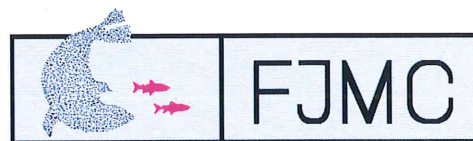


Fisheries Joint Management Committee  
Box 2120 Inuvik, Northwest Territories  
X0E 0T0



## PREFACE

*The Inuvialuit Final Agreement, signed in 1984, sets out the terms of a settlement between the Committee for Original People's Entitlement representing the Inuvialuit, and the Government of Canada, representing all citizens of Canada, among them the Inuvialuit.*

*As prescribed by Section 14 (61) of the Inuvialuit Final Agreement the Minister of Fisheries and Oceans established the Fisheries Joint Management Committee in 1986. The Committee was established to assist Canada and the Inuvialuit in administering the rights and obligations relating to fisheries within the Inuvialuit Settlement Region as described in the Final Agreement, to assist the Minister of Fisheries and Oceans in carrying out his responsibilities for the management of fisheries, and to advise the Minister on all matters relating to fisheries affecting the Inuvialuit and the Inuvialuit Settlement Region.*

*To this end the FJMC, in cooperation with the Hunters and Trappers Committees of Aklavik, Holman Island, Inuvik, Paulatuk, Sachs Harbour, Tuktoyaktuk, and the Department of Fisheries and Oceans, undertook the development of a management plan for Beaufort Sea beluga. This document represents the results of that effort. The research, monitoring and regulations necessary for the implementation of the Plan, are to be provided by the Hunters and Trappers Committees, the Inuvialuit Game Council, the Department of Fisheries and Oceans and by the Fisheries Joint Management Committee.*

*The first Beluga Management Plan was completed in 1991. This third printing has been updated to include new information and research activities.*

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## INTRODUCTION

Beluga that are found each summer within the Inuvialuit Settlement Region form part of a larger population that winters in the Bering Sea. Each spring that population separates into several stocks that migrate to summering areas ranging from Bristol Bay on Alaska's west coast to the eastern Beaufort Sea. During summer a portion of the Beaufort Sea stock concentrates in the Mackenzie River estuary, and is hunted there by Inuvialuit from Aklavik, Inuvik and Tuktoyaktuk. Residents of Paulatuk hunt beluga in the Darnley Bay area. To date, the Inuvialuit harvest of beluga has been self-limited to the number of whales required to cover the basic subsistence needs of residents from these communities.

Beluga management in the Canadian Beaufort Sea has been carried out through a variety of federal acts and regulations. These include the *Fisheries Act*, the *Marine Mammal Protection Regulations*, the *Oil and Gas Production and Conservation Act*, the *Canadian Environmental Protection Act*, and the *Arctic Waters Pollution Prevention Act* and most importantly, under the Inuvialuit Final Agreement. (Western Arctic (Inuvialuit) Claims Settlement Act Canada 1984)





With the signing of the *Inuvialuit Final Agreement (IFA)* in 1984, some adjustments in beluga management within the Inuvialuit Settlement Region have been necessary. First, management activities must now reflect the legislation enacted as a result of that Agreement. For example, the appropriate changes to the Marine Mammal Protection Regulations have been made. Second, both resource users and managers agreed that management programs were required to ensure that the beluga resource continues to thrive, and that it is utilized efficiently.

With those general objectives in mind, the following Management Plan has been prepared. The task has required the cooperation and participation of both the Inuvialuit and the Department of Fisheries and Oceans (DFO). To be successful, the Plan will continue to depend upon the cooperation and participation of the Hunters and Trappers Committees (HTC's), the Inuvialuit Game Council (IGC), the Fisheries Joint Management Committee (FJMC) and the Department of Fisheries and Oceans. Implementation of some components of this Plan can be immediate. Others may take years, and some will be ongoing. However, the commitments, long-term objectives and overall goals of the Plan will be retained and pursued by all parties.

The FJMC recognizes that as circumstances within the Settlement Region change with time, some components of the plan may become out-dated. Therefore the Committee agrees to review the plan with the Hunters and Trappers Committees, the Inuvialuit Game Council and the Department of Fisheries and Oceans three years after it comes into effect.



**GOALS OF BELUGA MANAGEMENT**

A fundamental theme of the Inuvialuit Final Agreement is its emphasis on **the protection and preservation of Arctic wildlife, the environment, and its biological productivity**. An equally important theme is that sound wildlife management is to be used to ensure optimal sustainable harvests for Inuvialuit. Both are to be achieved through the principles and practices of conservation.

To provide the base for all renewable resource management activities within the ISR, the *Inuvialuit Renewable Resource Conservation and Management Plan* was prepared by the Wildlife Management Advisory Council (NWT) and the FJMC in 1988. It lays out a long-term strategy for the conservation and management of fish and wildlife within the Inuvialuit Settlement Region, and provides both community resource users and resource managers with reason and direction for their actions.

The *Beaufort Sea Beluga Management Plan* has been developed in a fashion that is consistent with the themes and goals of the above document. The Plan's purpose is to ensure the responsible and effective, long-term management of the beluga resource by the Inuvialuit and the Department of Fisheries and Oceans.

