Conservation Strategy for BOWHEAD WHALES *(Balaena mysticetus)* in the Eastern Canadian Arctic[1]

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on behalf of the

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[1] This document will form the basis of a Recovery Strategy under the Species At Risk Act.

Executive Summary

1. The bowhead or Greenland right whale (*Balaena mysticetus),* called *arvik* or *arviq* in Inuktitut, has been used for at least 2,000 years by Inuit for food, oil, and shelter, and is an important part of Inuit culture.

2. Inuit hunted bowheads for a long time without having a significant impact on the populations. Commercial whaling, which occurred up to the early to mid 20th century, depleted all of the world's five bowhead whale populations, including those in the Canadian eastern Arctic.

3. There are two populations of bowhead whales in the Canadian eastern Arctic. The Hudson Bay-Foxe Basin bowheads appear to occur only in Nunavut waters. The Baffin Bay-Davis Strait whales are found both in Nunavut and Greenland waters.

4. The recovery of these populations from depletion by commercial whaling has been perceived to be slow, but on a bowhead time scale it may be occurring at a reasonable rate. Relatively low reproductive rates, together with killer whale predation, other sources of natural mortality, and low-level subsistence hunting may prevent a faster recovery, especially from critically low population levels.

5. The Nunavut Wildlife Management Board (NWMB) recently completed a five-year Inuit Bowhead Knowledge Study (IBKS) documenting Inuit traditional knowledge of sightings, locations, movements and aggregations of bowheads throughout the Nunavut Settlement Area. Many Inuit concluded that bowhead populations have increased in numbers in the last few decades but also believe that predation by killer whales and factors such as noise from exploratory and industrial development may be reducing recovery rates.

6. In the Inuit Bowhead Knowledge Study, Inuit emphasize that harvesting bowhead is important for retaining their culture. Many Inuit believe, as indicated in the study, that a low-level subsistence hunt would not jeopardize continued recovery of the two bowhead populations in Nunavut. They also state that the bowhead whales should be carefully and properly managed and that future harvests should be strictly controlled, monitored and managed.

7. The Hudson Bay-Foxe Basin and Baffin Bay-Davis Strait bowheads have been designated as separate populations based on summer distribution patterns and responses to whaling pressure. The Hudson Bay-Foxe Basin Stock has been estimated to have numbered at least 600 whales prior to heavy exploitation in the period 1860-1915. Based on recent aerial surveys, an estimate of 345 bowheads represents the minimum number thought to be present in this population. Many Inuit say that bowhead numbers in Northern Foxe Basin and in the Repulse Bay area are higher today than in the 1960s and 1970s. These comments come from elders and hunters who infrequently saw bowheads until recently. The Baffin Bay-Davis Strait Stock likely numbered around 12,000 individuals in the year 1825. Counts and estimates

during the 1970s and 1980s produced minimum estimates of 350 to 375 bowheads. As in the Hudson Bay-Foxe Basin population, many Inuit say that when they were children or young adults, they rarely saw bowheads or saw only small numbers but in recent years they have been seeing greater numbers.

8. In the spring of 1999, the Nunavut Wildlife Management Board (NWMB), World Wildlife Fund Canada (WWF), and the Department of Fisheries and Oceans (DFO) agreed to jointly develop a long-term Conservation Strategy that would include a strategy and outline actions to promote recovery of bowhead populations in the Canadian eastern Arctic. The partners also agreed to incorporate traditional knowledge from the Inuit Bowhead Knowledge Study (IBKS) to complement the scientific knowledge.

9. An internal Advisory Committee (essentially a "Recovery Team"), consisting of members from the three partners and the Qikiqtaaluk Wildlife Board (QWB), was established to guide the development of this conservation strategy. Robert Moshenko, an experienced Arctic marine biologist and resource manager, was contracted to facilitate the process. This Advisory Committee could be the basis for the Recovery Implementation Team that would be established and provide the forum for review and planning of actions to promote recovery and conservation of bowheads in Nunavut.

10. A workshop was held in Iqaluit on 16-17 December 1999. It provided the opportunity for all major stakeholders in Nunavut to participate in the development of a long-term conservation strategy for bowhead whale populations. The stakeholders participated through group discussions. They developed the mission statement, goals and objectives (actions) for the overall management (recovery, sustainable subsistence harvest, and habitat protection) of the bowhead whale populations. They also identified and rated potential long-term threats to bowheads and their habitat. The major threats identified were killer whales, pollution, man-made noise, tourism, climate change, and non-harvesting. Lesser threats that were identified included ice entrapments, fishing gear entrapment, subsistence harvest, diseases and food competition.

11. Bowhead whales may live as long as 200 years so an effective conservation strategy, recovery program and monitoring program must be long-term to reflect the bowhead lifespan. This long-term recovery strategy for the bowhead whale populations in the Canadian eastern Arctic, with a recommended time-frame of 100 years, was developed by the internal Advisory Committee for the lead agencies, i.e., the Department of Fisheries and Oceans and the Nunavut Wildlife Management Board and its partners.

12. The Conservation Strategy provides a framework to identify information gaps and to develop and implement programs to research and monitor bowhead population levels, and threats to bowhead and their habitat that may impede recovery. These programs would integrate Inuit traditional knowledge and science, and would be community-

based. To be successful, this long-term strategy requires a strong commitment from the lead agencies and partners to sustain focus, funding and overall momentum.

13. This Conservation Strategy has been developed in anticipation of the new federal *Species at Risk Act (SARA)*, and may meet the requirements for or will form the basis of a recovery strategy. The format used follows the guidelines drafted in February 2000 to be used in developing a recovery strategy under SARA.

14. The purpose of this Conservation Strategy is to improve the conservation status of bowhead whales in the Canadian eastern Arctic by:

- using an ecosystem approach and focusing on long-term key conservation issues
- identifying current major information gaps and actions needed to fill the gaps
- providing a conservation strategy that may meet the requirements for or will form the basis of a recovery strategy under the Species at Risk Act

The **recovery goal** is to promote population recovery and maintain self-sustaining and healthy bowhead whale populations in Nunavut.

The **short-term objectives** are to:

- identify and protect important areas used by bowhead whales
- establish a long-term monitoring and research program combining both traditional knowledge and science
- ensure a sound, sustainable and continuing Inuit subsistence harvest of bowhead whales
- ensure that any human activities do not adversely affect bowhead whale populations or their habitat
- communicate clearly this conservation initiative to the public in Nunavut and beyond