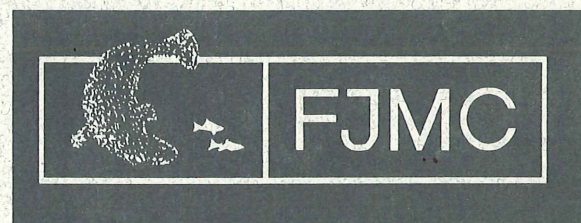


BEAUFORT SEA BELUGA MANAGEMENT PLAN

**Fisheries Joint Management Committee
Box 2120
Inuvik, Northwest Territories
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1991




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.

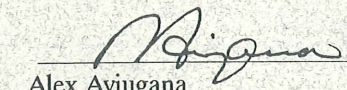
As prescribed by Section 14 (61) of the Inuvialuit Final Agreement, the Minister of Fisheries and Oceans established the Fisheries Joint Management Committee in 1986. The Committee was established to assist Canada and the Inuvialuit in administering the rights and obligations relating to fisheries within 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, Inuvik and 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 regulation 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.

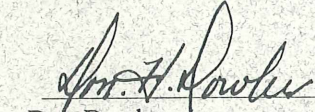
**FISHERIES JOINT MANAGEMENT
COMMITTEE**



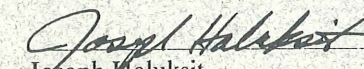
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Chairman



Alex Aviugana
Member



Don Dowler
Member

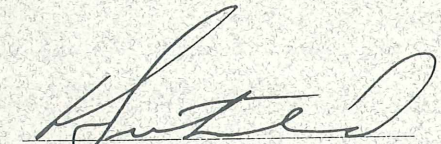


Joseph Haluksit
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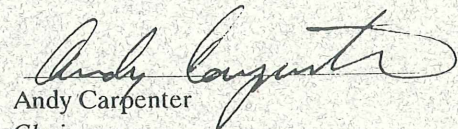
M. H. Papst
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**DEPARTMENT OF FISHERIES AND
OCEANS**



Paul Sutherland
*Regional Director General
Central and Arctic Region*

INUVIALUIT GAME COUNCIL



Andy Carpenter
Chairman

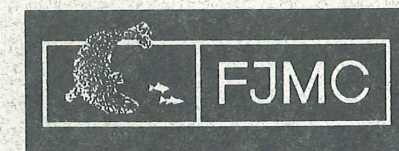


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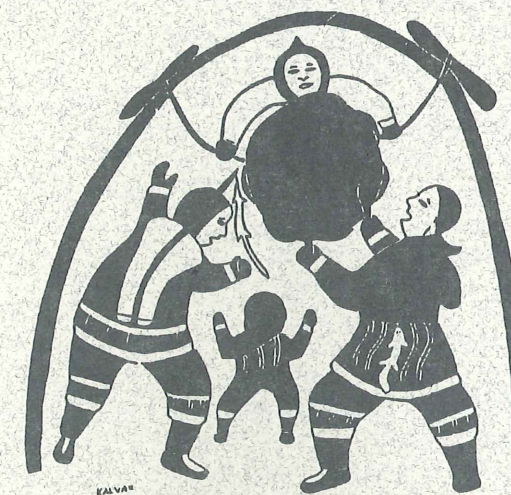
INTRODUCTION

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 occasionally 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.

Until recently, 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 *Beluga Protection Regulations*, the *Oil and Gas Production and Conservation Act*, the *Canadian Environmental*

Protection Act, and the *Arctic Waters Pollution Prevention Act*. As well, various informal arrangements have been implemented. These have been designed to provide management data as well as to mitigate effects of industrial activity on beluga, beluga habitat and beluga harvesting.

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 are now being 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 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.

