



August 8, 2023

Tommy Palliser
Executive Director
Nunavik Marine Region Wildlife Board

Miles Smart
Executive Secretary
Hunting, Fishing and Trapping Coordinating Committee

Re: New information related to the Davis Strait polar bear subpopulation for consideration

Dear Tommy Palliser and Miles Smart,

As you know, management authority for the Davis Strait (DS) polar bear subpopulation is a shared responsibility of the governments of Nunavut, Québec, Newfoundland and Labrador, Canada, and Greenland as well as the Wildlife Management Boards and Advisory Councils, including Nunavik Marine Region Wildlife Board (NMRWB), Hunting, Fishing and Trapping Coordinating Committee (HFTCC), Nunavut Wildlife Management Board (NWMB), and Torngat Wildlife and Plants Co-Management Board (TWPCB). The Government of Canada will continue to inform Greenland of new information as it becomes available.

We are writing to inform you that new scientific information is available on the DS polar bear subpopulation. Additionally, the DS Technical Working Group has prepared a subpopulation status report to summarize existing information (scientific and Indigenous knowledge) about DS polar bears, habitat/environmental conditions, and harvest levels. The Government of Nunavut has prepared a submission for a request for decision to the NWMB to reassess the DS Total Allowable Harvest for their regular meeting on August 30, 2023. As there is a need to consider neighbouring jurisdictions in decisions, we are requesting that this new information is considered by the NMRWB and HFTCC in relation to harvest by Nunavik Inuit within the DS subpopulation. In the absence of a coordinated process among jurisdictions involved to establish a harvest sustainable at a subpopulation level, and subsequently allocate harvest among stakeholders, we encourage the NMRWB and the HFTCC to share any information and/or recommendations regarding current harvest levels and needs of the Nunavik Inuit, with respect to the DS polar bear subpopulation with the NWMB. Such information, views, and recommendations may feed into discussions within the NWMB, while being responsive to other party's in the management of this shared resource.

The following attachments are provided for your consideration:

1. Dyck, M., Dunham, K.D., Ware, J.V., Koons, D.N., Regehr, E.V., Hosmer, D.W., Derocher, A.E., Dale, A. Pisapio, J., and Szor, G. 2022. *Re-estimating the abundance of the Davis Strait polar bear subpopulation by genetic mark-recapture*. Final Report, Government of Nunavut, Department of Environment, Iglulik.
2. *Davis Strait Polar Bear Subpopulation Status Report (hereafter, Subpopulation Status Report)*.

Re-estimating the abundance of the Davis Strait polar bear subpopulation by genetic mark-recapture

A two-year genetic mark-recapture (biopsy) study was conducted in 2017 and 2018 involving all co-management partners with authority in DS to re-estimate the abundance of the DS polar bear subpopulation. The study included genetic biopsy samples collected in 2017 and 2018, live-capture data collected 2005-2007, and harvest recovery data collected annually from 2005-2018. Estimated abundance for the 2017-2018 period was 2,015 bears [95% CRI 1,603 - 2,588]. Polar bears were less likely to be in poor body condition in 2017-2018, compared to previous 2005-2007 physical mark-recapture, adult males and solitary females were in better body condition than subadults and females with dependent offspring. Mean cub-of-the-year and yearling recruitment appears to be sufficient to sustain the subpopulation.

Subpopulation Status Report

The Subpopulation Status Report was prepared by the DS technical working group, which comprises of representatives with management authority in DS (including governments, Indigenous Land Claims Organizations, and Wildlife Management Boards). It includes information about the current and historical abundance estimates, current and historical harvest levels, Indigenous knowledge, and scientific studies completed for the subpopulation.

Some additional considerations

Subpopulation status

- **In 2022, Canada's Polar Bear Technical Committee (PBTC) assessed the recent scientific trend in abundance for DS polar bear subpopulation to be "likely declined" based on scientific data.** The PBTC assessed DS abundance as 'likely declined' relative to the previous study (2005-2007) given that there was a 0.896 probability that subpopulation growth was <1 and thus the subpopulation most likely declined over this period. The PBTC also considered the potential for high harvest, at the time of the survey the DS subpopulation had been managed in Nunavut for a population reduction.
- **The PBTC's Indigenous knowledge trend of the DS subpopulation is 'increased'.** The assessment is based on information from a number of published sources, including the report completed by the NMRWB in 2019. In all studies, participants noted an increase in polar bear abundance since the 1970s (across Nunavik communities as well as hunting, camping, and traveling areas of Inuit from Kimmirut and Pangnirtung in Nunavut), and since the 1990s throughout Labrador.

Current harvest quotas and reported harvest (see full DS subpopulation status report for more details)


- Current harvest quotas for the DS subpopulation are as follows:
 - 61 polar bears per year in Nunavut (established in 2012/2013 under an assumption of 2:1 male to female harvesting). The current Total Allowable Harvest of 61 can include up to 50% female bears based on a 2019 decision from the NWMB.
 - 12 polar bears from February 1st to June 30th in Labrador (established in 2012, managed partially by sex with prohibitions on the harvest of females with cubs).

- 3 polar bears in Greenland (established in 2006 with mandatory reporting).
- There is no current annual limit in place for Nunavik Inuit harvesting within DS. Since the 2007/2008 harvest season (after the 2005-2007 study period), reported Nunavik take has averaged 25.5 polar bears per year with a sex ratio of approximately 1.9 males to 1 female from 1994/95 to 2021/22.
- Thus, the combined annual limit for Nunavut (61), Labrador (12), Greenland (3), and the average annual reported take by Nunavik Inuit (25.5) is **approximately 101 polar bears per year for the subpopulation as a whole**. Under the previous 2005-2007 abundance estimate of 2,158 bears, this equates to a removal rate of 4.7%. Under the current 2017-2018 abundance estimate of 2,015, this equates to a removal rate of 5%.
- However, an annual harvest of 63.4 polar bears per year has been estimated based on data reported to management authorities for the 5-year interval extending from 2017/18 to 2021/22 (38.0 in Nunavut, 10.6 in Labrador, 13.0 in Nunavik, and 1.8 in Greenland). Under the previous 2005-2007 abundance estimate of 2,158 bears, this equates to a removal rate of 2.9%. Under the current 2017-2018 abundance estimate of 2,015, this equates to a removal rate of 3.1%.

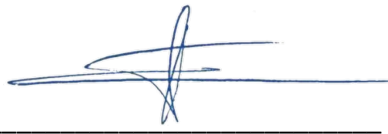
We would like to acknowledge the hard work and collaboration by co-management partners to complete the Polar Bear Management Plan for Québec, the Eeyou Marine Region and the Nunavik Marine Region (hereafter the QC-EMR-NMR Management Plan). Approach 1.3 of the QC-EMR-NMR Management aims to *revise the harvest registration process with the goal of achieving complete reporting of all human-caused mortality of polar bears*. Effective management and the long-term persistence of polar bears relies on the collection of accurate harvest information. The governments of Canada, Nunavut, and Québec are committed to continuing to work with co-management partners toward an effective polar bear management system in Nunavik Marine Region and Mainland Québec.

We look forward to hearing from you with respect to your consideration of the provided information.

Sincerely,



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 Regulatory Affairs Division, Canadian
 Wildlife Service
 Environment and Climate Change
 Canada



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