

#### **Preamble**

Your opinion is being sought by the Canadian Government in order to make an informed decision concerning the addition of the Ungava Bay and Eastern Hudson Bay Beluga populations to the "List of Wildlife Species at Risk", as presented in Schedule 1 of the Species at Risk Act (SARA).

The status of the Ungava Bay and Eastern Hudson Bay Beluga populations was reviewed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in May 2004. Since the COSEWIC has designated both populations as being "endangered", the Minister of Fisheries and Oceans must now decide whether to recommend that the Governor in Council adds the species to the List of Wildlife Species at Risk. Before deciding how to proceed, the federal government wishes to consult Canadians, particularly those directly concerned, to obtain their opinion in order to properly determine the social and economic impacts, both positive and negative, of the addition of the Ungava Bay and Eastern Hudson Bay Beluga populations to the List of Wildlife Species at Risk. This consultation workbook was therefore designed with this objective in mind.

We encourage you to answer the questions (any or all) at the end of this workbook. We also invite you to add any comment you consider relevant. You can be assured that your answers and comments will be taken into consideration in the decision-making process. To make sure your comments are considered, responses are required before:

#### March 31 2005

You can download a copy of this consultation workbook and find additional information regarding SARA at the following Internet address:

http://www.sararegistry.gc.ca

#### 1. The Species at Risk Act

A large variety of wildlife species inhabit Canadian lands and waters. Unfortunately some of them are in danger of disappearing. The Canadian government has therefore seriously committed to protecting them, particularly by adopting the *Species at Risk Act* (SARA) in June 2003, as part of its Endangered Wildlife Species Protection Strategy.

This Act provides a legal framework for adopting measures, throughout Canada, that will ensure the survival of wild animal and plant species and protect our natural heritage. This Act also establishes the criteria being used to determine which species must rapidly become the focus of recovery measures, and the methods to implement recovery in order to protect them. Finally, this Act establishes guidelines for cooperation between governments, organizations and individuals, and provides sanctions for offenders.

Environment Canada is responsible for the overall implementation of SARA. Fisheries and Oceans Canada has the responsibility for aquatic species at risk, except for individuals located on territories managed by Parks Canada (national parks, national historical sites, national marine conservation areas, and other protected heritage sites).

Since no single organization or entity can, on its own, take on the responsibility of ensuring the survival of a species, the effectiveness of the new Act will depend on everyone's goodwill to ensure the survival of all species at risk. With this in mind, SARA requires, at several steps throughout the process, that the federal government consult provincial and territorial governments, First Nations, landowners, resource users, and the general public.

This workbook was developed to assist Fisheries and Oceans Canada with consulting with stakeholders about adding the Ungava Bay and Eastern Hudson Bay Beluga populations to the List of Wildlife Species at Risk in Appendix 1 of SARA. This list contains the species which are protected under the Act. They are species which have been reviewed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), and for which a species at risk status was given. COSEWIC designated the Ungava Bay and Eastern Hudson Bay Beluga populations as Endangered in May 2004. The reader will find more details in the following sections regarding the addition of wild species to the List of Wildlife Species at Risk and its legal consequences.

#### 1.1. The role of COSEWIC

The mandate of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) is to assess wild animal and plant species present in Canada and assign a designation to each based on their status. The Committee is comprised of specialists working in various relevant fields such as biology, ecology and traditional native knowledge. Members of COSEWIC come from different areas, such as governments, universities, aboriginal organizations, and non-governmental organizations. They are appointed according to their expertise, and must provide independent, impartial and scientific advice and recommendations in accordance with the mission of COSEWIC.

COSEWIC assesses the biological status of wildlife species by using the best scientific and traditional knowledge available. It reviews research and takes into account aboriginal community and traditional knowledge. In its species assessment, COSEWIC uses rigorous assessment criteria based on those developed by the World Conservation Union (IUCN).