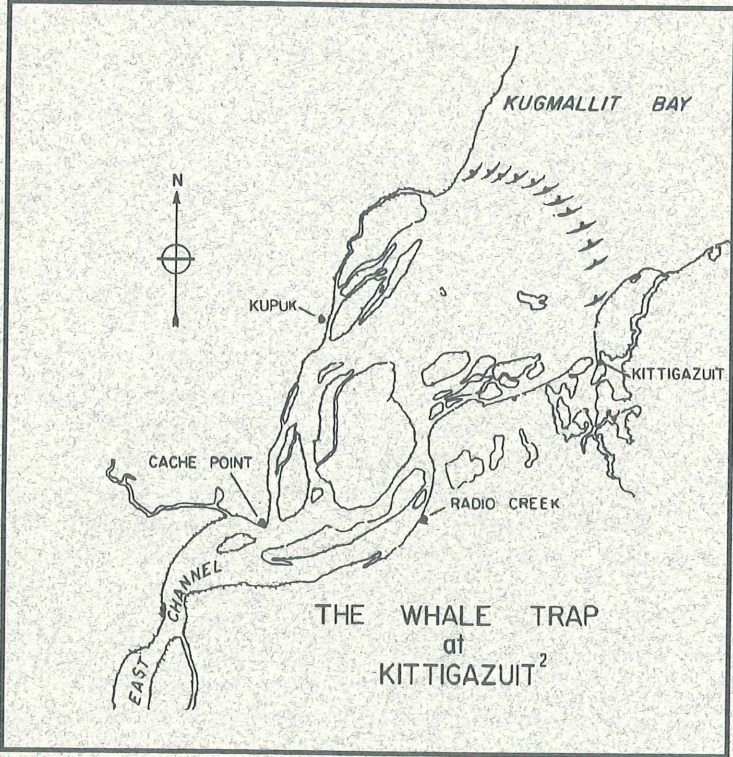
The *Beaufort Sea Beluga Management Plan* has been developed in a fashion that is consistent with the themes and goals of the above document. The Plan's purpose is to ensure the responsible and effective, long-term management of the beluga resource by the Inuvialuit and the Department of Fisheries and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



"At the great whale hunts I remember there was such a large number of kayaks that when the first had long disappeared from view, more and more were just setting out." Nuligak¹

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 losses after shooting. Residents of Paulatuk and Holman occasionally harvest beluga near their communities, and residents of Sachs Harbour have recently expressed an interest in hunting beluga off the coast of Banks Island.

To date the harvest of beluga in the Mackenzie River estuary has been self-regulated, and is generally limited to the number required for subsistence needs. However, the increasing Inuvialuit population may result in an increase in the number of beluga harvested during the coming years. As well, other communities within the Settlement Region have expressed an interest in the development of community-based beluga harvests. As a result, both the Inuvialuit and the Department of Fisheries and Oceans recognize that in the long term a more precise approach will be required.

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 economical harvest and low loss rates.

Total Allowable Catch

This plan is based on the approach that establishing a Total Allowable Catch (TAC) is necessary to ensure conservation, responsible management and optimal utilization of beluga. 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 put another way, 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. Thus the population will not get smaller.

For this approach to work, all removals from the population must come from the TAC, including landed whales, lost whales, and those taken for scientific purposes. In addition, if beluga harvested by Inupiat on the Alaska North Slope are from the same stock, then those beluga must be included in the TAC. Management by a TAC will allow the Inuvialuit to utilize the beluga resource to its full extent, and according to the principles of conservation.

Determination of the TAC

At present, a TAC based on accurate estimates of stock size and recruitment/vital rates can not be calculated. The Department of Fisheries and Oceans is responsible for conducting the necessary studies to determine the TAC. Such studies are currently underway. It is the responsibility of the Inuvialuit to provide accurate harvest information and loss rates, and to participate in the collection of the necessary biological data.

Allocation of the TAC

Inuvialuit and Inupiat

Currently there are insufficient biological data to determine if beluga harvested in Canada by Inuvialuit and in Alaska by Inupiat arise from discrete stocks. There is also limited information available on the current level of the harvests in Alaska. Cooperative efforts have recently been initiated to provide the data necessary to determine the discreteness of the Beaufort Sea beluga stocks and the size of the Alaskan harvest.

If the beluga harvested by Alaskans are from a stock shared with the Inuvialuit then an allocation of TAC must be made between the Inuvialuit (Canada) and the Inupiat (U.S.A)

Since beluga may be a shared resource between Canada and Alaska, cooperative efforts have been initiated between the Inuvialuit and the Alaskan Inupiat to jointly develop a common management plan. At present this effort is being headed by the Alaska Inuvialuit Beluga Whale Committee (AIBWC). It is intended that the contents of this document would contribute to an international management agreement.

Among ISR Communities

The FJMC has referred the task of allocating the TAC among the communities within the Inuvialuit Settlement Region to the Inuvialuit Game Council. The Hunters and Trappers Committees will allocate their community's portion of the TAC among beluga hunters.

The sub-allocation carried out by the Inuvialuit Game Council and Hunters and Trappers Committees should be done by percentage of the TAC rather than by numbers of whales. This will allow sub-allocation to be self-adjusting if the TAC changes.

Uses of the TAC

Subsistence

The first priority for the beluga harvest is subsistence usage, as defined under the IFA:

"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 of the non-edible by-products of wildlife that are incidental to the taking of wildlife by Inuvialuit for their personal use."

