngavik Incorporated

Position: Supports the proposal put forth by the Kitikmeot Regional Wildlife Board (Public Hearing Transcript (June 17, 2014), p.126, lines 2-4; Nunavut Tunngavik Incorporated Written Submission (May 2014), p.1).

Evidence/Arguments:

- Recognizes that the communities of the Kitikmeot region have endured hardships over the past 12 years as a result of the moratorium and reduced total allowable harvest (Nunavut Tunngavik Incorporated Written Submission (May 2014), p.1).
- Because of the moratorium and reduced total allowable harvest for Cambridge Bay and Gjoa Haven, elders, hunters and seamstresses from all these communities are unable to teach these skills to their children and grandchildren (Nunavut Tunngavik Incorporated Written Submission (May 2014), p.1).
- The population is considered to be increasing by both scientists and Inuit. Therefore, a modest increase in the total allowable harvest is appropriate (Nunavut Tunngavik Incorporated Written Submission (May 2014), p.1).
- Problem bears are more frequent and are causing a safety concern (Public Hearing Transcript (June 17, 2014), p. 125, lines 2-7).
- More emphasis needs to be placed on Inuit Qaujimajatuqangit (Public Hearing Transcript (June 17, 2014), p.91 lines 11-13).
- Based on Inuit Qaujimajatuqangit, polar bears in M'Clintock Channel migrate to the Gulf of Boothia. When the M'Clintock Channel population decreased, the Gulf of Boothia population increased (Public Hearing Transcript (June 17, 2014), p.30 line 17 – p.31 line 12).
- The Government of Nunavut used old data to reduce the total allowable harvest for the Baffin Bay polar bear subpopulation. Therefore, it is only fair to consider

old data to increase the harvest in M'Clintock Channel (Public Hearing Transcript (June 17, 2014), p. 40, lines 9-24).

- Recognizes that caution should be taken when using RISKMAN simulations (Public Hearing Transcript (June 17, 2014), p. 97, lines 2-3).
- RISKMAN simulations indicate that the M'Clintock Channel subpopulation has likely increased (Public Hearing Transcript (June 17, 2014), p. 64, line 1-2).
- It is quite likely that the M'Clintock Channel age distribution was disturbed or perturbed because they had been experiencing a high harvest if you assume multiple age classes (Public Hearing Transcript (June 17, 2014) p. 60 lines 11-14).
- It is fair to apply recruitment and survival values for the simulation from a data set that was completed in 2000 because the simulation is occurring immediately after these results were produced, from 2000 to 2014 (Public Hearing Transcript (June 17, 2014) p. 61 lines 9-19).
- The RISKMAN simulation indicate that a total allowable harvest of 18 would at a minimum, maintain the population at the estimates that are provided in 2014 and potentially decrease the subpopulation (Public Hearing Transcript (June 17, 2014) p. 64 lines 8-13).
- The 3 year moratorium and then 12 years of a reduced harvest of 3 has allowed the population to recover to a certain level. This level is still likely below the target population of 750, but it is also likely to allow some increase in harvest. But there will be obvious impacts on the growth rate of the population (Public Hearing Transcript (June 17, 2014) p. 67 lines 5-11).
- According to Inuit Qaujimagatuqangit polar bears are only minimally affected by climate change and can survive very well in the water (Public Hearing Transcript (June 17, 2014), p. 122, lines 18-20).

Environment Canada

Position: Supports maintaining the current total allowable harvest of 3 or a modest increase (Public Hearing Transcript (June 17, 2014), p. 146, lines 15-17; Environment Canada written submission (May 14, 2014) p.2).

Evidence/Arguments:

- To reach the Memorandum of Understanding's target population size of 750 bears, harvest levels must necessarily be below the maximum sustainable harvest (Environment Canada written submission (May 14, 2014) p.1).
- According to the most recent (2013) Polar Bear Technical Committee status table, the M'Clintock Channel subpopulation has a recent trend of 'likely increase'

on account of the quota being below the maximum sustainable yield (Environment Canada written submission (May 14, 2014) p.1).