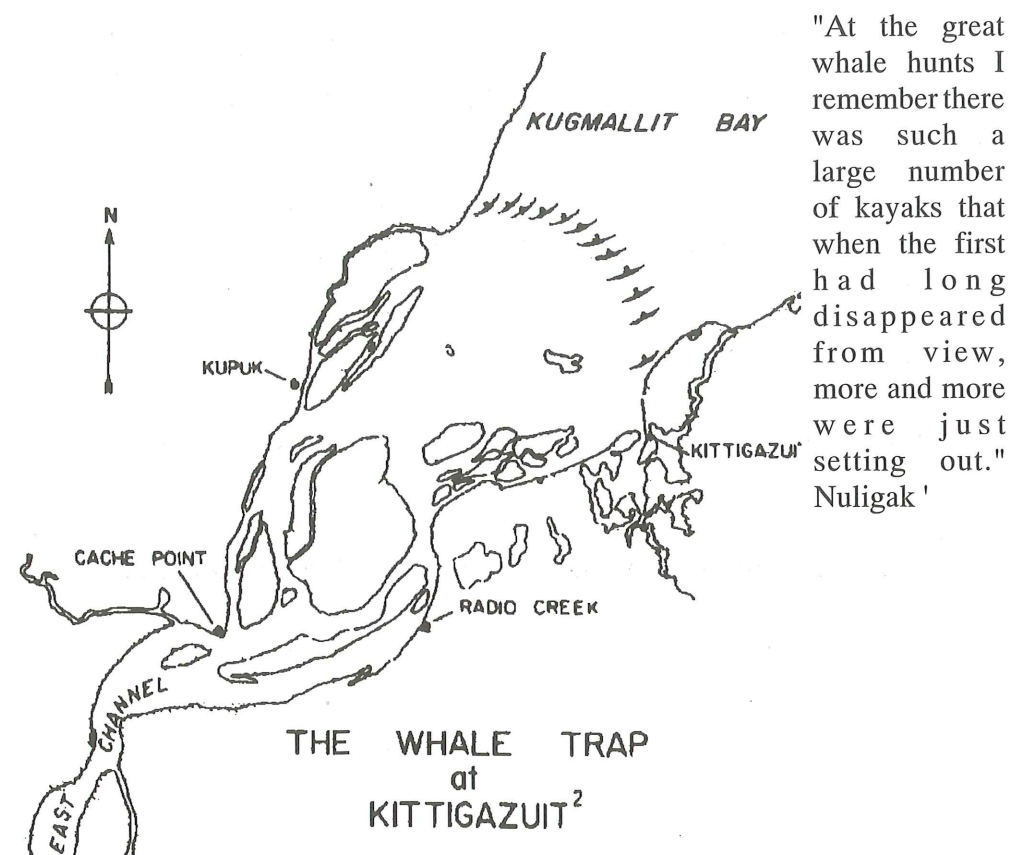
**The Specific Goals of this Plan are:**

**To maintain a thriving population of beluga in the Beaufort Sea**

**To provide for optimum sustainable harvest of beluga by Inuvialuit**

The following pages describe the activities that the parties to the plan feel are necessary to meet the goals outlined above. These activities are described in three main sections. The first section deals with ensuring a sustainable harvest of beluga for Inuvialuit. The second part describes measures necessary to conserve and protect beluga in an increasingly industrialized environment. The final section outlines supporting programs that will be necessary if the plan is to be successful. These components are not meant to describe management activities in great detail. Rather they are used to establish the general objectives necessary to attain the Plan's major goals.

#### Whale Trap at Kittigazuit



## SUSTAINABLE HARVESTS

Inuvialuit from Aklavik, Inuvik and Tuktoyaktuk harvest beluga from the Mackenzie River estuary each summer. The harvest comes largely from whale concentration areas in Kugmallit Bay, near Kendall Island, Shallow Bay and along the Yukon coast between Tent Island and King Point. Little whale hunting takes place offshore since the water is too deep and whales escape by diving. As well, hunters recognize that they risk high loss rates due to the deep water. Residents of Paulatuk are now conducting a successful annual hunt with results varying from year to year depending on hunting conditions. Residents of Holman Island and Sachs Harbour may occasionally harvest beluga as the opportunity arises.

The harvest of beluga in the estuary has always been self regulated and limited to the number required for subsistence needs. From 1984 to 1996, an average of 124 beluga have been landed each year. This is well within the safe removal level or Total Allowable Catch (TAC) for this stock.

The struck and lost rate is significantly less than previous estimates of up to 18% for this hunt. (Strong T. Can Data Rpt Fish Aqua Sci 800) and for 1992 to 1996 has averaged 9.8%. The adoption of community beluga hunting bylaws and guidelines has contributed to a reduction in lost whales.

The Alaskan harvest of beluga from the stock that migrates to the Beaufort/Mackenzie is not as high as originally thought and been most recently estimated at 46 beluga per year. (Alaska Marine Mammal Newsletter Vol. 3 No. 1 Oct. 95 )

#### Objectives

To provide for a level of harvest that generates the greatest net benefit to the Inuvialuit while ensuring the long-term sustainability of beluga in the Canadian Beaufort Sea.