The first step in assessing the status of a wildlife species is to request a status report, which will then be reviewed by peers and approved by a sub-committee of experts on the species. During a meeting of COSEWIC members (once or twice a year), the status report is examined, and discussions are held in order to determine whether the species is at risk, and if necessary, to provide a status designation.

The statuses provided, which represent risk level categories, are as follows:

"extinct" species: any species that no longer exists;

"extirpated" species: any species that no longer exists in the wild in

Canada, but exist elsewhere;

• "endangered" species: any species facing imminent extirpation or

extinction;

• "threatened" species: any species likely to become endangered if limiting

factors affecting it are not reversed;

"special concern" any species raising concerns because of

**species:** characteristics that make it particularly sensitive to

human activity or to certain natural phenomena.

• "not at risk" species: a species that has been evaluated and found to be

not at risk.

• "data deficient": a species for which there is insufficient scientific

information to support status designation.

COSEWIC submits its species assessment to the Minister of the Environment, who, in collaboration with the other competent ministers if necessary, initiates the process of adding the species to the List of Wildlife Species at Risk.

For more information, please visit the COSEWIC Web site at the following address:

http://www.cosewic.gc.ca

#### 1.2. Wildlife species listing process

Once COSEWIC has determined that a wildlife species is "at risk", the first step to ensure its protection is to add it to the List of Wildlife Species at Risk. Otherwise, it will not benefit from SARA protection. When COSEWIC submits its assessment to the Minister of the Environment, the Minister must produce a recommendation and present it to the Governor in Council. Within nine months of receiving the COSEWIC assessment (from the Minister of the Environment), the Governor in Council must react to the report and recommendation in one of the following ways:

- a) accept the assessment and add the species to the List of Wildlife Species at Risk;
- b) decide not to add the species to the List of Wildlife Species at Risk;
- c) refer the matter back to COSEWIC for further information or consideration.

After nine months, if the Governor in Council has not taken any decision, the Minister or the Environment will have to add the species to the List of Wildlife Species at Risk, according to the COSEWIC assessment.

The Governor in Council's decision will initially be based on the opinion of COSEWIC, which is based on the biological status of the species. However, in order to make an informed decision, the Government of Canada must assess other factors such as the social and economic impacts that could occur from adding a species to the List of Wildlife Species at Risk. This consultation is an opportunity for concerned Canadians to express their point of view and voice their concerns on this subject.

Once a species is listed as "extirpated", "endangered" or "threatened", two processes are triggered. Initially, a series of prohibitions are adopted to protect the species, and order to begin its recovery, a recovery strategy and a plan are developed. In the case of "special concern" species, a management plan must be developed.

#### 1.3. Protection

Under the terms of SARA, Fisheries and Oceans Canada must ensure the protection of all aquatic species at risk. When a species is added to the List of Wildlife Species at Risk with an "extirpated", "endangered" or "threatened" status, prohibitions are automatically applied. The Act prohibits the killing, harming, harassing, capturing or taking of any individual belonging to that species. It also prohibits people from possessing, collecting, buying, selling or trading individuals of a species at risk. As well, the Act prohibits the damage or destruction of the residence or any part of the species' critical habitat, as defined within a recovery strategy or an action plan. It should be noted that these prohibitions do not apply to "special concern" species.

For aquatic species, exceptions to these restrictions may be authorized by the Minister of Fisheries and Oceans, as long as the survival or recovery of the species is not jeopardized. The Minister may conclude agreements or issue licences only if he considers that the activity concerning a listed species 1) represents scientific research related to the conservation of the species, 2) is beneficial to the species or increases its chances of survival, or 3) if it only affects this species in an incidental way. Furthermore, the competent minister must be of the opinion that a) all reasonable alternatives have been considered and the best approach adopted, b) all feasible measures will be taken to minimize impacts and c) the activity will not jeopardize the survival or recovery of the species.