There are options available to the Inuvialuit regarding how the TAC is to be utilized, provided that the above priority is recognized and that all alternative uses are included in the TAC.

Decisions concerning the acceptability of alternative uses and the portion of the TAC allocated to alternate uses, with the exception of whales taken for scientific purposes, and subject to federal law, rest with the Inuvialuit. The decision to allow a portion of the TAC to be used for scientific research shall be the responsibility of the FJMC.

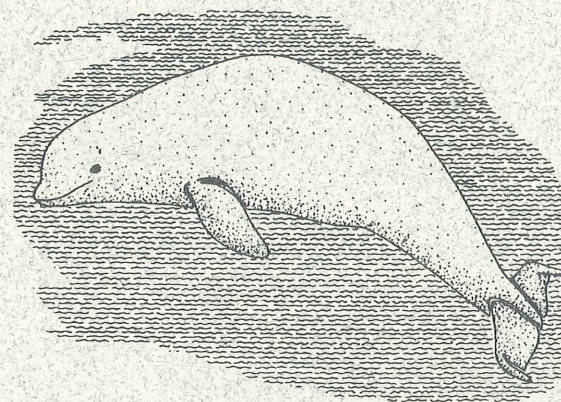
Sale to Non-Inuvialuit (Commercial Use)

At present, commercial use of beluga is not permitted in Canada. If commercial use is legalized at some time in the future, the decision on the portion of the TAC that will be designated as commercial, as well as its allocation among communities will be the responsibility of IGC.

Other Uses

The capture of beluga for exhibit is at present controlled through a Department of Fisheries and Oceans licensing system. Since the system used within the Settlement Region is based on full consultation with

IGC and FJMC, it should continue. However any beluga captured under such licenses must be included in the TAC.



CONSERVATION AND PROTECTION

GUIDELINES FOR DEVELOPMENT ACTIVITIES

Beluga 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 stability 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.

Beaufort Sea Beluga Management Plan - Management Zone Boundaries

- ① Beluga Harvesting Area
- ② Beluga Harvesting Area (Existing or Potential)
- ③ Mackenzie Estuary and Tuktoyaktuk Peninsula
- ④ Offshore
- ⑤ Foreign/International Waters