To ensure an efficient harvest and low loss rates.



Stock Status

An aerial survey of the Mackenzie Estuary, Eastern Beaufort Sea and Amundsen Gulf was conducted in late July of 1992.

Including factors for missed at surface and belugas under the surface the survey produced an index of stock size of 19,629 (15,134 - 24,125 95% CI) beluga. (Harwood et al 1996 Can. J. Fish Aqua. Sci. 53(10) 2262 -2773)

These estimates do not represent all of the beluga that summer in the Eastern Beaufort Sea. For example, the estimates are not adjusted for animals that did not surface while the observers were present and beluga that were outside the survey area. Therefore, these estimates can be considered a very conservative index of the stock only.

Results from DNA analysis from beluga in the Canadian Beaufort as well as those from the Alaskan side are not complete to date but indicate that the Bering Sea population of beluga may be divided into as many as four different stocks, one of which would be the Beaufort Sea Stock. At least some of the Alaskan spring and fall harvest are likely taken from the Beaufort Sea Stock.

Total Allowable Catch (TAC)

The first edition of the Beluga Management Plan devoted considerable attention to total allowable catch (TAC). Since the beluga monitoring program has provided long term accurate and consistent results since 1976, and the results of the 1992 aerial survey have established the presence of far more whales (20,000 +) than original estimates of 7,500, there is no pressing need to establish a TAC at this time.

TAC is recognized as a valuable tool and may be established in the future if required. In this plan, a TAC is defined as the total number of beluga that can be struck by hunters in a single hunting season without reducing the number of beluga in the overall population, or a TAC ensures that the number of adult beluga taken from the population through hunting and other natural causes of death will not be greater than the number of beluga that reach breeding age each year.

For this approach to work all removals from the population must come from the TAC.

Total Allowable Catch, if required, could now be calculated from the estimate produced by the 1992 aerial survey, and from recruitment and vital rates studies which are ongoing. As more data is secured from these studies, a more accurate analysis could be achieved in the future. The Department of Fisheries and Oceans is responsible for the necessary studies and it is the responsibility of the Inuvialuit to continue to provide accurate harvest information and to participate in the collection of biological data.

Since some of the Beaufort Sea beluga are a shared resource between Canada and Alaska, the Inuvialuit and the Alaskan Inupiat are developing a joint agreement to establish an Inuvialuit-Inupiat Beluga Commission. This Commission will ensure the exchange of harvest data, traditional ecological knowledge, research results and will plan and conduct joint research projects where desirable.

If TAC is established in the future, allocation responsibilities are defined in the Inuvialuit Final Agreement, the first priority being subsistence use.



## CONSERVATION AND PROTECTION

### Guidelines for Development Activities

**B**eluga summering in Canadian waters migrate through areas where oil and gas exploration activities have been underway for almost two decades, and where oil and gas production and transportation activities are proposed for the future. They concentrate in areas where hydroelectric developments and other ventures such as mining (gravel removal), deep water port development and shipping could affect water regimes, water quality and food availability. Such activities could affect beluga either directly (e.g. underwater noise, oil spills) or indirectly (e.g. changes in salinity or integrity of ice, timing of break-up). However, the severity, likelihood and biological implications of these effects are, for the most part, unknown.

There are no commercial fisheries in the Canadian Beaufort Sea at this time. It is possible that commercial fishing opportunities within the Inuvialuit Settlement Region will be identified and pursued in the coming years. Removal of significant quantities of fish may reduce the amount of food available to beluga. Development of any commercial fishery, either marine or estuarine, should take into account the food requirements of beluga. It must be emphasized that the present base of scientific knowledge related to species interaction and beluga feeding ecology in the Beaufort Sea is not sufficient for proper assessment of the effect of medium or large scale commercial fisheries.

### Objectives

**To protect beluga, beluga habitat and beluga harvesting.**

**To provide guidelines and information to assist Government, the Environment Impact Screening and Review Process and the Inuvialuit Lands Administration in their evaluation of development proposals which may affect beluga, beluga habitat or beluga harvesting.**



To provide information in a format that will assist the Mackenzie Delta - Beaufort Sea Regional Land Use Planning Commission in developing its comprehensive land use plan.

To provide guidelines to assist industry in preparing developmental proposals.