It is important to mention that those prohibitions do not apply to activities that have been authorized within a SARA recovery strategy, action plan or management plan.

#### 1.4. Recovery planning and management plan

The goal of the recovery process for "extirpated", "endangered" or "threatened" species is to reduce the causes of decline for that species by putting emphasis on stewardship and public awareness among others. First, a recovery strategy is prepared. It contains recovery objectives and strategies that are developed according to the threats the species is facing. Thereafter, an action plan is developed, which details the actions flowing from the recovery strategy.

The recovery of a species requires planning and teamwork. The competent Minister must gather the people, organizations and jurisdictions who share an interest in the species (i.e. federal government ministers, provincial or territorial governments in charge of the territory where the species is located, wildlife resource management boards, First Nations organizations, landowners and other people likely to be interested in the recovery of the species). These people will be consulted during the development of the recovery strategy. Planning for recovery is a continuous process; the competent minister must report on the implementation of the recovery strategy, and the progress made towards meeting its objectives every 5 years.

Furthermore, a recovery strategy and an action plan must identify to the extent possible the species' critical habitat, as well as activities that are likely to destroy it. When the knowledge available on this habitat is inadequate, the strategy will have to establish a research schedule in order to fill the gaps. Once the critical habitat has been identified and described in a recovery strategy or action plan, it becomes illegal to destroy it.

In the case of a "special concern" species, a management plan is developed which must include measures for the conservation of the species and its habitat. Management plans are developed in collaboration with qualified provincial or territorial ministers, federal ministers, wildlife resource management boards, and any other relevant person or organization.

Once the recovery strategies, action plans, or management plans are developed, they are published on the Public Registry (see section 1.5). Anyone can make comments to the appropriate Minister in writing concerning the recovery strategy, the action plan, or the management plan for a listed animal or plant species. The general public has 60 days, after publication of the strategy or the plans in the Registry, to inform the Minister of their position.

# 1.5. Public Registry

The SARA Public Registry, available on the Internet, is a complete source of information on topics covered by the Act and offers access to public records concerning the administration of SARA. It is a key instrument in allowing the government to respect its commitment to support public contribution in the environmental decision making process.

The Registry includes various documents, such as regulations, orders, agreements, guidelines, standards and codes of practice. Furthermore, it contains status reports, recovery strategies, action plans, as well as management plans. The Public Registry can be found at the following address:

http://www.sararegistry.gc.ca

# 2. Information on the Beluga<sup>1</sup>

# 2.1. Species information

The Beluga, *Delphinapterus leucas*, is a medium-sized toothed whale, which becomes completely white when it reaches sexual maturity. Adult males attain a length of 4.5 meters and females 3.5 meters. Both are similar in appearance. Young are born a dark grey and gradually become paler as they mature.

Belugas are also known as white whale, *béluga* in French, and *qilalugaq* or *siqsuaq* in the Inuktitutt, Inuvialuktun and Inupiat dialects.

# 2.2. Biology

Belugas have a mean lifespan in the range of 15 to 30 years, although they may live beyond the age of 40. They are sexually mature at the ages of 5-7 years. Scientific evidence suggests that females are capable of giving birth, on the average, every 3 years. They feed on a variety of fish and invertebrates. Little is known of their mating behaviour as it occurs in the winter offshore areas. Polar bears, killer whales and Inuit hunters are their main predators.

#### 2.3. Habitat

Belugas spend the summer in coastal and offshore areas. Their distribution is centred on certain river estuaries, which they visit shortly after ice break-up and where they moult. They frequent these areas occasionally throughout the summer months. In the autumn they begin migrating to other locations, including certain deep-water areas, where they can feed intensively. They then continue to move to areas where pack-ice is of about 40%-80% cover, and spend the winter there.

