

**Beluga co-management; Perspectives from  
Kuujjuarapik and Umiujaq, Nunavik**

**By Robin Gislason**

**A thesis submitted in partial fulfillment of the requirements  
for the degree of**

**Master of Environment**

**Department of Environment and Geography  
University of Manitoba**

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**Beluga co-management; Perspectives from  
Kuujjuarapik and Umiujaq, Nunavik**

**BY**

**Robin Gislason**

**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of  
Manitoba in partial fulfillment of the requirement of the degree**

**MASTER OF ENVIRONMENT**

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## **Abstract**

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The Inuit of Nunavik have always harvested the beluga whale for subsistence purposes. This harvest is socially, culturally, and economically important to the Inuit of Nunavik. In the 1800s the Hudson Bay Company ran a commercial whaling post at the mouth of the Great Whale River. It was during this time that the eastern Hudson Bay beluga summer stock first began to decrease. In the 1980s The Department of Fisheries and Oceans (DFO) first began to consider the subsistence harvest by the Inuit too high for the population to recover. They implemented a management strategy that consisted of harvest quotas and seasonal and regional closures. This strategy was implemented with very little Inuit consultation, and therefore is not agreeable to the Inuit of Nunavik. In December 2006 the Inuit and Federal Government signed the Nunavik Inuit Land Claims Agreement, which covers offshore areas not dealt with in the 1975 James Bay and Northern Quebec Agreement. This agreement created the Nunavik Marine Region Wildlife Management Board, a co-management board that allows for management decision-making by both the Federal Government and the Inuit. The purpose of this research is to identify Inuit perspectives on co-management for the eastern Hudson Bay beluga summer stock. Through this research 12 themes of co-management importance have been identified by Inuit community members in Kuujjuarapik and Umijuaq, Nunavik.

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&

Adam Lewis

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## **Chapter One: Beluga management in Nunavik**

Maintaining hunting-based subsistence is the essential and continuing foundation of Inuit culture and identity (Freeman, 2006). The Inuit of Nunavik have always harvested the beluga whale. Beluga whale hunting is one of the most social subsistence hunting activities to take place in the Canadian Arctic. Through the harvest, distribution and consumption of beluga whales, Inuit identity and social relationships are affirmed (Tyrell, 2007a). The harvest instills a strong self-image for Inuit youth, while confirming and maintaining a sense of community (Kishigami, 2005).

The eastern Hudson Bay beluga summer stock is currently listed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as “endangered” (COSEWIC, 2006). Its numbers began to decrease drastically when the Hudson Bay Company ran a commercial whaling post from 1854 to 1877 at the mouth of the Great Whale River (Reeves and Mitchell, 1987a). Then based on aerial survey results in the 1980s the Department of Fisheries and Oceans (DFO) began to consider the Inuit subsistence harvest too high for the population to recover. In response DFO implemented a series of beluga management plans that included harvesting quotas as well as seasonal and regional harvesting closures.

The Traditional Ecological Knowledge of the hunters in the region is currently not used in relation to the beluga for management purposes (Kishigami, 2005). The hunters are currently not involved in any beluga management decision-making.

### **Purpose**

The purpose of this research is to determine what perspectives Inuit hunters in Kuujjuarapik and Umiujaq, Quebec have on co-management strategies for the eastern Hudson Bay beluga stock.

## **Objectives**

1. Identify the cultural and socio-economic relevance of the beluga harvest to Inuit participants in Kuujjuarapik and Umiujaq, Nunavik. This objective is necessary to determine why the beluga harvest is necessary in Nunavik.
2. Identify Inuit perspectives on positive and negative aspects of the current beluga management plan in Nunavik
3. Identify perspectives from community members in Kuujjuarapik and Umiujaq, Nunavik on future beluga co-management recommendations

## **Rationale**

To Inuit culture, any challenge to subsistence is likely to be resisted, and unless effectively countered will be exceedingly damaging (Freeman, 2006). Subsistence, understood to mean the cultural values that socially integrate the economic relations of a hunting people into their daily lives, is comprised of those culturally-established responsibilities, rights and obligations that effect every man, woman, and child every day of their lives (Wenzel 1991).

According to Kishigami (2005) the current management strategy directly challenges Inuit subsistence, and is not working. There is outright resistance to the beluga management plan expressed through non-cooperation, and beluga management plans have been consistently ignored in Nunavik for the past 10 years (Tyrell, 2007). Although there is an Inuit advisory board, the Lumaq Board, the Department of Fisheries and Oceans maintains complete legislative control. The management strategy tries to include the knowledge of the local hunters, but their knowledge is rarely used (R.Tookalak, 2006).

Kishigami (2005) believes the only way a co-management body could be successful would be to include the local hunters. Kishigami (2005) goes on to state that

there are two problems with the current management system. One is the institutional complexity or functional ambiguity in the sharing of responsibilities and power between the local Inuit and DFO. Another is that Inuit do not actively participate in co-management practices or play a vital role in co-management. It is evident that there is a problem that needs to be solved; the stock is decreasing and will become extinct if a successful management strategy is not put in place (COSEWIC, 2006). The need for a management strategy that all parties can agree to is essential (Lewis et al., 2006).

### **Authorship, Intellectual Property and Information Sharing**

Due to the possibility of gaining insight to Traditional Knowledge throughout the research process, all information shared will be recognized and referenced using the APA referencing style. The researcher has also ensured all knowledge gathered and used for this research has been verified by the owner of the property (Appendix III). As well as the above verification process, the final data has been made available to the community. All community participants as well as representatives from DFO, Makivik Corporation, local HFTAs, local municipal offices, Sakkuq Land Holding Corporation, and the HFTCC have received a copy of the Inuit/DFO beluga co-management relations book.

Any material recorded on audiocassettes is owned by the participant and such material is acknowledged as “edited by” the researcher and authored by “the participant”. Any use or replication of this material is subject to the approval of the author. Any data generated solely by the researcher, such as research logs and journals, will be considered to be authored by the researcher and thus the property of the researcher.

Ultimate dissemination of raw or edited data, to local libraries and/or community centers will be at the discretion of the participants. Whereas, ownership and

dissemination of the final thesis, as approved by the participants, will be the property of the researcher.

### **Parameters and limitations**

The parameters of this research include the community members of Kuujjuarapik and Umiujaq, an Inuit field guide for each community, and the researcher. “Community members” include all people within the community who have a stake in the beluga harvest. Youth, elders, hunters, women, and anyone else who has a stake in the beluga harvest have had an opportunity to be included in this research. It includes perspectives, thoughts, reflections, and suggestions of the community members and the researcher based upon current and future beluga management systems for the purpose of managing the eastern Hudson Bay beluga summer stock.

There are 14 communities within Nunavik. The main limitation is that only two communities and one researcher will be represented in this study. Logistically this study is limited by time, and current 2006-07 perspectives. These perspectives have been collected only in the fall season due to financial restrictions during both of the researcher’s field seasons as well as the researcher’s ability to travel to the communities of Kuujjuarapik and Umiujaq. Other limitations include the availability and desire of the community members, most importantly hunters’ ability and desire to go through the interview process. Therefore, the quality of the data represented in this research is based on these factors.

### **Literature Review**

According to DFO the Hudson Bay beluga population is comprised of three separate summer stocks. Most of these beluga over winter in the Hudson Strait then migrate to different sections of the Hudson Bay for the summer months. There is

evidence that some belugas over winter around the Belcher Islands and northern James Bay where there is open water year round (Hammill et al., 2004). According to DFO's aerial surveys and satellite telemetry the three stocks include the western Hudson Bay stock with population estimate of 57, 342 (DFO, 2005b), the eastern Hudson Bay stock has a population of 2045, and as of 2004 telemetry devices have not picked up any belugas in the Ungava Bay stock (Gosselin, 2005). Molecular genetic analysis of samples collected by hunters support the division of these stocks (deMarch & Maiers, 2001). The Ungava Bay and eastern Hudson Bay stocks are currently listed as endangered by The Committee on the Status of Endangered Wildlife in Canada (COSEWIC, 2006), and quotas on harvesting have been set in place.

In the mid 1800s the Hudson Bay Company set up a commercial whaling post at the mouth of the Great Whale River (Reeves and Mitchell, 1987a). This venture included the harvest of 1000s of beluga for their valuable oil. The Inuit of Nunavik have always harvested beluga for subsistence purposes (Reeves and Mitchell, 1987a). Economic reports from the Department of Indian and Northern Affairs in the 1970s report that there were also active attempts by the Inuit of Nunavik to sell beluga products from their harvest. The objective was to try to generate cash from the subsistence harvest that would allow people to live on the land, but still generate cash needed for supplies (Hammill, 2006).