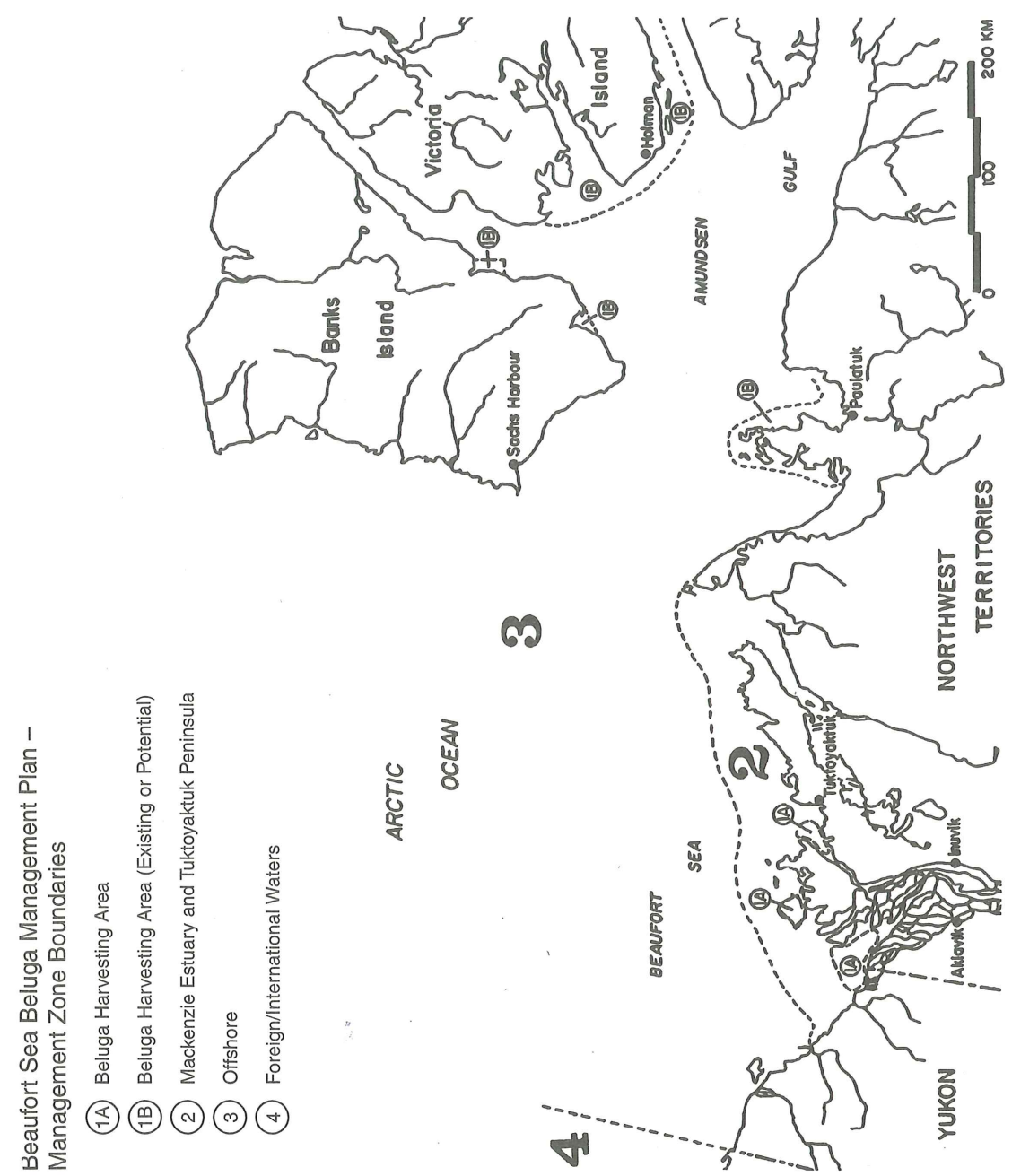
Beluga Management Zones

To reflect the intensity of management required, this Plan divides the Beaufort Sea into four management zones (Fig. 1 & 2). The guidelines associated with each of the zones are intended to assist decision makers in their consideration of special regulations, codes of conduct, or international agreements needed to guarantee that beluga are conserved, the harvest is ensured, the habitat is protected, and other compatible uses of the resource are allowed.

There are several acts and regulations that apply to industrial activities in the Canadian Beaufort Sea. These are administered by various governmental agencies. In addition, the Environmental Screening and Review Process was established under the Inuvialuit Final Agreement to ensure that the interests of the Inuvialuit are considered in the review of development proposals for Crown Lands within the Inuvialuit Settlement Region. Similarly, the Inuvialuit Lands Administration reviews all proposals for development on Inuvialuit private (7(1)(a & b) lands.

The guidelines for each zone are intended to provide specific guidance to Inuvialuit cooperative management bodies and government agencies for their use in the evaluation of any development proposals which may affect the well-being of the beluga resource, the harvesting of that resource, or beluga habitat.

