



**SUBMISSION TO THE**

**NUNAVUT WILDLIFE MANAGEMENT BOARD**

**FOR**

**Information:**

**Decision: X**

**Issue:** Polar Bear Total Allowable Harvest Recommendations for the Kane Basin Sub-population

**Background:**

- The last comprehensive population study for the Kane Basin (KB) polar bear subpopulation, which is shared with Greenland, was conducted between 1992 and 1997. The 1997 population estimate was 164 bears, and the population was predicted to likely decline given the low population growth rate at that time. In 2006 Greenland implemented a quota for the KB subpopulation that reduced the Greenlandic take in response to likely unsustainable harvesting.
- Due to the high uncertainty of the population status which was caused in part by a low population growth rate, harvest uncertainties and changing environmental conditions, the Canada-Greenland Joint Commission on Polar Bear (JC) recommended that a new study needed to be conducted to ascertain an up-dated status of this subpopulation. The JC tasked the Scientific Working Group (SWG) with that study.
- A new non-invasive genetic mark-recapture study was conducted between 2012 – 2014. The new abundance estimate for the KB polar bear subpopulation is 357 bears (95% CI: 221 – 493), while the 1997 estimate was 224 bears.
- Following the final report of the Baffin Bay (BB) and Kane Basin (KB) polar bear study, the JC tasked the SWG with providing harvest recommendations through a Harvest Risk Assessment study.
- The GN consulted with affected communities in January 2017 on the results of the SWG scientific study and DOE traditional knowledge study for BB and KB Polar Bear subpopulations.

## Current Status:

- The JC met in October 2017 to determine Total Allowable Harvest (TAH) recommendations based on the results of the Harvest Risk Assessment completed by the SWG.
- The SWG harvest risk analysis recommended a possible removal of up to 10 (2.8%) bears from the KB polar bear subpopulation as a result of the high uncertainty in vital rates and overall small sample sizes during the population study.
- Due to demand and based on the fact that the population estimate is higher than the previous numbers, Greenland recommended a harvest of 15 bears (4.5%).
- Greenland requested an allocation of 10 bears for Greenland and 5 for Nunavut as the community of Grise Fiord very seldom harvests bears from this population. Greenland later lowered their quota to 9 bears
- Even if a harvest of 4.5% is approved, it is unlikely that the actual joint removal would annually exceed the SWG recommendation of 10 bears (2.8%)
- The JC did not settle on a recommended harvest from the KB subpopulation due to the fact that there was no representation from Grise Fiord at the JC meeting.
- GN and NTI had a call with Grise Fiord HTO on January 9, 2017 to discuss the SWG recommendations and Greenland harvest proposal. The HTO identified they want to maintain their 5 tags for KB and have no concern with Greenland harvest of 9.
- The Department of Environment (DOE) will conduct in person consultations with the Grise Fiord HTO in early February 2018.
- A consultation summary report will be provided to the board as soon as possible after the community consultations for consideration at the March meeting.

## Recommendations:

1. DOE recommends **no change** to the current Kane Basin TAH of 5 bears.