

**SUBMISSION TO THE**  
**NUNAVUT WILDLIFE MANAGEMENT BOARD**  
**FOR**

**Information: X**

**Decision:**

**Issue:** The Nunavut Wildlife Management Board (NWMB) requested information with which to consider Total Allowable Harvest (TAH) levels for narwhal, beluga and walrus populations distributed within the Nunavut Settlement Area.

**Background:**

Scientific studies conducted by Fisheries and Oceans Canada (DFO) and other researchers have shown that narwhal, beluga and walrus are hunted locally on their summer ranges, and also during spring and fall migrations within Nunavut or elsewhere. The Northern Hudson Bay narwhal population is shared with Nunavik. Belugas in western-northern-southern Hudson Bay (and possibly James Bay) are shared with Nunavik. Part of the Eastern High Arctic-Baffin Bay beluga population may be shared with Greenland. Walrus populations in Hudson Bay are shared with Nunavik, and walrus occurring around Baffin Island and in Baffin Bay may also be shared with Greenland.

Since 2004, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) has recommended that certain Canadian populations of beluga, narwhal and walrus be listed under Canada's Species at Risk Act (SARA). Currently, the listing process outlined in the SARA legislation is being harmonized with provisions of settled land claims agreements.

The Canada-Greenland Joint Commission on Conservation and Management of Narwhal and Beluga (JCNB) meet approximately every two years, to discuss and develop management recommendations for shared stocks of narwhal and beluga stocks in the greater Baffin Bay region. Nunavut Inuit delegates attend JCNB meetings. The NWMB Chairperson is a Co-Commissioner of the JCNB.

Canada belongs to the Convention on International Trade in Endangered Species (CITES). CITES authorities monitor global trade of beluga, narwhal and walrus products to ensure that foreign demand does not become a conservation concern.

**Current Situation:**

DFO's Centre for Science Advice (CSAS) has completed two documents which are publicly available on the DFO website. These documents provide scientific

analysis of interest to discussions about sustainable harvesting of marine mammal populations in the Nunavut Settlement Area (NSA).

Science Advisory Report 2008/035 \*\* produced Total Allowable Landed Catch (TALC) levels for summering stocks of beluga and narwhal whose range includes the NSA. Nunavut beluga and narwhal populations are considered data-poor, because there is insufficient recent information to conduct a full stock assessment. Therefore, DFO used Potential Biological Removal (PBR) estimates as the basis for its analysis. PBR estimates are stock specific limits of human induced mortality (e.g. total hunting mortality, net entanglements, and ship collisions). To account for uncertainty about total hunting mortality, information reported as part of the trial Community Based Management program was used to develop Total Allowable Landed Catch (TALC) estimates. PBR estimates do not account for animals that die from natural causes, such as old age, disease, entrapments or predation.

It is not possible to generate harvest advice for walrus populations at this time (Stewart 2008). With the exception of West Jones Sound, there are no reliable data on which to estimate minimum population numbers. There have been no abundance estimates made for Nunavut walrus populations in the past 5 years and there are no existing abundance estimates that include the entire stock. However, some Inuit communities have identified local declines in walrus populations. More recent estimates of walrus population size and better harvest reporting are needed before DFO can recommend sustainable harvest levels for Nunavut walrus populations.

### **Analysis:**

The PBR and TALC estimates provided in SAR 2008/035\*\* are based entirely on scientific analysis, they do not include management considerations relevant to individual marine mammal stocks. The NWMB ensures full public consideration of wildlife management issues within the NSA, such as the establishment of TAH. As public meetings are scheduled to consider levels of TAH for populations of beluga, narwhal and walrus in the NSA, DFO will prepare submissions that include an assessment of population-specific management issues to be considered in establishing sustainable harvest limits.

The wildlife harvesting rights of Nunavut Inuit under their land claims agreement are protected by Section 35 of the *Constitution Act, 1982* and modest increases in existing harvest levels would accommodate increased Inuit need. However large increases in subsistence hunting levels for these species are likely to draw national and international attention. The NWMB should consider both the pros and cons of large increases in future harvests of beluga, narwhal and walrus in the NSA.

Beluga, narwhal and walrus populations distributed within the NSA have been assessed by COSEWIC and subsistence harvesting of marine mammals is monitored closely by the international community. COSEWIC has identified subsistence hunting as a potential threat to beluga, narwhal and walrus populations in the NSA. In addition, CITES authorities monitor global trade of beluga, narwhal and walrus products to ensure that foreign demand does not become a conservation concern.

Beluga, narwhal and walrus are hunted locally on their summer ranges, but also during spring and fall migrations within Nunavut or elsewhere (e.g. Nunavik, Greenland). The NWMB should encourage the completion of sharing arrangements with other jurisdictions, before considering TAH levels for the NSA, to avoid future conflict over sharing arrangements.

Formal sharing arrangements involving shared marine mammal populations would be viewed positively by co-management partners and the international community. There may be some risk to sustainability of these populations if arrangements on harvesting are not established

**Consultations:**

DFO Central & Arctic Region – K. Fisher, P. Richard, R. Stewart  
DFO Ottawa – S. Romberg

**Recommendations:**

1. The NWMB consider the information provided in SAR 2008/035\*\* and Research Document 2008/025, as well as stock-specific management issues, in developing materials for future public discussion regarding sustainable harvest levels.
2. The NWMB encourage the completion of sharing arrangements with Nunavik and Greenland, for shared stocks of beluga, narwhal and walrus.

**Prepared by:** P. Hall, Fishery Management Coordinator, DFO Winnipeg

**Date:** 11 May 2009

**Attachments:**

DFO. 2008. Total allowable harvest recommendations for Nunavut narwhal and beluga populations. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2008/035. \*\*

Stewart, R.E.A. 2008. Can We Calculate Total Allowable Harvests for Walrus Using Potential Biological Removal? DFO Can. Sci. Advis. Sec. Res. Doc. 2008/025.

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\*\* note: NWMB Staff have identified typographic errors in the current version of SAR 2008/035. DFO thanks NWMB for pointing out these errors, and will forward revisions of the current document to NWMB as soon as possible.