

DFO 20076  
Rm 54

## SUBMISSION TO THE NUNAVUT WILDLIFE MANAGEMENT BOARD

### FOR

Information: X

Decision:

Issue: Sustainable Removals of Eastern Arctic Bowhead Whales

### **Background:**

In January 2007, Fisheries & Oceans Canada (DFO) scientists updated the Nunavut Wildlife Management Board about recent genetics and satellite tagging studies on Eastern Arctic (EA) Bowhead whales, initial abundance estimates resulting from aerial surveys, and offered preliminary advice on sustainable removals from this stock. In June 2007, DFO presented the same research findings to the Scientific Committee of the International Whaling Commission (IWC), who recommended that the aerial survey data be re-analysed. The survey re-analysis was carried out between August and October of 2007.

Last year, DFO's National Marine Mammal Peer Review Committee (NMMPRC) accepted the conclusion that EA Bowhead whales form a single population that is shared between Canada and Greenland. At its most recent meeting (November 2007), the NMMPRC reviewed the method of re-analysis. NMMPRC noted that the mean estimate of 14,400 whales for the fully corrected (double-observer mark-recapture) method is much larger than previous estimates had indicated, although extremely wide confidence limits (4810-43105) illustrate the large uncertainty in this estimate.

Potential Biological Removal (PBR) is an internationally accepted mathematical calculation that is used to determine the human induced mortality of marine mammals that can be sustained each year and still allow the population to increase. Bowheads that are killed as a result of hunting, net entanglements, ship strikes, etc. are considered as human induced mortality. Bowheads that are killed by killer whales, or that die from natural causes, are not counted against a PBR.

Considering the high uncertainty of the new abundance estimate for EA bowhead, it is not clear if the increased population estimate will receive international support. The NWMB may wish to continue with setting short-term TAH (for a year or two) before setting a long-term annual quota for the EA Bowhead.

In the interim, a precautionary approach would be to ensure that no more than 10 bowheads are removed from the Eastern Arctic population by hunting and other human activities in Nunavut, Nunavik and Greenland. This value is based on previous advice to the NWMB. It should be noted that in June 2007, the IWC awarded Greenland 2 bowhead strikes/year for each of the years 2008-2012.

The NWMB may be receiving suggestions that a Nunavut bowhead TAH should reflect the PBR. In considering such suggestions, the NWMB may wish to consider both the pros and cons of a large increase in bowhead TAH. Canada's Aboriginal hunt of large whales has not been an issue at recent IWC meetings because the take is considered to be small. A sudden and dramatic rise in Canadian bowhead quota will draw unnecessary attention from the IWC and may even provoke the US to impose sanctions on Canada. A change in view by the IWC on Canada's Aboriginal hunt will affect the Inuvialuit's bowhead hunt and the re-establishment of a traditional large whale hunt by the Nunavik Inuit and the Nuu-Chaa-Nulth. Setting a bowhead TAH goes beyond a conservation consideration.

The allocation of bowhead between Nunavut and Nunavik is the responsibility of the Minister. DFO prefers that the sharing arrangement of bowhead harvesting be decided between Nunavut and Nunavik.

**Consultations:** B. Hunt, K. Pelley, K. Martin, P. Simon, B. Wong

**Recommendations:** That the NWMB review the updated science advice on the re-analysis of the aerial survey. It would be prudent for Canada to wait for international scientific input on the EA bowhead survey reanalysis before an official PBR is established. In other words, **the NWMB may wish to continue with setting short-term TAH (for a year or two) and wait for comments from the IWC Scientific Committee before setting a long-term annual quota for the Eastern Arctic Bowhead.**

**Prepared by:** P. Hall

**Date:** 6 December 2007