Hammill et al., (2004) suggests that the Inuit have, in recent years over harvested the eastern Hudson Bay beluga, preventing the recovery of the beluga stock, and that not all the blame can be put on the commercial harvest of the Hudson Bay Company. Hammill et al., (2004) goes on to state that the Hudson Bay Company's commercial beluga harvest occurred so long ago that the current low population estimates can not be

blamed solely on the commercial harvest. Therefore, one must assume that subsistence harvesting has not allowed for recovery. Some responsibility for over-harvesting needs to be claimed by the Inuit subsistence harvest.

DFO began to consider the Nunavik Inuit subsistence beluga harvest to high for the population to recover in the 1980s. They implemented a series of beluga management plans beginning in 1996 with the first five-year plan. The plan was developed with the inclusion of DFO and Inuit. It included a total allowable catch (TAC) of 240 beluga per year. The plan was considered a by-law with no penalties. The second plan from 2001 to 2003 raised the TAC to 370 beluga. This plan implemented regional closures in the Hudson Bay Arc and Ungava Bay (figure 2.1). There were some communities in Nunavik who were hoping to get out of the beluga management plans because they were unhappy with the first plan from 1996 to 2000. However, all 14 communities agreed to the second management plan (Kishigami, 2005).

In 2002 DFO revised the second management plan based solely on the results of the aerial survey results from 2001. They reduced the TAC to 240 and implemented more rules including best practice hunting techniques. The revisions were reluctantly accepted by the hunters due to the fact that the plan was based on aerial survey results only and did not include any Traditional Knowledge (Kishigami, 2005).

By last summer, 2006 the TAC had been reduced to 135 beluga. Inuit resistance to the management plans is extremely high. Harvesting that had been accounted for last year was at 149 beluga. This number is 14 animals over the TAC. Due to this over-harvest DFO has decided to subtract this number from the 2007 TAC which will now be a TAC of 121 beluga (George, 2005).

In anticipation of an offshore co-management agreement in Nunavik being reached, in 2005 the Inuit approached the DFO with the idea for an advisory co-management board. DFO agreed and the board is called “Lumaaq” named after an Inuit beluga whale legend\*. The board has no legislative powers, but acts as an advisory board for DFO on beluga management. The board is comprised of five regional Inuit representatives, two Makivik representatives, one from the Belcher Islands, one from Nunavut, and one DFO representative (R. Tookalak, 2006). Although DFO does take into consideration the recommendations from Lumaaq Corporation, they hold conservation as their top priority. (Hammill, 2006).

\*The Lumaaq Legend goes like this;

*A mother had a baby who could not see very well. The mother was not nice to this baby. Then when the baby grew up, it attached its mother to a harpoon and harpooned a beluga whale. The Inuit say to this day the mother is still attached to the beluga's back. When the people see the backs of the belugas come out of the water they say “Lumaaq” “Lumaaq”.  
(as told by Moses Weetaltuk, 2006).*

In December 2006 the Inuit and Federal Government signed the Nunavik Inuit Land Claims Agreement that covers offshore areas not dealt with in the 1975 James Bay and Northern Quebec Agreement. This agreement created the Nunavik Marine Region Wildlife Management Board. The board includes three Inuit members from Nunavik and four representatives appointed by governments, including Nuavut. This is a co-management board that will hold decision-making powers regarding the beluga harvest in Nunavik as it allows for management decision-making by both the Federal Government

and the Inuit. Although this agreement was signed in December 2006, time will be needed to go through this legislative process. Until this process is completed the management and legal responsibility is in the hands of DFO.

There are two different knowledge systems that could be used for the management of this population. The western scientific satellite telemetry and aerial survey approaches are very useful because they are able to provide information in regards to the population number as well as information on the activity of belugas when using offshore waters. The Traditional Ecological Knowledge of the area is more precise in regards to beluga movement close to the eastern Hudson Bay shoreline. This includes information on breeding, calving, and resting areas (Lee et al., 2002). Both data sets are important to the management of the population. However, there are gaps in both data sets. If the two sets of data were to be combined, a more holistic picture would be represented, and therefore, a better strategy could be implemented (Hammill et al., 2004).

There are many examples within Canada, as well as world wide, of successful co-management strategies -The Fisheries Joint Management Committee created for the Mackenzie Delta/Beaufort Sea area in 1984, The Gwich'in Renewable Resources Board was created for the southern Mackenzie Delta area in 1992, the Nunavut Wildlife Management Board was established for the eastern Arctic in 1993, and the Sahtu Renewable Resources Board was created for the area around Great Bear Lake in 1994 are just a few. This paper will present two examples; the James Bay beaver management strategy (Moller et al., 2004), as well as the Beverly-Qumanirjuaq Caribou Management board management strategy (Moller et al., 2004). These two examples prove that co-management is a possibility, and a reality.



There are currently four co-management boards within Nunavik; The Hunting, Fishing, Trapping Coordinating Committee, Kativik Advisory Committee, Kativik Environmental Quality Commission, and the Federal Review Committee North. Members of these boards were interviewed in 2002, to discuss their views on the integration of TEK in co-management bodies in Nunavik, Quebec. These interviews represent the fact that the management boards are made up of many people with many different views. That being said, the results from the interviews were easily categorized into three challenges that need to be overcome within these boards to properly execute the combination of western science and TEK for management purposes (Peters, 2002).

### **Cultural Importance of the Beluga in Nunavik**

Given the specificity of each cultural group's environmental and social relations, subsistence as practiced by the Inuit (or any other foraging people) is a distinctive marker of their cultural identity. Foraging practices provide the culturally appropriate foods whose consumption connects Inuit to their understanding of who they are and to their cherished heritage (Freeman, 2006).

The beluga whale is called "qilalugak" in Inuktitut (Kishigami, 2005). An adult beluga whale provides approximately 200 kg of meat, 50kg of maktaq (skin with associated blubber), and 300 litres of fat oil (Reeves and Mitchell, 1987b).

A large quantity of southern foods such as bread, canned soups, vegetables, eggs, meat, chicken, pork, milk, etc. have been increasingly transported into arctic regions and consumed by Inuit since the 1960s (Kishigami, 2005). Several studies on food consumption in the Nunavik region show a general trend of young Inuit increasingly dependent on store bought food, and thus decreasingly dependent on country foods (Kuhnlein, 1995). While store bought foods tend to be rich in carbohydrates and

saturated fats, country foods are rich in many vitamins, minerals, and protein (Kuhnlein, 1995). In addition many Inuit still prefer country foods to southern foods in terms of taste and cultural satisfaction (Kishigami, 2005).

Beluga whales are regarded as a highly valued food resource as well as a socio-culturally important resource to the Inuit (Freeman, 1993). This is especially apparent in Inuit food sharing practices. Food sharing has several economic functions, such as mutual assistance and maintenance of equality (Kishigami, 2005). Generally the maktaaq and meat of the whale are always shared among hunters and community members (Kishigami, 2005). This food is shared on the basis of particular social relationships between hunters and their family, neighbors, and friends (Kishigami, 2005).

Inuit food sharing practices reproduce a self-image of Inuit who help each other as well as a sense of community. In several communities in Nunavik food sharing at the entire village level is organized by the Hunter Support Program under the James Bay Northern Quebec Agreement. This confirms, maintains, and strengthens a sense of community or village and that of being Inuit (Kishigami, 2005). In the rapidly changing political and economic circumstances of contemporary Inuit life, food-sharing practices are strongly related to the economic function of mutual assistance as well as the reproduction of Inuit social relationships and a sense of community (Nuttall, 1991).

The imposition of quotas has resulted in a change of sharing patterns within the Nunavik communities. At one time beluga products were available to everyone in the community, no matter what your connection to the hunters was. This is no longer the case. Many community members are no longer privy to beluga products, due to a loss of sharing. Many of the hunters now only have enough beluga products to share with close family members. Hunting has become much more individualistic than before. Inter and

intra-family relationships are being affected by the quota imposition (Doidge, et al, 2002).

As Harry Brower, Sr. an Inuit elder from Alaska states, “The whales, they give themselves”, so too is this perception strongly tied to the Inuit culture in Nunavik.

Freeman clearly explains this perception and cultural tie to the beluga in the following quote.