- In 2009, hunters in the region commented that an increasing number of polar bears were being observed in the subpopulation. However, the most recent Aboriginal Traditional Knowledge assessment (in the 2013 status table) has classified the subpopulation as 'stable' at 284 bears (Environment Canada written submission (May 14, 2014) p.1-2).
- For M'Clintock Channel, using the 4.5% rule may permit a harvest of as many as 13 polar bears per year. However, given the lack of up-to-date information and uncertainty, it is recommended that the precautionary principle be applied and that the total allowable harvest does not reach this maximum level (Environment Canada written submission (May 14, 2014) p.2).
- An increase in the total allowable harvest to 18 polar bears would almost certainly contribute to a population decline (Environment Canada written submission (May 14, 2014) p.2).
- It is vital that the harvest level be re-considered once again when the ongoing Government of Nunavut survey has been completed and a new population estimate has been obtained (Environment Canada written submission (May 14, 2014) p.2).
- The parameters used in the RISKMAN simulations are dated and adding considerable uncertainty to the results ((Public Hearing Transcript (June 17, 2014), p. 38, lines 2-14).
- Projections carry with them uncertainties and it is probably best to work with a number that we have confidence in, even though it may not be up to date, and on that basis, consider a modest increase that should not have any negative impact on the future of this population (Public Hearing Transcript (June 17, 2014), p. 137, lines 17-21).
- The modest increase would be less than 10 and probably close to what the Government of Nunavut proposed (Public Hearing Transcript (June 17, 2014), p. 141, lines 16-19).
- Canada's management of polar bear continues to be under intense international scrutiny. Therefore, it is important for Nunavut's polar bear trade that decision makers ensure that harvest levels are sustainable and follow sound conservation principles (Environment Canada written submission (May 14, 2014) p.2).

Ekaluktutiak Hunters and Trappers Organization

Position: Supports an increase in the total allowable harvest (Public Hearing Transcript (June 17, 2014), p. 149, lines 16-17).

Evidence/Arguments:

- There are lots of polar bears around, especially in the Hadley Bay area (Public Hearing Transcript (June 18, 2014), p. 165, lines 22-24; p. 168 lines 1-8).
- Polar bears are coming closer to the communities than what they did in the past (Public Hearing Transcript (June 17, 2014), p. 44, lines 1-7).
- The number of polar bears is too high (Public Hearing Transcript (June 17, 2014), p. 149, lines 16-17).
- Not enough weight is put on Inuit Qaujimagatuqangit (Public Hearing Transcript (June 17, 2014), p. 150, lines 3-6).
- There has not been enough consultation with the community on surveys and management decisions (Public Hearing Transcript (June 18, 2014), p. 165, lines 4-9).

Gjoa Haven Hunters and Trappers Organization

Position: Supports an increase in the total allowable harvest (Public Hearing Transcript (June 17, 2014), p. 128 lines 8-13; Public Hearing Transcript (June 18, 2014), p. 185 lines 12-17).

Evidence/Arguments:

- There has not been enough consultation with the community on surveys and management decisions (Public Hearing Transcript (June 17, 2014), p. 44, lines 14-20).
- Frustrated that the community has not seen any form of compensation since the moratorium (Public Hearing Transcript (June 17, 2014), p. 128, lines 14-24).
- An increasing number of bears are entering the community and are presenting danger to the community (Public Hearing Transcript (June 17, 2014), p. 151, lines 6-16; Public Hearing Transcript (June 18, 2014), p. 191, lines 8-12).
- Since the moratorium and reduced total allowable harvest, the M'Clintock Channel polar bear population has increased (Public Hearing Transcript (June 18, 2014), p. 191, lines 18-20).

Ikpinguak Hunters and Trappers Organization

Position: Supports an increase in the total allowable harvest (Public Hearing Transcript (June 18, 2014), p. 200, lines 9-11).