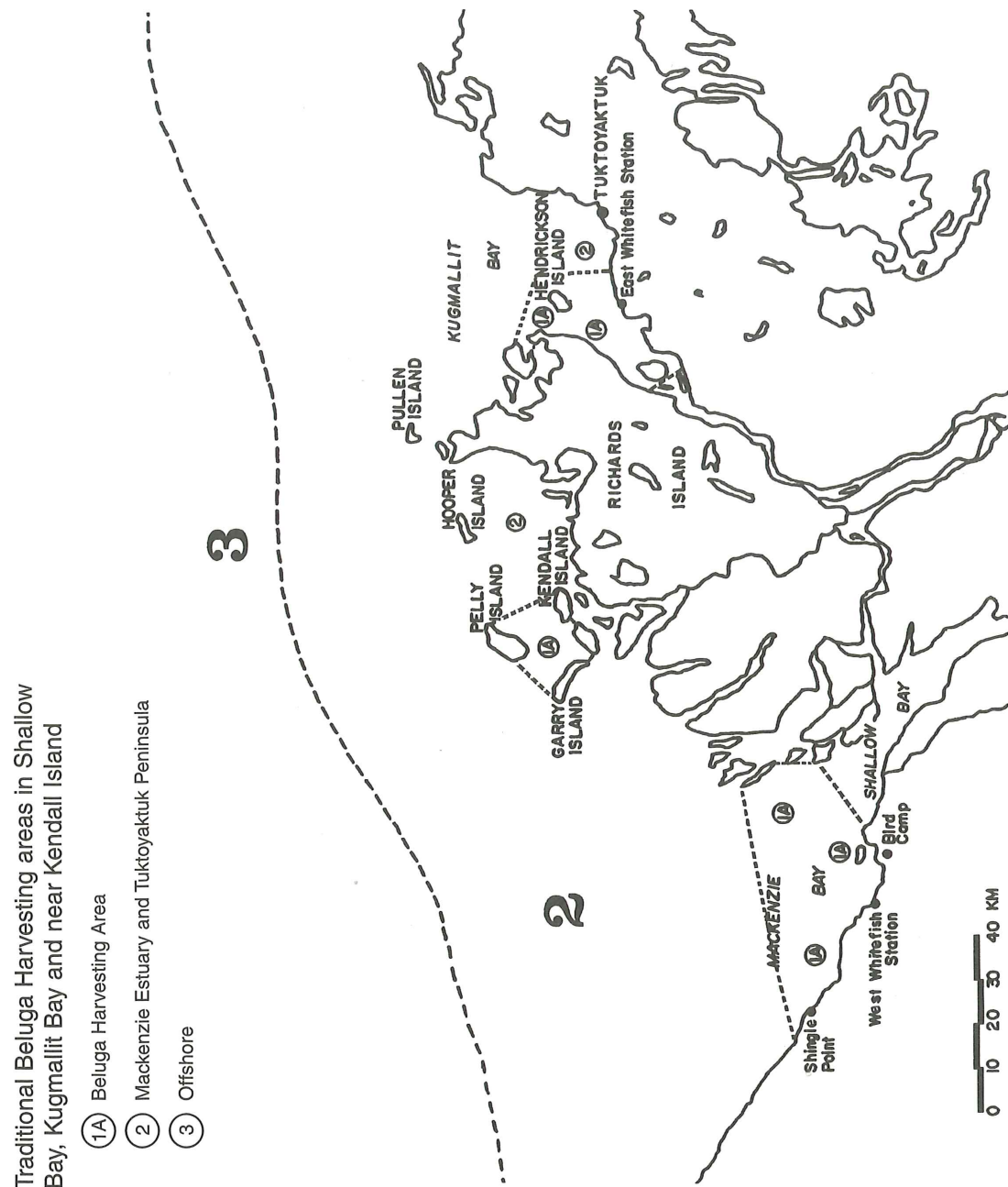
Figure 1: Management Zone Boundaries



Beaufort Sea Beluga Management Plan - Management Zone Boundaries

- 1A Beluga Harvesting Area
- 1B Beluga Harvesting Area (Existing or Potential)
- 2 Mackenzie Estuary and Tuktoyaktuk Peninsula
- 3 Offshore
- 4 Foreign/International Waters

Figure 2: Zones Related to Traditional Harvesting



## Descriptions and Guidelines - Zone 1

### Zone 1a - Traditional Harvesting\Concentration Areas

This zone includes about 1800 square kilometres of shallow waters at the mouth of the Mackenzie River and encompasses the only known traditional summer concentration areas (Shallow Bay, east Mackenzie Bay and Kugmallit Bay) for the Beaufort Sea beluga stock. These areas are shallow (less than 2m), warm, brackish and highly turbid. Belugas are harvested in these areas by Inuvialuit from Inuvik, Tuktoyaktuk and Aklavik.

During the summer, the Canadian Beaufort Sea beluga stock concentrates in these areas. It has been suggested that beluga move among concentration areas, and between the estuary and the offshore during this period. Why beluga concentrate in estuaries is not well understood, but it could be for purposes of calving, calf rearing, moulting and/or socializing.

### Zone 1b - Occasional or Potential Harvesting Areas

This zone includes areas where beluga are harvested by residents of Paulatuk and occasionally by residents of Holman, and where residents of Sachs Harbour have shown interest in hunting beluga in the future. At present there are no systematic data on beluga distribution or abundance in these locations.

### Guidelines for Zones 1a and 1b

In the review of any development proposal, Zone 1 is to be considered a Protected Area according to the guidelines described in the Inuvialuit Renewable Resource Conservation and Management Plan. The oil and gas industry should not be permitted to explore for resources within Zone 1 waters nor to produce hydrocarbons or construct/operate any type of facility.



No mining activities (e.g. gravel removal) should be permitted from break-up until August 15th.

Development activities such as hydro-electric or mining projects, even if located outside of Zone 1, should be evaluated for their potential deleterious effects on water quality and quantity, or on the salinity and integrity of ice in Zone 1 waters.