The notion that the animal is offering itself to the hunter, in a society that attaches a great deal of virtue to the act of sharing and gifting food, is likely to imbue the food obtained from such an offering with intense symbolic importance. The animal consciously and knowingly chose to become part of the body of the person receiving that gift. Thus food obtained in this exchange between provider and consumer, gives more than nutrition to the consumers-it symbolically connects the Inuit in a profoundly meaningful way to their living environment. In more traditional times, and among Inuit today who hold to those traditional spiritual beliefs, eating customary food is akin to a religious observance (Freeman, 2006).

It is extremely difficult for a person from this culture to believe the beluga is actually endangered due to over-hunting. If the animal is meant to be giving itself to the hunter, how is it possible to blame the hunter for the state of the animal’s low population estimates?

#### **Scientific aerial surveys and satellite telemetry**

Systematic aerial line transect surveys were conducted in eastern Hudson Bay in 2001, and documented a population of 2045 belugas (Hammil et al., 2004). The surveys consisted of east-west transects running off the shore from the coast. In 1985, a previous survey was conducted and 1400 belugas were counted (not corrected for diving) within the eastern Hudson Bay beluga stock. . These differences illustrate the difficulties of estimating the abundance of small clumped populations (Gosselin, 2005). These

differences can be attributed to environmental conditions such as ice extent and human error or changes in survey protocol. A reduction in the altitude of planes, delays, different observers, lost flying days due to weather, and differing GPS systems all combine to equal great uncertainty (Gosselin, 2005). According to Hammill et al. (2004), aerial surveys underestimate whale abundance because observers may fail to detect whales at the surface (detectability bias) or because whales are diving when the aircraft passes overhead (availability bias). Although satellite telemetry is used to help counter these biases a warning has been issued that the population estimates of the 2001 survey and its large uncertainty should be considered with caution when used for management purposes (Gosselin, 2005, Hammil et al., 2004).

The Nunavik human population is growing rapidly with an approximate number of 10,000. Over 50% of this population is under the age of 20 (Nunavik Regional board of health and social services, 2007). There are currently 14 communities, and with a higher population comes a need for more resources. According to Hammill et al. 2004, a balance is needed to secure a place for the eastern Hudson Bay beluga population.

### **Traditional Ecological Knowledge**

Traditional Ecological Knowledge (TEK) may be defined as a knowledge system based on tradition that is created, preserved and dispersed. This information is passed from generation-to-generation and is determined by factors such as land use, environment, region, culture and language (Crowshoe, 2005). Inuit hunters have a wealth of knowledge when it comes to beluga migration patterns, as well as information as to why the patterns are changing. (Lee et al., 2002). When interviewed most hunters stated the reason for the low population numbers of the eastern Hudson Bay beluga are due to a change in historical beluga migration patterns (Lee et al., 2002). They know belugas are

extremely sensitive to noise, and therefore, are now traveling farther offshore to escape from the noise due to outboard motors on canoes, sealift helicopters, and coast guard vessels. The noise is becoming louder, and is occurring more often and in more locations than ever before (Lee et al., 2002). TEK also indicates that any of the rivers and estuaries that were at one time teeming with beluga are now devoid of any whales. Some hunters believe this is due to over harvesting, but still felt this was necessary for subsistence. One elder recalls an instance when a population was over exploited in the past. He stated the reasoning behind the exploitation was due to necessity. He did not show or vocalize any excuses or regrets while recalling the incident. In some cases, the hunt is essential for survival (Lee et al., 2002).

The hunters continually speak of the importance of passing down knowledge. Many have stated that the best elders are no longer alive. There are older hunters who are able to remember back to the 1950s and 1960s, but most information from before that is lost (Doidge et al., 2002). They say hunting methods have changed over the years and the present knowledge base has been eroded with the passing of elderly, very knowledgeable hunters. This could be a very important benefit of incorporating TEK into management. A successful co-management strategy would help preserve some of this very important knowledge for future generations, as well as making it a way of life in the present. The fact that many believe a generation gap exists is evidence for the need to keep this knowledge alive (Doidge et al., 2002). Quotas have also meant that some Inuit hunters have been taking more dangerous risks because they are in a rush to hunt as many beluga as possible before the quota is reached (Doidge et al., 2002). It was noted that in fall the beluga travel farther away from shore, to travel as quickly as possible to avoid

freeze-up. Changing ice conditions are also a large factor influencing the change in beluga migration patterns (Lee et al., 2002).

In Kuujjuarapik, hunters drive the beluga into the shallow waters, harpoon the beluga, and then the beluga is shot with a rifle (Doidge et al., 2002). Some Inuit uses of the beluga include the drying of stomachs to stuff with fat, the making of Kamiks (skin boots), the consumption of maktaq as an important part of their diet and culture, and the drying of meat for consumption (Doidge et al., 2002).

Hunters also expressed concern with the present beluga management strategy. A major concern expressed in these interviews was the lack of fairness when allotting quotas to communities. Although most hunters try to respect the quota system, they do not think it is fair. They would like to see all communities having to meet the same quota (Lee et al., 2002).

The hunters have expressed the need for more research on population sizes, noise disturbance, and changing summering grounds (Doidge et al., 2002). The TEK population status differs from the telemetry results reported from DFO who state the population numbers are lower. The TEK data states the numbers have not dropped as drastically as DFO predicts, but that the migration patterns have changed due to noise and hunting territories. This is evident in the fact that belugas are no longer using the bays and estuaries (Lee et al., 2002).

#### **A Comparison of TEK and Scientific Data on the Eastern Hudson Bay Beluga Stock**

According to Lewis et al., (2006) TEK and science differ in observational intensity and geographical cover, and therefore arrive at different conclusions. Although there is some overlap of the two data sets, the main differences between the two databases were the extent of offshore use and seasonal distribution patterns. TEK

provides a longer historical record than the scientific dataset in northern Quebec. Information like breeding, feeding, calving, and resting areas cannot be captured with telemetry (Lewis et al., 2006). Telemetry has the advantage of tracking animals without human presence, and excludes any human biases. TEK and telemetry data agree in demonstrating the beluga's preference for the inshore area. However, telemetry shows a usage of offshore areas, whereas TEK does not, due to the hunter's range of inshore areas (Lewis et al., 2006).

### **Views of Traditional Ecological Knowledge in Co-management Bodies in Nunavik**

Co-management may be defined as the sharing of power and responsibility between the government and local resource users (Berkes, et al. 1991). Although there is increasing recognition that TEK can make important contributions to environmental and resource management issues, the integration of TEK into co-management bodies in Nunavik is not straightforward. Three main challenges have been documented.

1. **Differences in knowledge systems between western science and traditional ecological knowledge.** “Science can be characterized by disembodiedness, universalism, individualism, object dichotomy, and an instrumental attitude towards nature (nature as a commodity)” (Berkes, 1999:10). While TEK is composed of indigenous knowledge systems that are embedded in local cultures and communities and bounded by local environments, with a significant moral and ethical context. It emphasizes the lack of separation between nature and culture (Peters, 2002).
2. **The relatively powerful position of western science and scientists in comparison to TEK and its users.** Often TEK is devalued due to its use only as a way to fill gaps for scientific knowledge (Peters, 2002).

3. **There are many challenges in documenting TEK, more specificity in definition and usage is needed** (Usher, 2000). If TEK is to be utilized, it must be documented in a way that is equivalent or comparable to scientific research (Peters, 2002).

During the interview process of Peter's study (2002) three elements emerged.

1. There are complex and sometimes contradictory natures of the views that committee members held about TEK. Committee member's views varied.
2. There needs to be a more active role of the Inuit in attempting to shape how TEK is used in decision-making. The need for the Inuit community to continually confirm and define their TEK is essential for co-management bodies to survive. Education is essential (Peters, 2002).
3. The need for documentation of, and research funding for, the collection of TEK. Individuals cannot be treated as the only source for information on all areas and practices. The endless scientific documents that are readily available are a much easier choice to use in research. If TEK is to be equal in research, documentation is essential. This will also lead to greater use in the decision making process (Peters, 2002).