Evidence/Arguments:

- According to Inuit knowledge, polar bears migrate between M'Clintock Channel and Gulf of Boothia. When there was a decrease in M'Clintock Channel during the last survey, there was also an increase in the Lord Mayor Bay area of the Gulf of Boothia (Public Hearing Transcript (June 17, 2014), p. 104, lines 10-19).
- There is a book published by National Geographic called "Who's My Father?" which indicates that bears from M'Clintock Channel and Gulf of Boothia do mate (Public Hearing Transcript (June 17, 2014), p. 104 line 24 – p. 105 line 5).
- Frustrated that Government is not listening to Inuit Qaujimajatuqangit (Public Hearing Transcript (June 17, 2014), p. 105 lines 3-5).
- More problem bears are entering the community and hunting camps, which is creating a safety concern (Public Hearing Transcript (June 18, 2014), p. 193 lines 11-13; p. 193 lines 23-25; p. 200, lines 9-11).
- Since the moratorium in M'Clintock Channel was put in place, less people from the community are travelling there. This is having social impacts because knowledge on M'Clintock Channel is no longer being passed on to younger generations (Public Hearing Transcript (June 18, 2014), p. 194 lines 4-8).
- The moratorium is having a huge financial impact on the community (Public Hearing Transcript (June 18, 2014), p. 194 lines 21-25).

Qaujimaniliit

Position: Supports an increase in the total allowable harvest (Public Hearing Transcript (June 17, 2014) p. 36 lined 23-25).

Evidence/Arguments:

- Problem bears are more frequent and are creating human safety concerns and property damage. In the past, problem bears were not an issue because they could harvest the bears that were sighted (Public Hearing Transcript (June 17, 2014), p. 40, lines 3-16).
- The moratorium emotionally hurt the affected communities and is causing a problem (Public Hearing Transcript (June 17, 2014), p. 49, lines 1-5).
- Groceries are costly and the people need polar bears as a source of food (Public Hearing Transcript (June 18, 2014), p. 213, lines 20-23 & p. 180 lines 22-25).
- Changes in ice conditions and melting sea ice are not a concern for polar bears (Public Hearing Transcript (June 18, 2014), p. 179, lines 4-16).

International Union for Conservation of Nature Polar Bear Specialist Group

Position: Supports maintaining the current total allowable harvest (Polar Bear Specialist Group Written Submission (May 13, 2014) p.1).

Evidence/Arguments:

- There does not appear to be any new scientific information which the PBSG could review to evaluate whether a 600% increase in the TAH could be sustained (Polar Bear Specialist Group Written Submission (May 13, 2014) p.1).
- Recommends that the NWMB apply the precautionary principle and wait for the results of the proposed new survey of the M'Clintock Channel subpopulation that is to be conducted by Government of Nunavut (Polar Bear Specialist Group Written Submission (May 13, 2014) p.1).

Sarah Uhlemann (Center for Biological Diversity)

Position: Supports maintaining the current total allowable harvest (Center for Biological Diversity Written Submission (May 26, 2014), p.1).

Evidence/Arguments:

- The most recent M'Clintock Channel subpopulation abundance estimate from a 2000 survey is 284 ± 59.3 , which was substantially lower than previous estimates from the 1970s of 900 bears (Center for Biological Diversity Written Submission (May 26, 2014), p.1).
- Scientists indicate that the subpopulation's depletion was caused by the "historical level of harvest" (Center for Biological Diversity Written Submission (May 26, 2014), p.1).
- Polar Bear Specialist Group noted that "even low harvests (3-4 bears per year) in M'Clintock Channel will extend the time required for recovery to 50 years or more" (Center for Biological Diversity Written Submission (May 26, 2014), p.1).
- The M'Clintock Channel polar bear subpopulation remains "reduced," and we are not aware of any new scientific information indicating the population has fully recovered or confirming an increasing trend (Center for Biological Diversity Written Submission (May 26, 2014), p.1).
- M'Clintock Channel subpopulation is threatened by climate change and populations are expected to decline substantially due to decreasing sea ice (Center for Biological Diversity Written Submission (May 26, 2014), p.1).