All shipping activities (including dredging) should be confined to designated routes and areas. Passage through or close to Zone 1 outside of designated routes, even if it's the shortest route, should be avoided from break-up to 15 August.

No port development should be allowed within or on the shores of any Zone 1 waters.

It is recommended that parties proposing industrial development and government agencies evaluating development proposals and other parties interested in development within the zone, seek the advice of the HTC's. To ensure the protection of the beluga resource and harvest, HTC's should be consulted regarding any licenses, permits or operating procedures approved for activities within the zones.

Commercial fishing proposals for Zone 1 should be evaluated and regulated with regard to beluga food species.

## **Zone 2 and 3 Descriptions and Guidelines**

### **Description of Zones 2 and 3**

**Z**one 2 includes the Mackenzie Shelf waters shallower than 20 metres that are not already included in Zone 1. It extends from Baillie Islands (Cape Bathurst) in the east to Kay Point on the Yukon coast to the west. This Zone encompasses a major travel corridor used by Beaufort beluga to move into, out of, and amongst the various bays of the Mackenzie estuary.

Zone 3 includes the remaining geographic range of beluga in the Canadian Beaufort Sea and Amundsen Gulf (waters greater than 20 m deep). Beluga are known to occur as far seaward as the permanent pack ice (the northern boundary), and as far east as Victoria Island (the eastern boundary). The Alaska-Yukon border forms the western boundary of Zone 3.

Each spring, beluga migrate from wintering areas in the Bering Sea to summering areas in the Beaufort Sea. Depending on a number of factors including time of year and ice conditions, the migration occurs along the edge of the land fast ice (Zone 2), far offshore through leads in the pack ice (Zone 3), or both. After the migration, from about late June through to late July or early August, a large proportion of the stock concentrates in the Mackenzie estuary (Zone 1a). However, at the same time, a large portion of the stock is widely distributed throughout both Zones 2 and 3. There is evidence to suggest calving may occur in these waters at this time.

During August, beluga are widely distributed throughout the offshore in both Zones 2 and 3. They tend to occur in greatest numbers in Zone 2 waters near headlands and in the lee of islands, where fishing is apparently most favourable. Feeding is probably their most important activity in these Zones during August. Beluga usually begin their return migration in mid-August, using both nearshore waters (Zone 2) and offshore waters (Zone 3). Few whales remain in the region past early September. Deep water generally precludes hunting of beluga in Zone 2; both deep water and distance precludes hunting in Zone 3.

### **Guidelines for Zone 2 & 3**

**I**ndustrial activities or other projects may be permitted if they do not adversely affect the conservation of beluga and the protection of beluga habitat and beluga hunting, and they are conducted in a controlled and responsible manner.

Assessment of proposed activities must consider the direct effects on beluga (e.g.. contamination, disruption, displacement) as well as indirect effects (e.g.. salinity and integrity of ice, timing of breakup, food availability).

Commercial fishing proposals should be evaluated and regulated with regard to beluga food species.

Assessments must consider the potential for cumulative impact and long-term effects.

It is recommended that parties proposing industrial development and government agencies evaluating development proposals and other parties interested in development within the zone, seek the advice of the HTC's. To ensure the protection of the beluga resource and harvest, HTC's should be consulted regarding any licenses, permits or operating procedures approved for activities within the zones.

## Zone 4 Description and Guidelines

### International Waters

**Z**one 4 encompasses the range of the Canadian Beaufort Sea beluga population outside of Canadian waters, and includes the Alaskan Beaufort Sea, Chukchi Sea and Bering Sea. The entire beluga population is expected to occur within this zone during winter and during migrations. Virtually nothing is known of the distribution and activities of beluga on the wintering grounds, or the extent of mixing with others in the area. As well beluga are outside of Canadian waters for over six months of the year and may be subject to similar disturbances or perturbations as identified in the other zones.

### Guidelines

**S**ince cooperation is essential for responsible management of the beluga, an international agreement should be developed to ensure that beluga are managed and protected throughout their range.

As well, there should be an exchange of information between Canada and Alaska on industrial activities proposed or underway which could affect the well-being of the beluga.



## TOURISM, BELUGAS AND BELUGA HUNTING

**B**eluga that summer in Canadian waters are distributed throughout the inshore and offshore areas. A portion of the stock concentrates in the inshore areas where traditionally they have been hunted by the Inuvialuit. Recently the interest in viewing both beluga and beluga hunting has increased and this trend is expected to continue.

Providing the opportunity to view beluga and beluga hunting/processing is a valid use of the resource. If uncontrolled however, such activity could have a negative impact on the traditional beluga hunting activities of the Inuvialuit. It could also lead to harassment of the beluga. Currently there are only a few operators conducting whale-watching/cultural immersion tours in the region, but interest is expected to increase in the near future.

### Objectives

**To facilitate tourism opportunities associated with belugas while minimizing the impacts of such activities on belugas and beluga harvesting.**

### Disruption of Subsistence Whale Hunting

**I**t is recognized that whale hunting and tourism are not necessarily compatible activities. Hunters and Trappers Committees have prepared tourism guidelines for their respective hunting areas in order to alert the tourism sector about the desired levels and types of tourist activity.