### **Circumpolar wildlife co-management**

In November 1995 The Circumpolar Aboriginal Peoples and Co-management Practice Workshop was held in Inuvik, Northwest Territories. The workshop examined northern Aboriginal experiences with wildlife co-management. While experiences shared by participants varied, a number of common concerns and issues emerged from the discussion (Roberts, 1996). These issues are directly related to the Nunavik beluga co-



management regime, as it is not yet agreeable to all parties involved. Some conclusions on what is involved in co-management are listed below:

- Sharing of responsibility for resource management between government agencies and resource users
- Balance of power between resource users and government agencies
- Cooperation between resource users and government agencies
- Resource users taking responsibility for management decisions
- Communication and networking with other resource management organizations
- Recognizing and addressing cultural and linguistic barriers to participation
- Consensus decision-making
- Using ecologically sound management principles
- Exercising flexibility in addressing management issues
- Being adaptable to local concerns
- Using both scientific and indigenous knowledge in management decisions
- Research

### **Two Examples of Successful Co-management Regimes**

Harvest prohibitions for conservation are becoming a thing of the past. Many conservation agencies all over the world are beginning to realize that unless these prohibitions have local support they are doomed to fail (Posey, 1996). Newer approaches are participatory, inclusive, and community-based (Berkes et al., 2000). Examples include; The fisheries Joint Management Committee created for the Mackenzie Delta/Beaufort Sea area in 1984, The Gwich'in Renewable Resources Board was created for the southern Mackenzie Delta area in 1992, the Nunavut Wildlife Management Board was established for the eastern Arctic in 1993, and the Sahtu Renewable Resources Board

was created for the area around Great Bear Lake in 1994. Below are two more examples of successful co-management strategies.

**James Bay Beavers** – The James Bay Northern Quebec Agreement (JBNQA) of 1975 devolved management authority over beaver (*Castor Canadensis*) to Cree hunters and their organizations (Moller et al., 2004). Since the 17<sup>th</sup> century, the Cree have managed the beaver populations through stewards who are senior hunters and family heads. The stewards have always made the decision of how many beavers were to be harvested each year within their territories (Francis & Morantz, 1983). Through the JBNQA this practice was formalized, and the stewards were given access to aerial survey data. By the mid-eighties the Cree were well accustomed to using these surveys, and learned to combine the data from the surveys with their own TEK to realize the most practical management style for their situation. The aerial surveys were able to locate every beaver lodge within a steward's territory, but were not able to give any estimation on the number of beavers living in each one, or even whether or not they were still in use. The stewards on the other hand knew what proportions of the lodges were actually occupied, but did not have complete data on the number of lodges within their territory (Berkes et al., 2000). The combination of scientific monitoring and hunter's local observations provided optimal monitoring information to manage the resource (Moller et al., 2004).

**The Beverly-Qamanirjuaq Caribou Management Board** - In the late 1970s this co-management board was set up in response to a perceived sharp decline in the caribou herd's population. According to aerial surveys over a large territory, the herd was judged to have declined to dangerously low levels (Moller et al., 2004). The co-management body was set up to bring together government managers and Inuit, Cree, and

Dene caribou hunters. What began as an educational practice for hunters, who may have been perceived to be over-harvesting, turned into a highly successful and long-lived cross-cultural forum for joint problem solving (Kendrick, 2000). Shortly after two-way communication began between government managers and single indigenous groups it was discovered that the numbers of the caribou herd had not drastically decreased, but the herd had split. Part of the herd was outside of the area being observed through the scientific surveys (Moller et al., 2004). Once the population crisis was settled, the co-management board began to focus on other issues. Today the group focuses on discussing allocations and on setting up joint research projects and population monitoring programs that can satisfy all three indigenous groups and the government managers (Klein et al., 1999).

### **Conclusion**

The survival of Indigenous hunters and their ability to provide for the needs of their communities are evidence of the utility of their knowledge (Huntington, 2000). Beluga management in Nunavik would benefit from the inclusion of resource users in the decision-making process. The Inuit of Nunavik have a strong socioeconomic and cultural tie to the beluga whale. The need to use their beluga resource sustainably is strong if they would like the resource and the knowledge that comes with it to last for future generations. A co-management system that would be inclusive to all stakeholders is essential for the Inuit of Nunavik to hold on to this important community resource. The best way to develop a co-management system that is inclusive to all stakeholders is to research all stakeholders' perspectives regarding co-management for the eastern Hudson Bay beluga summer stock.

## Chapter Two: Methods

The intent of this research is to obtain a holistic picture of the subject of study with an emphasis on portraying the everyday experiences of individuals, while interviewing them, and others who are relevant. This is done through in-depth interviews. This research has tried to capture the whole picture and reveal how people describe and structure their world (Creswell, 2003).

### Bounding the Study

The fieldwork of the study has been conducted in Kuujjuarapik and Umiujaq, Nunavik. All interviews and field notes were collected within the community. The actors included are the researcher; Robin Gislason, who is the primary data collection mechanism, two Inuit field guides; Moses Weetaltuk and Mayor Davidee Sappa, and 37 community members in Kuujjuarapik and Umiujaq.



(Makivik Corporation, Cartographic Services, Nunavik Research Centre, 2007)  
Figure 2.1 Map of Nunavik

Events in this process included one on one, semi-standardized taped interviews between the researcher and community member, with the field guide acting as an interpreter if necessary. Interviews were taped from beginning to end with a small handheld tape recorder and the researcher took notes throughout the process. The decision of which community members were to be interviewed was decided upon by community contacts. In Kuujjuarapik, the President of Sakkuq Land Holding Corporation decided to use the local fm radio station to announce interviews that were open to the entire community. This is in contrast to the interviews conducted in Umiujaq where Robbie Tookalak, Representative of the Hudson Bay for the Lumaq Advisory Committee picked the hunters he felt had the most knowledge on the beluga harvest.

An interview may be defined as a conversation with a purpose (Berg, 1995). A semi-standardized interview is a type of interview located between the extremes of completely standardized and completely non-standardized interviews. This type of interview involves the implementation of a number of predetermined questions and/or special topics. These questions have been asked of each interviewee in a systematic and consistent order, but the interviewer also digressed; that is the interviewer probed far beyond the answers prepared in the standardized questions; as is expected in semi-directive interviews (Berg, 1995).

In his thesis *Assessing Traditional and Contemporary Fisheries Knowledge Within the Shoal Lake Watershed: Possibilities for Partnerships with Shoal Lake First Nation #40* Bosnich (1995) received permission to tape the interviews prior to commencing the interview. His success in the interview strategy came by conducting standardized open-ended interviews. Twelve initial interviews and various follow-up interviews were conducted. Prior to conducting the interview, Bosnich made an

introductory visit to the interviewee's homes. This served to ensure the objectives of the project and events of the interview were fully understood and to explain what would happen to the information gathered from the project.

### **Cultural Protocol**

The researcher has an obligation to respect the rights, needs, values, and desires of the informants (Creswell, 2003). Below are two examples from theses on cultural protocol that the researcher has incorporated into her research.

Bosnich (1995) successfully followed community protocol with his one on one and group interviews. To insure that high quality information was obtained the goals and objectives of the chief, council and local fishermen were ascertained, and suggestions were sought from the community. The objectives for the project were then modified accordingly, and the parameters deemed acceptable to both the researcher and community were developed.

In Simpson's thesis (1999) *The Construction of Traditional Ecological Knowledge: Issues, Implications and Insights* she writes of personal responsibility and awareness. She states that many Aboriginal people acknowledge that with the acquisition of knowledge comes responsibility, and that researchers have a responsibility to ensure those who have shared their knowledge do not get hurt by the research.

### **Research in a network setting**

This research has been funded by the ArcticNet National Centre of Excellence. ArcticNet has funded this research because it concerns people and environmental change in the Canadian Arctic. The ArcticNet network has been extremely useful in fulfilling the objectives of the research. Through the network I have come into contact with many experts in the fields of marine mammal science, geographic information systems, and

Inuit Traditional Knowledge. These contacts made this research project stronger due to the sharing of knowledge that arises through the usage of a network system.

### **Data Collection Strategies**

Data was collected from September 9, 2006 – October 1, 2006, with a follow up community visit from February 8 to 15, 2007. This included interviews with community members in September, and then verification of the content of the interviews in 2007.

### **Data Analysis Procedures**

Creswell (2003) claims that qualitative data analysis primarily entails classifying things, persons, and events and the properties that characterize them. Bosnich (1995) developed a data classification system to group data into specific classes. Melnyk (2000) also used a data classification system, whereby she divided her data into three separate categories ranked by priority. Then went through a second round of interview questions continually categorizing the data received by the priority ranking.

During the data analysis process the data collected by the researcher was organized categorically and reviewed repeatedly and continually. A list of major ideas that surfaced were chronicled (as suggested by Merriam 1998). Taped interviews and the participant's notes were transcribed verbatim. Field notes and taped interviews have been regularly reviewed for categories and trends.