Appendix B – NWMB's initial decision letter to the Minister (October 20, 2014)

(9) bears to the regional total allowable harvest in the Nunavut Settlement Area for the M'Clintock Channel polar bear subpopulation, resulting in an overall regional total allowable harvest of twelve (12) bears.

FURTHER RESOLVED that the NWMB review the level of total allowable harvest for the M'Clintock Channel polar bear subpopulation following completion of the Government of Nunavut's three year genetic mark-recapture study, expected in 2017.

2. MAIN POINTS OF AGREEMENT AND DISAGREEMENT AMONG HEARING PARTIES

2.1 Main points of agreement among hearing parties

1. As a tool for population modelling, the predictions produced by the computer program RISKMAN are not necessarily reliable.
2. The RISKMAN predictions presented in the Kitikmeot Regional Wildlife Board's supplementary submission is not intended to provide evidence supporting a total allowable harvest of eighteen (18), but it does intend to provide evidence that this polar bear subpopulation is increasing.
3. The M'Clintock Channel polar bear subpopulation is increasing and the bears encountered by Inuit are generally healthy.
4. The low level of total allowable harvest in place for many years has had serious social, cultural and economic impacts on Inuit in the affected communities.
5. No Inuit Qaujimajatuqangit or traditional ecological knowledge studies have been undertaken for this subpopulation since at least 2005, nine years ago.
6. A total allowable harvest increase is in order.
7. Both science and Inuit Qaujimajatuqangit need to be carefully considered in deciding upon an appropriate increase in the level of total allowable harvest.

2.2 Main points of disagreement among hearing parties

1. The parties disagreed on what the level of total allowable harvest should be. Recommendations on the total allowable harvest ranged from remaining with the status quo (3) to an increase of 15 bears.

3. RATIONALE FOR THE NWMB DECISIONS

3.1 The NWMB's total allowable harvest decision

During its decision-making, the NWMB carefully considered the best available scientific information and Inuit Qaujimajatuqangit. The most recent abundance estimate for the M'Clintock Channel polar bear sub-population is based on results from a mark-recapture study completed in 2000, which estimated an abundance of 284 bears. The Government of Nunavut Department of Environment and the Kitikmeot Regional Wildlife Board provided estimates of the current population size based on population viability analyses. In their simulations, both hearing parties used vital rates estimated from polar bear mark-recapture research in M'Clintock Channel between 1998 and 2000 and harvest data collected between 2000 and 2012. The Government of Nunavut estimated a population size of 336 bears (standard error = 130) and the Kitikmeot Regional Wildlife Board estimated a population size of 380 bears (if a stable age distribution² is assumed) or 490 bears (if a stable age distribution is not assumed).

As listed above in Section 2.1, hearing parties agreed that the population of polar bears in M'Clintock Channel has likely increased. This trend is consistent with the Polar Bear Technical Committee's and International Union for the Conservation of Nature Polar Bear Specialist Group's assessment as presented in both organizations' 2013 status tables. In addition, results from a non-invasive polar bear hair snag study conducted between 2006 and 2009 detected 59-82 individuals in a relatively small area of M'Clintock Channel. Although this research is still on-going and cannot provide estimates of population size, the number of bears detected and the low number of individuals that were re-sampled is evidence that this subpopulation has increased.

Furthermore, the Kitikmeot Regional Wildlife Board, the three affected Hunters and Trappers Organizations and Qaujimaniliit provided the NWMB with evidence based on harvester observations and Inuit Qaujimajatuqangit that the M'Clintock Channel polar bear subpopulation is healthy and increasing in size. Community delegates stated that more bears are entering the communities compared to the past, which is causing concern for public safety. Nunavut Tunngavik Incorporated and the Ikpinguak Hunters and Trappers Organization also provided evidence based on Inuit Qaujimajatuqangit that polar bears move between the M'Clintock Channel and Gulf of Boothia subpopulation boundaries and that when the subpopulation size in M'Clintock Channel decreased, the Gulf of Boothia subpopulation increased.