**The Tourism Guidelines provide the following:**

- there shall be no water based tourism or related activity in Zone 1(a);
- subsistence hunting takes priority over tourism activities;
- HTC's will designate areas to be used for whale watching/tourism within the ISR;
- tourism operators must have a written Agreement with the appropriate HTC;
- specific Guidelines are provided covering harassment, timing of activity, tour length, photography, use of aircraft and protection of the environment.

(Complete Tourism Guidelines may be obtained from the Fisheries Joint Management Committee or the Community Hunters and Trappers Committees.)

The avoidance of conflict between resource harvesters and the tourism sector requires continuing cooperation and understanding.

**Disturbance of Beluga**

With respect to disturbance of beluga, many human activities can be controlled through application of the Hunters and Trappers Committee By-laws, the Marine Mammal Protection Regulations and the Tourism Guidelines. A general prohibition against disturbance is contained in the Department of Fisheries and Oceans legislation. In addition, the general guidelines developed by the Department of Fisheries and Oceans for whale watching should be adopted by the Hunters and Trappers Committees and distributed to tourism operators.



**BY-LAWS AND REGULATIONS**

The ongoing Implementation of this Plan requires a continuing firm commitment and coordinated effort by the Inuvialuit and the Government of Canada to be prepared to make changes to existing Legislation or formulate new laws as may be required. Parties to this Plan must recognize and be prepared to deal directly with any real or potential threat which may adversely affect beluga habitat.

**Objectives**

To protect the Beaufort Sea beluga resource and the harvest of that resource.

To formulate, amend and implement guidelines, bylaws, and regulations necessary to protect the beluga, beluga habitat and the beluga harvest.

**Beluga Protection Regulations**

The Marine Mammal Protection Regulations under the Fisheries Act are general in application and have been amended to recognize beneficiaries and their rights under the Inuvialuit Final Agreement. The new Oceans Act has been passed (1996) and contains provisions to establish Marine Protected Areas which can prescribe measures for the conservation and protection of a fishery or fishery habitat. This may provide recognition and protection for the Beluga Management Zones.

**Hunters and Trappers Committee Hunting By-laws**

All H.T.C.'s within the Inuvialuit Settlement Region have adopted community specific by-laws to ensure efficient and safe hunting practices. These by-laws provide support to the applicable sections of the Marine Mammal Regulations, are enforceable under these Regulations and set specific standards for each community's hunting activities.

The Beluga Hunting By-laws are accompanied by H.T.C. Community Hunting Guidelines which reinforce the standards set by the By-laws and ensures that the hunting is conducted in the best possible manner. The HTC By-laws and Guidelines and an essential component of the Beluga Management Plan and may be modified from time to time. **The complete Beluga Hunting By-laws and Guideline are found inside the back cover.**

The By-laws and Guidelines have already reduced hunting losses and wastage and will result in safer hunting.

**Enforcement**

**D**epartment of Fisheries and Oceans is responsible for the enforcement of the *Fisheries Act* and the Marine Mammal Protection Regulations. The Hunters and Trappers Committees By-law can be enforced by Fishery Officers under these Regulations.



**SUPPORTING PROGRAMS**

**Monitoring and Research**

**M**onitoring of the Beaufort Sea beluga and the annual harvest are necessary to provide information required to evaluate the soundness of management strategies and the health of the beluga.

In light of information gaps in the database for Beaufort Sea Beluga the FJMC, DFO and the Environmental Studies Research Funds (ESRF) sponsored a workshop to examine the status and other important questions related to Beaufort Sea Beluga. The workshop was held in Vancouver, BC on February 3-6, 1992, and was attended by individuals representing various agencies from both Alaska and the ISR, technical advisors and hunters.

As a result of research priorities identified by the workshop, FJMC sponsored a number of research projects including: an aerial survey, a DNA stock genetics study, and a community based traditional knowledge study. The results of these studies have been discussed at an FJMC sponsored workshop in the spring of 1996.

**Objectives**

**To provide the necessary biological information for the conservation, management protection and optimal utilization of Beaufort Sea beluga.**

**To provide the new biological information about the Beaufort Sea beluga required for the implementation of this management plan.**

**Requirements**

Monitoring activities should be designed to meet the goals and objectives of this Plan, especially those relating to the Harvesting and Conservation components. Monitoring and research activities should make use of the significant amount of scientific and traditional knowledge collected since the first Beaufort Sea Beluga Workshop.

All research programs will make every effort to include local and traditional knowledge, and wherever possible, Inuvialuit will participate in research activities.



**EDUCATION and PUBLIC AWARENESS**

The management activities described in this Plan must be supported by educational programs. As with many traditional pursuits, the transfer to younger Inuvialuit of knowledge related to hunting skills and practices has been accomplished with limited success. As a result, programs are required to reverse this trend.

**Objectives**

To initiate school and hunter education programs.