### **Verification**

In ensuring the validity of the study, the following strategies have been employed;

1. Triangulation of data - Triangulation was first used in the social sciences as a metaphor describing a form of multiple operationalism or convergent validation (Campbell and Fiske, 1959). Triangulation in the context of this research is used to describe the use of multiple data-collection technologies designed to measure a single

concept or construct (Berg, 1995). Data has been collected through multiple sources to include interviews, observations, reflections, and document analysis.

2. Member Checking - According to Gallagher (2002) and Creswell (2003) emphasis must be placed on the fact that all information derived from interviews needs to be verified by the interviewee in order to ensure that the information is correct and the context reflects the views held by the individual and was not biased by an etic interpretation of the researcher. Member checking is used to determine the accuracy of the qualitative findings through taking the final report or specific descriptions or themes back to participants and determining whether these participants feel that they are accurate.

This process was successful in Kuujjuarapik during the researcher's second field season. Participants met with the researcher and verified that the researcher did indeed have the correct information. Those participants from Kuujjuarapik who were unavailable during the researcher's second field season gave authority to the field guide, Moses Weetaltuk, to sign the verification contract on their behalf. This was not the situation in the community of Umiujaq. The researcher's return to the community of Umiujaq during the second field season found the community shut down in regards to communicating with outsiders on the beluga co-management issue. After numerous conversations with Mayor Davidee Sappa of Umiujaq, the researcher was able to identify strong emotions due to the Government's decision to prosecute Inuit beluga harvesters perceived to be over-hunting as the reasoning behind this community shutdown. Furthermore, the carrier of this news was in the community immediately before the researcher's second field season.



The decision of the Government to begin prosecuting hunters from the Hudson Strait communities who harvested over the annual quota was devastating news to the community of Umiujaq. So much so that they were not willing to distinguish the difference between university researcher and DFO. Hence, the method employed to receive verification of the interviews obtained in Umiujaq was to have Mayor Davidee Sappa sign a verification and approval contract to proceed with the research. Mayor Sappa believes that this research will benefit his community in the future and would like to see the research continue.

### **Reporting the Findings**

Data collection strategies are similar throughout qualitative methods, but reports are diverse. This is a naturalistic study, and therefore the data is represented in descriptive, narrative form rather than as a scientific report (Creswell, 2003). Thick description will be the vehicle for communicating a holistic picture of the communities' perceptions on co-management for the eastern Hudson Bay beluga population. The final project is a construction of the participant's views and perceptions and the meanings attached to them. This allows the reader a full holistic view of the community members. A book will be produced based on community perceptions and distributed to all community members involved, representatives from the Department of Fisheries and Oceans, Makivik Corporation, local Hunting, Fishing, and Trapping Associations, Sakkuq Land Holding Corporation, The Northern Village of Umiujaq, and the Hunting, Fishing, Trapping Coordinating Committee.

## Chapter Three: Results

The results from the semi-directive interviews can be divided into 12

separate themes:

- The importance of the beluga harvest
- The integration of Traditional Knowledge into beluga management
- Perceptions on the Lumaq Advisory Board
- Perceptions on co-management
- Seasonal and regional closures
- The quota system
- Other successful co-management strategies
- Declining beluga numbers
- Other stakeholders in the management regime
- Separate beluga stocks in the Hudson Bay
- Perceptions on traditional and scientific knowledge
- Management recommendations

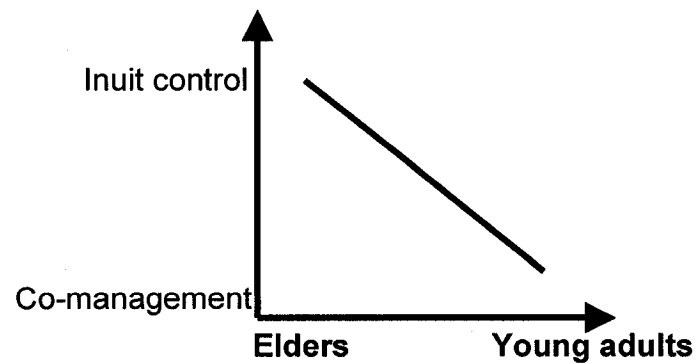
Each theme is based on the participants responses to the semi-directive interviews compiled in September of 2006. As a result of these interviews 12 themes continually arose based on current and future beluga co-management strategies. The results are listed below and divided into three age categories; Elders (60+ years), middle-aged hunters (40-59 years), and young adults (20-39 years). My field guide and another community participant decided upon the age groups. While the results for some of the themes did not produce a difference of perceptions in age categories, over half of the themes did produce a difference of perceptions in regards to the participant's age. For the sake of organization and readability all 12 themes have been organized into the three age categories. Included at the end of most themes is a pie chart that illustrates the perceptions of all participants without the division of age categories. A discussion section follows the results chapter on why these results are significant and how they will help in future Inuit/DFO beluga co-management relations.

Table 3.1. Management themes and age categories and Figure 3.1 Perspectives trends immediately follow. They illustrate the trends of the five most commonly discussed themes.

**Table 3.1 Management themes and age categories**

	<b>Importance of the beluga harvest</b>	<b>Quotas</b>	<b>Regional closures</b>	<b>Government perceptions</b>	<b>Views on beluga co-management</b>
<b>Elders</b>	Tradition Country food	Do not agree	Do not agree	Should stop trying to control Inuit	Inuit control
<b>Middle-aged hunters</b>	Tradition Country food	Quotas have been around for 10 years, we are used to them	Do not agree	Needs to consider Inuit in their decision-making	Equal partnership with government
<b>Young adults</b>	Tradition Country food	Positive view of quotas	Do not agree	Positive perceptions	Work together with government

**Figure 3.1 Perspectives Trends**



## **1. Importance of the beluga harvest**

### ***Elders***

*I have known about these whales since childhood, they are part of my being. It [the beluga harvest] should continue at all costs because it is a tradition of the Inuit.*

Mina Mickeytook

### ***Middle-aged hunters***

*It is of interest to all Inuit people. It has been the food source of our ancestors up to today. That's why everyone in Nunavik is connected to the whale. Because everyone shares a piece of the beluga, and it is shared by the whole community. So everyone is involved one way or another. This animal is very important to the Inuit up to today. Because Inuit identity is strongly linked to the beluga. Our ancestors have always hunted them, they are our delicacy, and the mammal itself has spiritual significance. It is because of our strong link to the animal that will continue into the future, we will always have a strong link to the beluga.*

Simonie Tuckatuck

*It is tradition, and a very good one at that. Because it teaches you how important it is whether you hunt beluga or other species in our region. It teaches young men how to hunt and be involved; their lives become important. Men trade their knowledge with each other and with the younger ones.*

Myva Niviaxie

*If we are losing all the beluga then it is not that important. You are them when you eat them. One summer we didn't have any beluga. It was like someone painted all the walls in our community black. I got to craving it. We pray we can continue the hunt.*

Jimmie Stone

*My father was a whaler. I grew up around it. I have known it from the start. I am a hunter. It is important to continue the beluga hunt because we don't want to lose our culture, any part of it. We still have our strong culture, and we want to keep it. That's why it is important to continue the beluga harvest.*

Sappa Fleming

### ***Young adults***

*Its part of our diet, and its been with Inuk culture for a long time. Hunting...its one of the things we do. And also as a hunter it makes you happy to catch one. It's one of the best big game to hunt. It gives you great satisfaction to catch one.*

Peter Tookalak

*It's the best meat, it is so good, I love it. When you have some you just want to go on and on, you can't stop eating it. That's how I am.*

Roger Tooktoo

## **2. The integration Traditional Ecological Knowledge in beluga co-management**

### ***Elders***

*It would be better managed if run by local people making the decisions of how many can be caught each year, supervising it. If the locals make the decisions, for sure the local people would be more inclined to listen to what ever was being decided, not from outside sources. According to the offshore agreement we are going to have 3 local people making the decisions. Lumaaq will make these decisions.*

Robbie Tookalak

### ***Middle-aged hunters***

*Working together, elders with elders, and the people concerned, because they do know a lot. They should be listened to more and their knowledge should be put into co-management.*

Myva Niviaxie

*DFO needs to come to every community in Nunavik, not just under the table giving us tough situations.*