² A stable age distribution assumes that each age class or stage grows at a constant rate; which may not have been the case for the M'Clintock Channel subpopulation (See hearing transcript, Day 2, pages 59-60).

In its decision-making, the NWMB also considered the management objective, as per the 2005 polar bear management memorandum of understanding, to increase the subpopulation size to 750 bears. As stated in the Government of Nunavut's written and oral submissions, during consultations for the development of the new Nunavut Polar Bear Co-Management Plan, community members and the three affected Hunters and Trappers Organizations stated they were satisfied with the current abundance of bears in M'Clintock Channel³. However, recognizing that a modification of this subpopulation's management objective will not likely occur until the Nunavut Polar Bear Co-Management Plan is further developed, the NWMB attempted to reach a precautionary balance in the management of M'Clintock Channel polar bear. Using 336 bears, the lowest estimate provided for the 2014 subpopulation size, a total allowable harvest of twelve bears is still considered below the maximum sustainable harvest limit and should still allow for an increase in the subpopulation size, albeit at a slower rate.

Finally, the NWMB took under consideration the social, cultural and economic impact of the continued moratorium in Taloyoak, and reduced total allowable harvest in Cambridge Bay and Gjoa Haven. An increase in the total allowable harvest will provide an opportunity for elders and harvesters from these three communities to pass on their skills and practices to younger generations, which is an important part of Inuit culture. As well, although the allocation of tags is done at the discretion of the Kitikmeot Regional Wildlife Board, increasing the total allowable harvest by nine bears would likely allow for the moratorium in Taloyoak to be lifted, which will relieve some of the social and economic impact felt by this community.

3.2 The NWMB's decision to review the total allowable harvest following completion of the Government of Nunavut's genetic mark-recapture study

The NWMB recognizes that the last population estimate for the M'Clintock Channel polar bear subpopulation is dated, and that there are risks and uncertainties associated with population estimates based on population viability analyses and RISKMAN simulations. In 2014, the Government of Nunavut Department of Environment began a three year polar bear genetic mark-recapture study in M'Clintock Channel. This study should provide an updated estimate of the subpopulation size by 2017. In its decision-making, the NWMB considered scientific evidence and Inuit Qaujimaqatugangit indicating a population increase, as well as the expected completion of an updated population assessment by 2017. The Board members agreed that increasing the total allowable harvest by nine bears, despite having a current subpopulation estimate, is not considered a conservation concern since new information will be available in a short period of time. A review of the total allowable harvest following completion of the genetic

³ See Public Hearing Transcript (June 17, 2014) p. 67 lines 7-11 and p. 72 lines 14-18 and Government of Nunavut Department of Environment written submission.

mark-recapture study will provide an opportunity for the NWMB to make timely adjustments, if necessary.

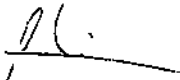
4. Conclusion

As per Section 5.3.8 of the *Nunavut Land Claims Agreement*, the NWMB is hereby forwarding its M'Clintock Channel polar bear subpopulation regional total allowable harvest decisions to you for your review and consideration.

The NWMB would also like to take this opportunity to congratulate the Government of Nunavut Department of Environment on their successful first year of polar bear genetic mark-recapture data collection in M'Clintock Channel. The NWMB looks forward to seeing the final results of this much needed research in 2017.

If you or your officials have any questions or concerns regarding the contents of this letter, please do not hesitate to contact the NWMB.

Sincerely,



Ben Kovic,
Chairperson of the
Nunavut Wildlife Management Board

Attachment: 1 (*Appendix A: Summary of Public Hearing Record*)