ARCTIC OCEAN

3

4

BEAUFORT SEA

2

AMUNDSEN

GULF

YUKON

NORTHWEST TERRITORIES

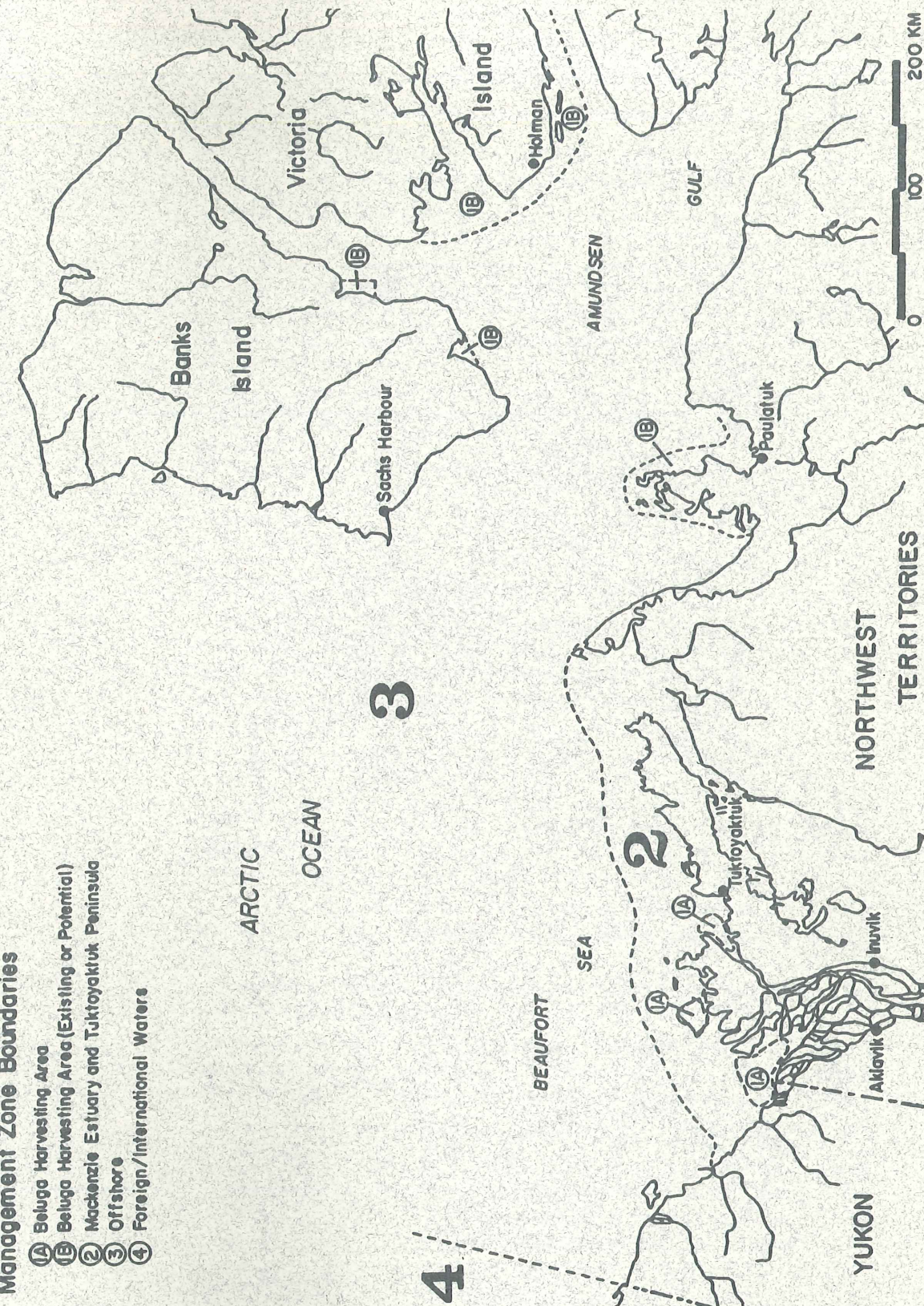


Figure 1. Management Zone Boundaries.