Simon Tookalak

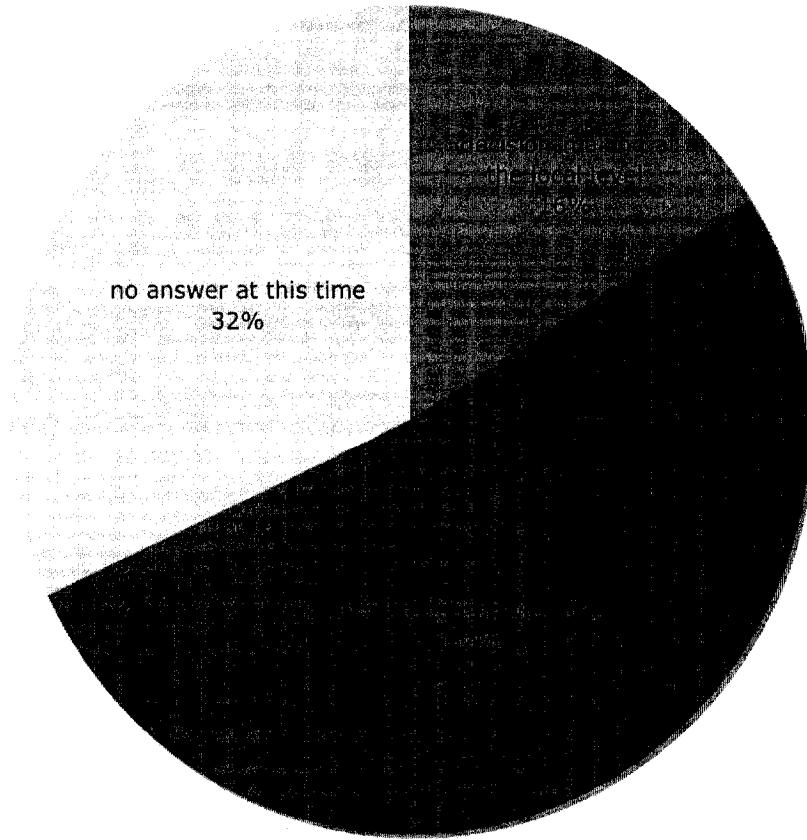
### ***Young Adults***

*It's going to be the same story. I'm sure DFO has very good information on TK now. The more you use the research the less you are going to need it. They are going to continue to say the same thing about the area. You do not have to be a college student to find out what our TK is. Each hunter is basically going to say the same thing, and as the years go on DFO is not going to need the elders anymore. Its good that they are working with the TK, in the long run it is going to come in handy with how they work with their co-management and pursue their beluga studies.*

Peter Tookalak

*They need to work together and listen to each other. They need to agree.*

Roger Tooktoo



**Figure 4.2 How to include more TEK in beluga co-management**

### **3. The Lumaq advisory board**

#### ***Elders***

*I only know of the legend.*

Jennie Mulucto

*Lumaq is not doing so well. We don't have money. I don't have money to travel to the communities I represent. There is nothing, no money on the Lumaq communities. There are 3 local members for Nunavik [one for Ungava Bay, one for Hudson Strait, and one for Hudson Bay], but we don't have any money, we can't travel. I have a conference call with the local hunters, for example to Inujjuaq. Lumaq is not 100% strong, but we have mouths, we talk. We are appointed by Makivik, I was appointed to be the representative of the Hudson Bay Coast, but have no money for travel. We have a meeting once a year, Makivik pays for airfare for that, but that's it. I hope it is going to be stronger when we are incorporated into the offshore agreement.*

Robbie Tookalak (HB Arc Lumaq representative)

*Lumaq is not doing enough. They do not come to the communities enough. They are not giving enough.*

Samwillie Quarak

#### ***Middle-aged hunters***

*I have not heard of them. That would be a good thing if the true powers are given to the Inuit in the decision-making process. Because I know the decisions would be carefully thought of...Inuit based, Inuit knowledge based, rather than just scientific alone. There would be a humanness in that decision-making. Just laws and regulations by themselves do not work.*

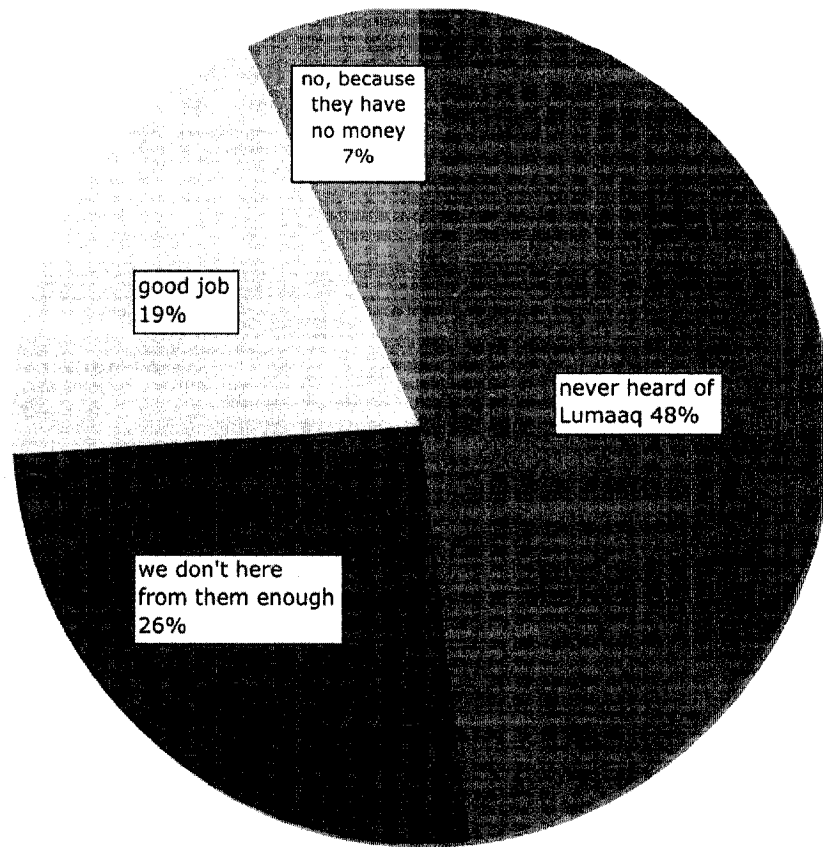
Simonie Tuckatuck

#### ***Young Adults***

*They are doing a good job, but they need to get more involved with Inuit people.*

Paul Crow





**Figure 4.3 Is the Lumaq Board doing a good job?**

#### **4a. Perspectives on co-management**

##### ***Elders***

*Where there's a will there's a way. We must work to find a way.*

Mina Mickeytook

##### ***Middle-aged hunters***

*That would be a welcome initiative, because it would mean more Inuit involved in all levels. Management level, decision-making level, it would be a welcome difference if the Inuit were involved more politically. It would mean DFO would not decide alone with all its rules and regulations.*

Simonie Tuckatuck

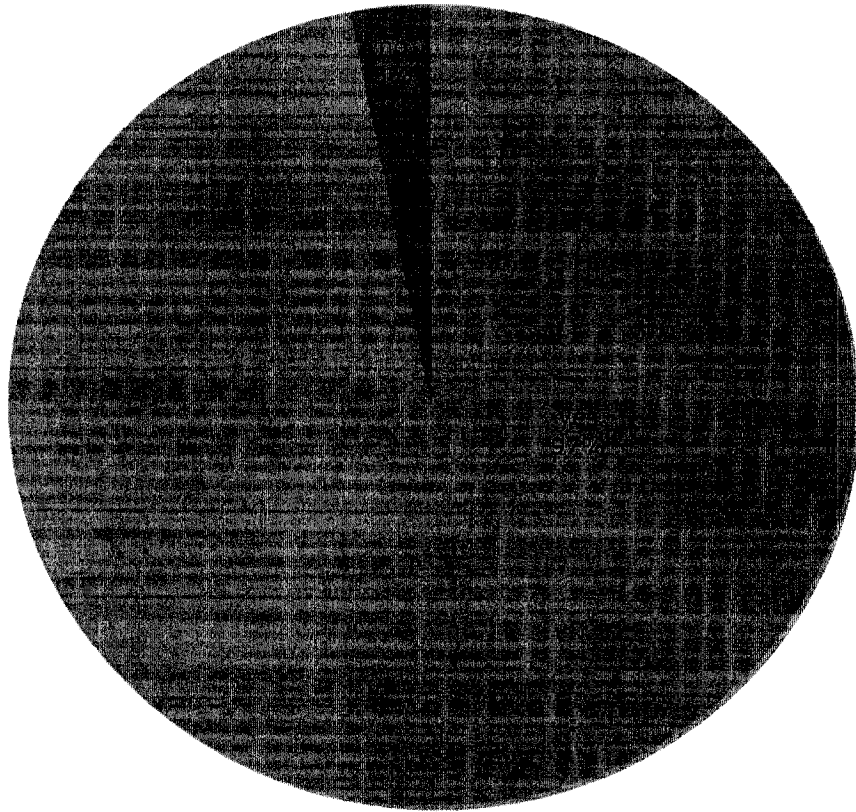
##### ***Young adults***

*Yes, I think they should work together. If they are going to help the beluga I'm all for it.*