#### 2.4. Distribution

Currently available evidence supports the division of Canadian belugas into seven populations, based on disjunct summer distributions and genetic differences (Figure 1 in the Appendix):

- 1) the **St. Lawrence Estuary population** occupying the area of the estuary centered around the Saguenay River mouth;
- 2) the **Ungava Bay population** occupying the whole of Ungava Bay in the summer;
- 3) the **Eastern Hudson Bay population** occupying the area from Kuujjuaraapik to Inukjuak, in the area of the Little Whale and Nastapoka Rivers during the summer months:
- 4) the **Western Hudson Bay population** occupying the areas of the Seal, Nelson and Churchill Rivers and further north to Southampton Island and Roes Welcome Sound during the summer and early autumn months;
- 5) the **Eastern High Arctic Baffin Bay population** spending its summers in the Lancaster Sound, Barrow Strait, Prince Regent Inlet and Peel Sound areas of the Canadian high Arctic

<sup>&</sup>lt;sup>1</sup> COSEWIC 2004. COSEWIC assessment and update status report on the beluga whale *Delphinapterus leucas* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. ix + 70 pp. (www.sararegistry.gc.ca/status/status\_e.cfm).

- 6) the **Cumberland Sound population** which seems restricted to the Cumberland Sound area and concentrates in Clearwater Fiord during July and August;
- 7) the **Eastern Beaufort Sea population** occupying the Delta of the Mackenzie River and migrates into the Amundsen Gulf and as far north as Viscount Melville Sound during late summer.

Migrations of all the populations occur from overwintering areas in areas of open water to their spring and summer calving and feeding areas, which are usually river estuaries.

This consultation workbook is about the Eastern Hudson Bay and Ungava Bay Beluga populations. The information found in the following sections will mainly deal with these two populations.

# 2.5. Population sizes and trends

Both the Eastern Hudson Bay and Ungava Bay Beluga populations experienced intensive commercial hunts conducted primarily by the Hudson Bay Company in the mid 1800s to early 1900s. There is evidence that both populations suffered serious declines as a result of this commercial activity. The recording of Beluga harvest statistics from the Nunavik Inuit, which began in 1974, shows that catches for some communities began declining in the late 1970s. In response, Makivik Corporation and the Department of Fisheries and Oceans began to work together on research projects in Nunavik. Aerial surveys were conducted in 1981, indicating that the number of Beluga estimated to be summering in eastern Hudson Bay and Ungava Bay could not tolerate continued high levels of harvesting. Surveys in 1985, 1993 and 2001 indicated that the situation had deteriorated. An additional concern is the low reproductive rate — an interval of one calf every three years.

The situation is complicated further by the fact that these two populations mix with the much larger western Hudson Bay population during the spring and fall migrations through Hudson Strait. Of importance, these mixed beluga populations continue to be heavily hunted during these migrations without hunters knowing from which population animals are ultimately being removed.

There are large differences in both the extent of the range and size between Beluga populations. The Ungava Bay population (Figure 2 in the Appendix) is too small to estimate. It might already be extirpated. It is important to mention that belugas are often observed in the Ungava Bay without knowing precisely from which population they come from. The Eastern Hudson Bay population (Figure 3 in the Appendix) is declining rapidly in size and number to around 2,000 individuals. Recent harvest levels could cause this population to be extirpated in less than 10 years. COSEWIC has re-examined these two populations in May 2004 and determined that both are endangered.

# 3. Threats to the Beluga

# 3.1. Hunting

Through their land claims agreements, Inuit in Nunavik have constitutionally protected rights to harvest, subject to the principles of conservation. Whale hunting is a very important part of the Inuit hunting tradition. In many ways, the skill and knowledge required to hunt walrus and belugas defines an Inuk hunter. Inuit also consider Beluga an important food source. Consumption patterns, however, are changing with dietary preferences, most evident between younger generations and their elders. Consequently, whale meat may become less sought after by Nunavimiut. The skin, or muktuk, remains a delicacy among all generations and is highly desired by all communities.