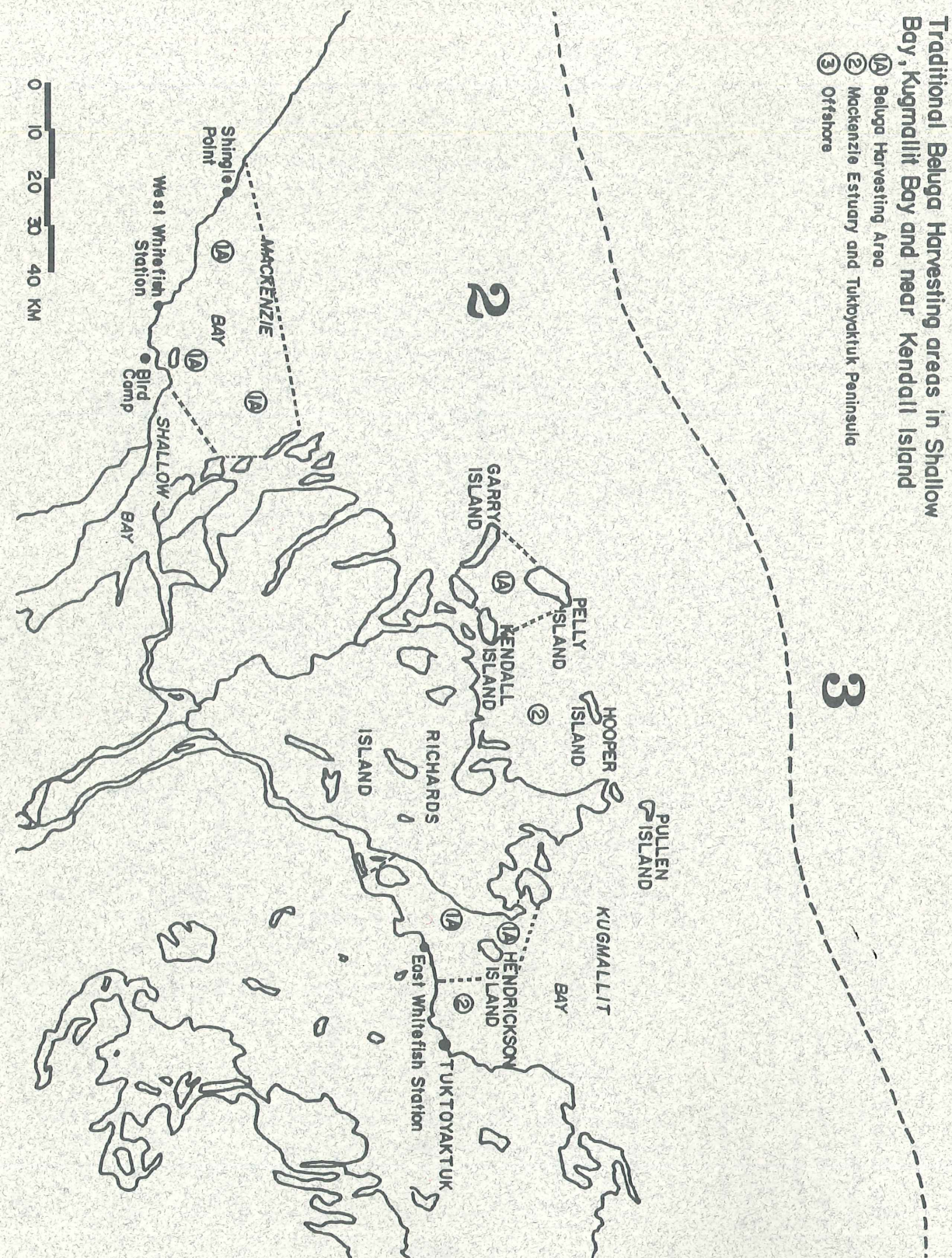


Figure 2. Zones related to traditional harvesting.

Zone 1 Descriptions and Guidelines

Zone 1a - Traditional Harvesting\Concentration Areas

This zone includes a few hundred square kilometers 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 occasionally harvested by residents of Paulatuk and 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.

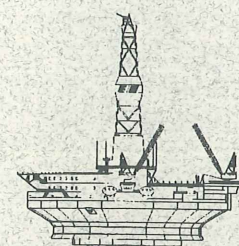
No mining activities (e.g. gravel removal) should be permitted from break-up until August 15th.

Development activities such as hydro-electric developments, even if located outside of Zone 1, should be evaluated for their potential deleterious effects on water quality and quantity, or on the stability and

integrity of ice in Zone 1a 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

Zone 2 includes all the Mackenzie Shelf waters shallower than 20 meters 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 landfast 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

Industrial 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., stability 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

Zone 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

Since 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

Beluga 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

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

Methods designed to limit conflicts between resource harvesting and tourism need to be investigated.

Disturbance of Beluga

With respect to disturbance of beluga, many human activities can be controlled through application of the *Beluga Protection Regulations* and the Hunters and Trappers Committee By-laws. 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

Implementation of this Plan will require a firm commitment and a continued, coordinated effort by the Inuvialuit and the Government of Canada. Fundamental steps required for implementation include making necessary changes to existing legislation, preparation of new legislation, by-laws and guidelines and the examination of enforcement options and requirements.

Objectives

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

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

Beluga Protection Regulations

The *Beluga Protections Regulations* under the *Fisheries Act* are general and apply to beluga hunting throughout the Northwest Territories. At present, they do not incorporate the beluga management zones identified in this plan, and thus do not afford adequate protection to beluga. They also must be revised to reflect the provisions of the *Inuvialuit Final Agreement*.

Hunters and Trappers Committee Hunting By-laws

The Hunters and Trappers Committees within the Inuvialuit Settlement Region are responsible for the preparation of community specific by-laws (community hunting rules) to ensure efficient and safe hunting practices continue, reduce hunting losses of the Beaufort Sea beluga, and encourage efficient utilization and proper disposal of the carcass. Such by-laws will compliment the federal regulations of more general application.

Enforcement

Department of Fisheries and Oceans is responsible for the enforcement of the *Fisheries Act* and the *Beluga Protection Regulations*. Regarding the enforcement of the Hunters and Trappers Committee by-laws, an option under consideration is that by-laws be enforced locally by "beluga guardians" under the direction of the Hunters and Trappers Committees, with the support of DFO or GNWT enforcement officers as required.

SUPPORTING PROGRAMS

MONITORING AND RESEARCH

Monitoring 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.

Many information gaps are present in the biological data base for beluga of the Beaufort Sea. Sound and responsible long-term management requires that these information gaps be filled as soon as possible. The Fisheries Joint Management Committee, the Hunters and Trappers Committees and the Department of Fisheries and Oceans will continue to cooperate on prioritizing and implementing the necessary research programs.

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. The Fisheries Joint Management Committee, the Hunters and Trappers Committees and the Department of Fisheries and Oceans will continue to coordinate monitoring programs on a timely basis.

Research on beluga in the Beaufort Sea should be directed toward the goals and objectives of this plan. Cooperative research programs already established should continue and new research programs, including cost-shared programs with industry, should be initiated. 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.

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.

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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 Kittegaryumiut*. McGhee, Robert. 1988. Canadian Museum of Civilization.