Hannah Tooktoo

*Yes I do. It's good to talk about it. Everyone needs to get along.*

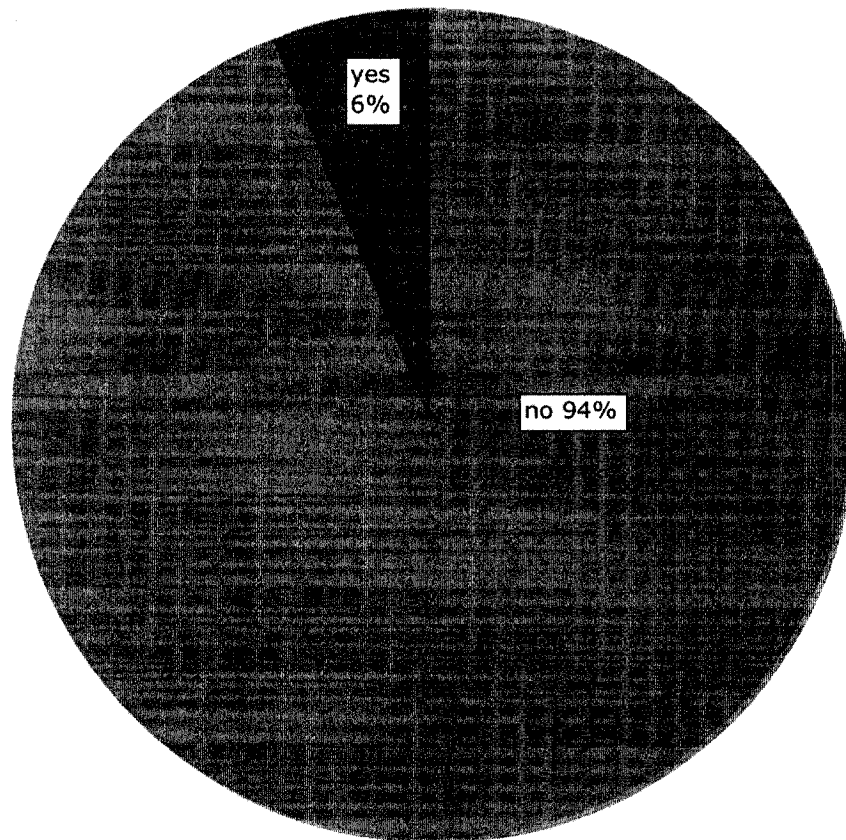
Angus Crow



**Figure 4.4 Do you agree with beluga co-management?**

#### 4b. Other successful co-management strategies?

Most (94%) of participants interviewed do not know of any successful co-management strategies? The 6% of participants who had knowledge of other successful management strategies did not know if they would be successful if applied in this situation.



***Figure 4.5*** Have you heard of any other successful co-management strategies?

## **5. What is your opinion on the seasonal and regional closures implemented by DFO?**

### ***Elders***

*I do not like it. But there is no choice if that's the law. There is nothing I can do about it.*  
Jennie Mulucto

*Although we have a quota of 15, we cannot even reach it because of the vast distance to our designated hunting area. We cannot even reach the designated hunting areas. Also, our designated hunting area has shallow areas that are dangerous for people who do not know the area. This is hard on us now that we have to travel there.*

Samwillie Quarak

*I disagree completely; this is not to my liking at all. The Inuit should be able to hunt what they want, where they want, and when they want.*

Mina Micketook

*We have to go almost 400 kms, and that site is an old army base. It has old metal pieces like drums, radar and old buildings. And they are still there. For sure there is mercury in this area. There are no rivers close by. We have to take water from ponds that are dirty and have lots of bugs. The water is always black and dirty; someone is going to get sick. We need to wash our clothes while we are waiting for the beluga in James Bay. Fresh water is not always close buy. It is not easy to hunt the beluga in James Bay. It is close to the army base. There are 1000s of old dirty drums left behind in that area from the army. There's a pipeline there. There are big towers still standing there, they are getting rotten, and this area is dangerous. Those towers are going to fall down. We have to report it to the government to clean it up. It's going to cost millions of dollars to clean it up. There are Cree hunting camps in James Bay at Cape Jones, they are hunting fish and geese in September. They were really pushy with two hunters from Umiujaq, and wanted to know what the Umiujaq hunters were doing in Cape Jones, which is not right. That's really bad. I think we have to have more meetings with the Crees, to you know, discuss it.*

*Last year the government gave Kativik Regional government \$5000 for hunting. This money needs to go directly to the communities.*

Robbie Tookalak

### ***Middle-aged hunters***

*When the hunters have to travel a far distance to catch the whale by they time they get back, the whale is not as fresh. It may take a few days to travel. If it is hot that affects the meat. The meat could become dangerous to eat. People have died from eating dangerous meat.*

Sappa Fleming

### ***Young Adults***

*They are good [seasonal and regional closures]. The beluga go to Little Whale River to have their babies, there and Nastapooka River. It is good for them to be able to rest and have their babies.*

Paul Crow

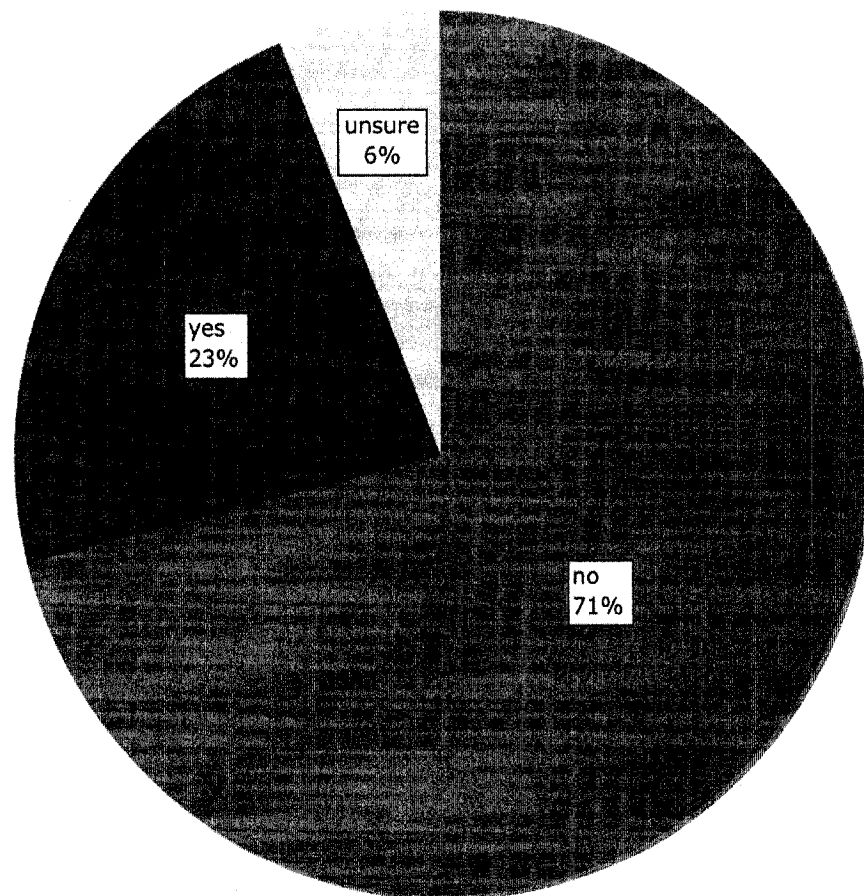
*They are just telling us and not really supporting us, you know, financially. You know I think they should have been more supportive. Both parties here, the community and DFO should work together. There is no financial support. And the weather, it's not always safe to go. We have to go very far to get the beluga now. Even if we see a beluga close by we can't catch them.*

*I wish they could be more accurate with the amount of belugas we have in the Hudson Bay.*