#### 3.1.1. Hunting Pressure

The Inuit subsistence hunt has continued to remove animals from the same populations since the end of commercial hunting. With the introduction of motors in the 1960s and their increased use over subsequent decades, hunters have been able to cover larger distances in their hunting territories. This, along with a rapidly increasing Inuit population, has resulted in a marked increase in hunting pressure resulting in a continued decline of the Beluga population that summers along the eastern Hudson Bay coast.

#### 3.1.2. Changes in hunting skills

During this same period, Inuit began to express concerns that the expertise and knowledge required to hunt Beluga efficiently were being lost, especially among younger people. Experienced hunters worried that animals were being harassed and use of improper weapons and lack of retrieval skills were causing more wounded animals to be lost.

# 3.2. Disturbance by noise

The tendency for both Beluga populations to return to the same respective estuarine locations in the summer increases their vulnerability. With no other available habitat, belugas return there each year and they must cope with hunting and considerable noise disturbance from motorized boat traffic.

#### 3.3. Habitat degradation

Industrial development is also part of this complex picture. Hydroelectric development has already changed the flow regimes of the La Grande and Koksoak Rivers. Other river systems, particularly the Whale/Mucalic Rivers in Ungava Bay and the Little Whale and Nastapoka Rivers in Eastern Hudson Bay, contain the only estuaries in Nunavik where belugas continue to aggregate.

These areas of important habitat used by Beluga have known hydroelectric potential. Any changes to the freshwater regimes at the estuaries of these rivers could have a major impact on the health of these two populations.

3.4. Climate Change
Finally, while it is impossible at this time to predict with certainty what, if any, the effects of climate change on Beluga may be, Inuit and scientists are aware that any changes in water temperature, salinity and the distribution of sea ice could affect Beluga in the future.

# 4. COSEWIC Assessment summary

#### **Eastern Hudson Bay population**

#### Status

Endangered

#### Reason for designation

The population has been reduced by at least 50% and continues to decline. Overhunting continues throughout its summer and migratory range. Mathematical models predict that it will likely disappear under present hunting levels in less than 10 to 15 years. Concerns have been expressed about habitat degradation of estuaries by hydroelectric projects, and by small vessel traffic disturbance.

#### Occurrence

Nunavut, Quebec, Arctic Ocean, Atlantic Ocean

#### **Status history**

Designated Threatened in April 1988. Status re-examined and designated as Endangered in May 2004. Last assessment based on an update status report.

#### **Ungava Bay population**

#### **Status**

Endangered

#### Reason for designation

All signs indicate that the population residing in Ungava Bay is very low and may be extirpated. However, it is difficult to definitely conclude that it has been extirpated because beluga from other populations may visit Ungava Bay. Hunting caused the population decline and continues in Ungava Bay, posing a threat to any remaining beluga.

#### Occurrence

Quebec, Arctic Ocean, Atlantic Ocean

#### **Status history**

Designated Endangered in April 1988. Status re-examined and confirmed in May 2004. Last assessment based on an update status report.

# 5. Prohibitions and recovery strategy

This consultation workbook was designed so that stakeholders can better understand the effects upon their activities of adding the Ungava Bay and Eastern Hudson Bay Beluga populations to the List of Wildlife Species at Risk. If listed, SARA prohibitions will automatically apply to these populations, as indicated in section 1.3 of this workbook

Adding these populations to the List would also make the development and implementation of a Recovery Strategy (and an Action plan) for the recovery of the Beluga populations mandatory; hunters would be expected to comply with it for the subsistence hunting to be allowed to continue. Moreover, activities that could damage critical habitat of the species would be banned.

Fisheries and Oceans Canada has already initiated the development of a recovery strategy for these two Beluga populations, and a recovery team has been established. The Recovery Team is composed of Inuit representatives and DFO scientists and resource managers. In this way traditional knowledge and scientific information can be exchanged and experiences shared with a common objective in mind: the recovery of the Ungava Bay and Eastern Hudson Bay Beluga populations.