**Programs**

**Classroom Instruction**

Targeted at school-aged children, this program will deal with the history and traditions associated with Inuvialuit whaling, as well as the principles of beluga management. This program should be developed jointly by beluga hunters, wildlife managers and educators, and should be delivered as part of the regular school curriculum.

**Practical Training**

This component, targeted at potential harvesters, should focus on hunting techniques as well as on the principles of beluga management. Since lectures and films can only supplement, not replace practical experience, such a program should best be carried out by the HTC's. Establishment of an educational whaling camp would serve to provide information on all aspects of proper, responsible and safe beluga harvesting, both to school children and beluga hunters.



Teaching Aids

To convey the principles of beluga management and proper methods of harvesting beluga a Hunting Manual and Video will be developed. The manual and video will specify and describe hunting equipment and techniques, outline by-laws and regulations and information and requirements of the beluga monitoring program.

An education video covering hunting equipment and techniques, describing by-laws and regulations, and traditional preparation and preservation of the muktuk and meat has been completed and is available for viewing.

A traditional knowledge study incorporating the experience and wisdom of the elder beluga hunters has also been completed and is available for reading.



DEFINITIONS

**Conservation:** the management of the wildlife populations and habitat to ensure the maintenance of the quality, including the long term optimum productivity, of these resources and to ensure the efficient utilization of the available harvest.

**Designated Routes:** those marine transportation corridors established, following consultation with the Department of Fisheries and Oceans, by Transport Canada .

**Optimum Sustainable Harvest:** the level of harvest that generates the greatest net benefit for the Inuvialuit while ensuring the long term sustainability of beluga within the Inuvialuit Settlement Region.

**Subsistence Usage:** with respect to wildlife other than migratory game birds, migratory non-game birds and migratory insectivorous birds, subject to international conventions, the taking of wildlife by Inuvialuit for their personal use for food and clothing and includes the taking of wildlife for the purpose of trade barter and, subject to Section 12, sale among Inuvialuit and trade, barter and sale to any person the non-edible by-products of wildlife that are incidental to the taking of wildlife by Inuvialuit for their personal use.

**Total Allowable Catch:** the number of beluga that can be removed from the Beaufort Sea beluga stock during any year without reducing the number of beluga in the overall population.



## ACKNOWLEDGEMENTS

The Beaufort Sea Beluga Technical Working Group was established by the Department of Fisheries and Oceans in 1985, and submitted its draft of the Beaufort Sea Beluga Management Strategy to the Fisheries Joint Management Committee in June 1987. Members of the Group were J.T. Strong (DFO, Chair), A. Aviugana (Inuvik), R. Barnes (DFO), E. Birchard (Esso), B. Day (Inuvik), F. Elanik (Aklavik), N. Green (Paulatuk), B. Kimiksana (Tuktoyaktuk), B. Smiley (DFO), and G. Yaremchuk (DFO).

In 1988-89, a community representative from each of the Tuktoyaktuk (R. Pokiak), Aklavik (T. Elanik) and Inuvik (R. Binder) Hunters and Trappers Committees, assisted by their respective Hunters and Trappers Committee Resource Person (F. Wolki, D. Malegana and A. Kasook, respectively), participated in four workshops coordinated by L. Harwood, Resource Biologist, Fisheries Joint Management Committee, to prepare a second draft of the management plan. They then presented the information from the draft plan to their community resource users.

The Committee would also like to acknowledge the contribution of a former Committee member, Michelle Roberge, who played a lead role in reviewing and editing the initial drafts of the Plan.

This third printing of the Beluga Management Plan is specially dedicated to the memory of Alexander Charles Aviugana who passed away on May 8, 1994. Alex was a founding member of the FJMC and also held numerous positions with other Inuvialuit organizations, but always had time for the business of the Committee. In many ways Alex shaped the FJMC. His insistence on community based monitoring and assessment projects, in addition to the training of Inuvialuit in resource management resulted in the HTC's becoming competent partners in the delivery of programs such as Beluga and fish monitoring activities. He always stressed the importance of incorporating traditional knowledge into management practises and decision making, as well as the need to educate the younger generation.

In short, Alex served both as a catalyst and a guide to the FJMC, helping everyone to see old issues in a new light, and to channel our efforts in productive directions. He never let anyone forget the provisions of the Final Agreement, nor the intent behind those provisions. We can all be proud of Mr. Aviugana's achievements and the legacy he left for all of us.

## CREDITS

1. *I, Nuligak*. 1966. M. Metayer, (tr.) Toronto, Peter Martin

2. *The Whale Trap at Kittigazuit* has been reproduced, with permission, from *Beluga Hunters, An Archaeological Reconstruction of the History and Culture of the Mackenzie Delta Kitleganyumiut*. McGhee, Robert. 1988. Canadian Museum of Civilization.



Signatory Page

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COMMITTEE**



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*Chairman*



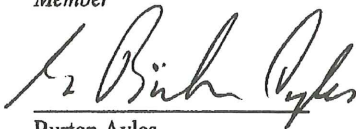
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*Member*



Pat Expakohak  
*Member*



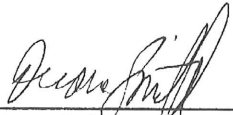
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