The proposed goals of the recovery strategy are (1) to ensure that the Ungava Bay Beluga population is sufficiently large to avoid extirpation and (2) to ensure that the Eastern Hudson Bay Beluga population doubles to around 4,000 animals, a level where the population would become less sensitive to threats, including harvesting and disturbance.

Three recovery objectives were proposed to attain these goals: (1) harvest to levels that would allow increase of the two populations while (2) recognizing the importance of Beluga populations to Inuit culture and nutrition and (3) to ensure the identification and the protection of critical habitats for these two populations.

The recovery strategy could thus allow hunting as long as the recovery of the two populations is not impaired. Guidelines for this activity will be established in regard to the recovery needs of these populations of belugas, all the while considering and taking into account the importance of this practice for the Inuit people.

# 6. Let us know what you think

# It is now your turn to speak up!

By answering the following questions before <u>March 31 2005</u>, you will ensure the federal government has a complete description and understanding of costs, advantages and impacts of the addition of the Ungava Bay and Eastern Hudson Bay Beluga populations to the List of Wildlife Species at Risk.

## How to proceed:

• You can answer the questionnaire in the reserved space below or use separate sheets that you will send to us by mail at the following address:

Species at Risk Coordination Office Maurice Lamontagne Institute Fisheries and Oceans Canada P.O. Box 1000 850 route de la Mer Mont-Joli, Québec G5H 3Z4

• Or by fax :

(418) 775-0542

• You can also send us your answers by email at the following address:

especesperilqc@dfo-mpo.qc.ca

Deadline: March 31 2005

For questions or comments concerning the *Species at Risk Act* or concerning this consultation process, please do not hesitate to write (coordinates above) or to communicate with us at: 1-877-775-0848.

# Thank you!

Qı	uestion 1
	entify your place of residence or your place of origin and describe your sector of activity or our interest concerning the Ungava Bay and Eastern Hudson Bay Beluga populations.
Qı	uestion 2
	e you in favour of the federal government adding these Beluga populations to the List of ildlife Species at Risk:
	Ungava Bay population Eastern Hudson Bay population
	Yes
	No
	No opinion

# **Question 3**

a)	Do you think the listing of the Ungava Bay and Eastern Hudson Bay Beluga populations will have a positive or negative impact on your activities? If so, how?

	b)	On the other hand, do you think that not listing the Ungava Bay and Eastern Bay Beluga populations would have a positive or negative impact on your act so, how?	n Hudsor :ivities? If
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c)	ir you	identifie	a negati	ve impa	cis, do	you nav	e sugge	stions if	ı order t	.o minim	ize t <b>n</b> e

# Question 4

a)	<ul> <li>Do you think that you could contri Hudson Bay Belugas as an individ you give a few examples of activiti</li> </ul>	ual, hunter,	recovery of community,	the Ungava Ba company or in	y and Easterr stitution? Car

concerted effort, carried out in collaboration with all interested parties. According you, how can the interested parties best be involved?	yι

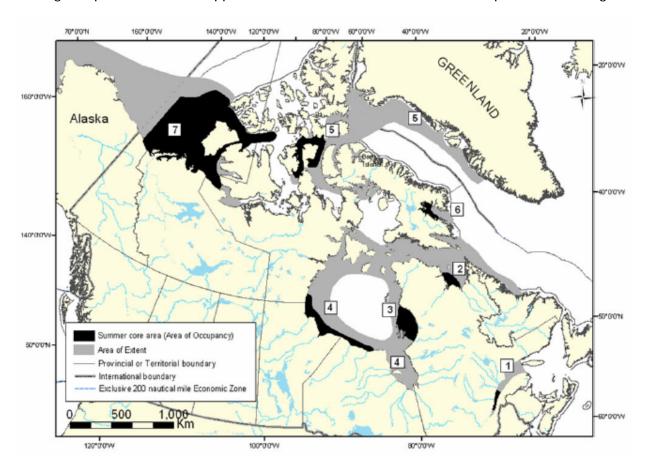
# **Question 5** Do you have any other comments or concerns?

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## 7. Appendix

The figures presented in this appendix are taken from COSEWIC status report on the Beluga<sup>2</sup>.



**Figure 1.** Location of the of Canadian Beluga populations: (1) St. Lawrence Estuary population (2) Ungava Bay population (3) Eastern Hudson Bay population (4) Western Hudson Bay population (5) Eastern High Arctic – Baffin Bay population (6) Cumberland Sound population (7) Eastern Beaufort Sea population

<sup>&</sup>lt;sup>2</sup> COSEWIC 2004. COSEWIC assessment and update status report on the beluga whale *Delphinapterus leucas* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. ix + 70 pp.

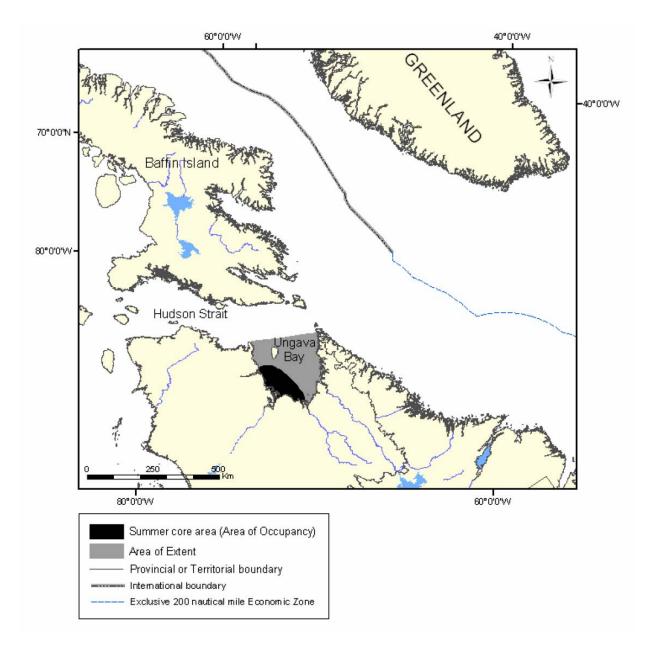
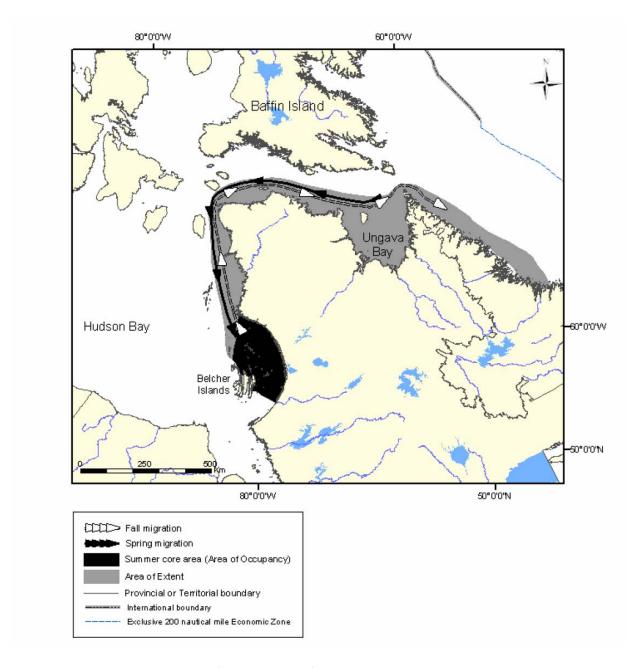


Figure 2. Extent of occurrence (area of extent) and summer core area of the Ungava Bay population of belugas.



**Figure 3**. Extent of occurrence (area of extent) and summer core area of the Eastern Hudson Bay population of belugas