Peter Tookalak

*I don't like this, but we have no choice because we have to allow for the beluga to repopulate. It is harder for people to go, but I guess it's a good thing because the beluga will come back.*

Roger Tooktoo



**Figure 4.6 Do you agree with the seasonal and regional closures on the beluga harvest?**

## **6. Do you agree with the harvesting quotas DFO has implemented?**

### ***Elders***

*I disagree completely with the quotas. I wonder why they are enforcing these quotas when it is a part of our culture. There should not be quotas at all. Inuit should go hunting when they want, where they want, and how much they want. It has to be up to the Inuit. The whales are our delicacy, they are a delicacy. We love to eat them, and the quota should not be there.*

Mina Mickeytook

*The quota is breaking our relationships, or family relationships and community relationships. Before the quota was introduced people were sharing, helping, and caring. When the quota was introduced, people started to complain because they never get any meat from the hunters. Because the harvesters are only hunting for themselves now. This has changed us a lot because it has broken our relationships and communications, and even causing problems like turning friends and family into enemies.*

Davidee Niviaxie

*Our quota for the year is 15 whales. So far we have only caught two due to bad weather and expense. The harvesters should not be hampered. They should be able to hunt without rules. We got two beluga this summer, and haven't had any since. We should be using our quota to the limit. There are other communities who finished their quota a long time ago [early in the summer], and are now using the rest of our quota. We should use our quota to the limit every year. We have only used our quota to the limit once or twice. DFO promised us 15 whales, but now DFO are saying no more. That's it, no more hunting this year. The hard part is why did they promise us 15 for our quota but now they are saying that's it no more hunting, even though we haven't reached our quota.*

Jennie Mulucto

*I believe in the quota because I think it would be very dangerous to harvest a lot of belugas. The beluga number will decline if too many beluga are harvested. But maybe I believe also that the government giving us the quotas is not that bad, but I think that maybe us Inuit ourselves should be deciding on the quotas, because we have to look for the future. The state of the beluga for the future. Yes, I believe in quotas for the state of the people for the future.*

Willie Kumuarluk

### ***Middle-aged hunters***

*It's a must thing that we have to follow until we really actually know just how many belugas are left in the Hudson Bay area, on both sides of the Bay. If we don't have quotas it would be much harder in the future, for our future generations. They implemented the quotas for that purpose, and we have been following the quotas very well. So we can respect them.*

Myva Niviaxie

*At first we did not like the quotas. Then we realized they were trying to do something for us, for our future generations. So our children's children will be able to harvest the beluga whale. Because it is in their culture, because it has always been their culture.*  
Moses Weetaltuk

***Young Adults***

*It seems to be a lot better for all Nunavik people, because different communities like Kuujjuarapik and Umiujaq, and all those four communities close by they used to catch a lot, Umiujaq and Great Whale, we didn't try to catch like 70 whales per year. Especially those four communities and Sanikiluaq too, they were catching too many whales, about 60 to seventy belugas per year. And catching so much, but with the quota right now we have been practicing this for more than ten years, it is more balanced now for each community for harvesting.*

Roger Tooktoo

*I don't mind the quotas because the beluga are endangered.*

Paul Crow

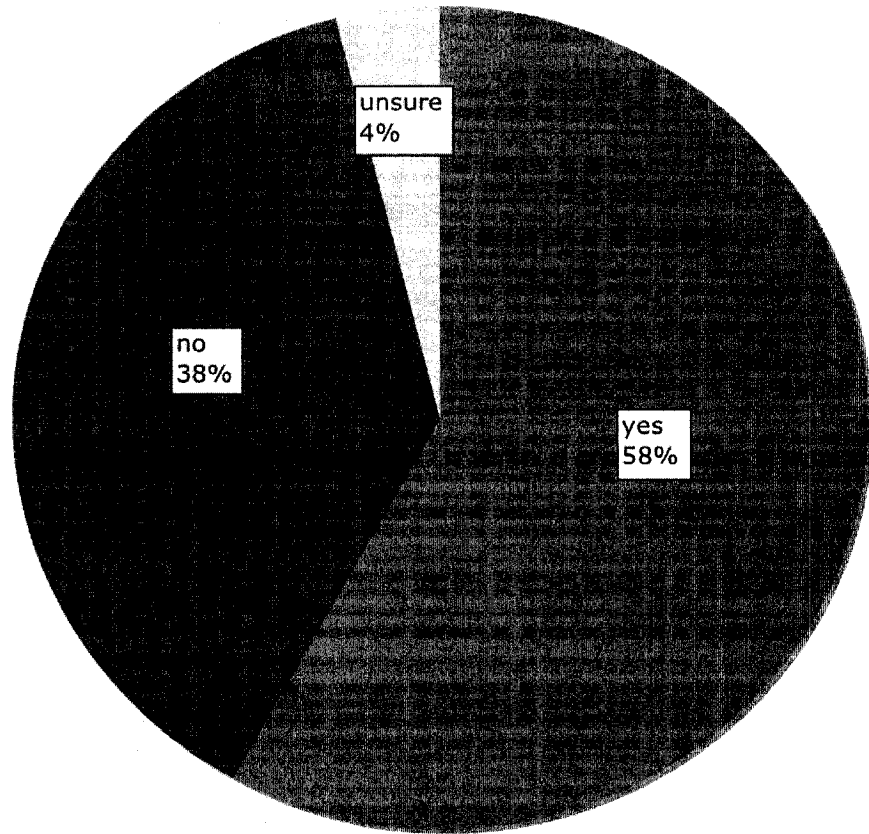
*Good job. I wish they would be more strict on the amount of belugas to be hunted.*

Isaac Kowcharlie

*I don't really believe in the quotas the government has introduced to the Inuit people because it hurts me. Once the quotas have been introduced to the people they are only hunting for themselves, they are no longer sharing. Hunters used to share the beluga, the meat, everything. Nothing was ever wasted. We helped each other. Now that the quotas have been introduced it has created selfishness, and a lack of communication. It has hurt the Inuit way of life. We can only catch as much as they say; this is not enough for us. I want to follow the regulations but I want the quota adjusted.*

James Kasadluak





**Figure 4.7 Do you agree with harvesting quotas?**

## **7. Government perceptions**

### ***Elders***

*Why is it that the government is imposing their rules on the Inuit? The Inuit should get to harvest what they want, and the government should not impose their rules on the Inuit.*

Jennie Mulucto

*I want to say what gave the government the authority to impose these quotas and other regulations on the Inuit. Is this the continuation of colonialism or what?*

Mina Mickeytook

*Well with DFO's imposed rules, I really do not think I can do anything about it, and I am also thinking about the future generations. This is not just about us. I would like to see the future generations go hunting as well. But the distance we have to travel to harvest the whales is a problem. I want to know if this can be changed to a closer place.*

Samwillie Quarak

*I don't really agree with the government and DFO giving laws and regulations to the Inuit people about the 55<sup>th</sup> parallel, because the 55<sup>th</sup> parallel belongs to the Inuit and the regulations and laws should be made by the Inuit people. I don't agree with these rules that they give us about the beluga.*

*I would like to very much work with the government, and they help us very much. I am grateful but I want them to understand.*

Willie Kumuarluk

### ***Middle-aged hunters***

*I could not say they are doing a good job, because people have hunted in this community for a long time. They know the cycle of the animals. The number has declined, but the elders still say it's the cycle. The animals will return. DFO does not understand this.*

Sappa Flemming

*I would like to see them more involved with the elders and the Traditional Knowledge, and also, as much as possible, when they are out there [collecting data] involve the Inuit. When they are out there doing the count, Inuit should be out there with them, so both sides can collect the information. They should be more receptive.*

Myva Niviaxie

*No, no a 1000 times no. During the history of the 1800s, the Canadian government, in its own laws, has allowed European whalers to hunt so many up to today, I still don't agree with DFO, how they are trying to manage the marine animals. The whole Nunavik region can't even get 500. So I don't see any good perceptions on DFO.*

Simonie Tuckatuck

*It would be much better if DFO would be interested in going to the communities to help out with what problems we have. We don't even have safe drinking water. I believe there may be mercury in the water near James Bay. They have very small ponds to get*

*water, and they have so many bugs in the drinking water we have to drink. If they could help out when our motors break down it could be very helpful.*

Simon Tookalak

*Without DFO we would know a lot less. As long as they don't lie, I'm ok with them. Some people tend to lie to get what they want.*

Jimmie Stone

***Young Adults***

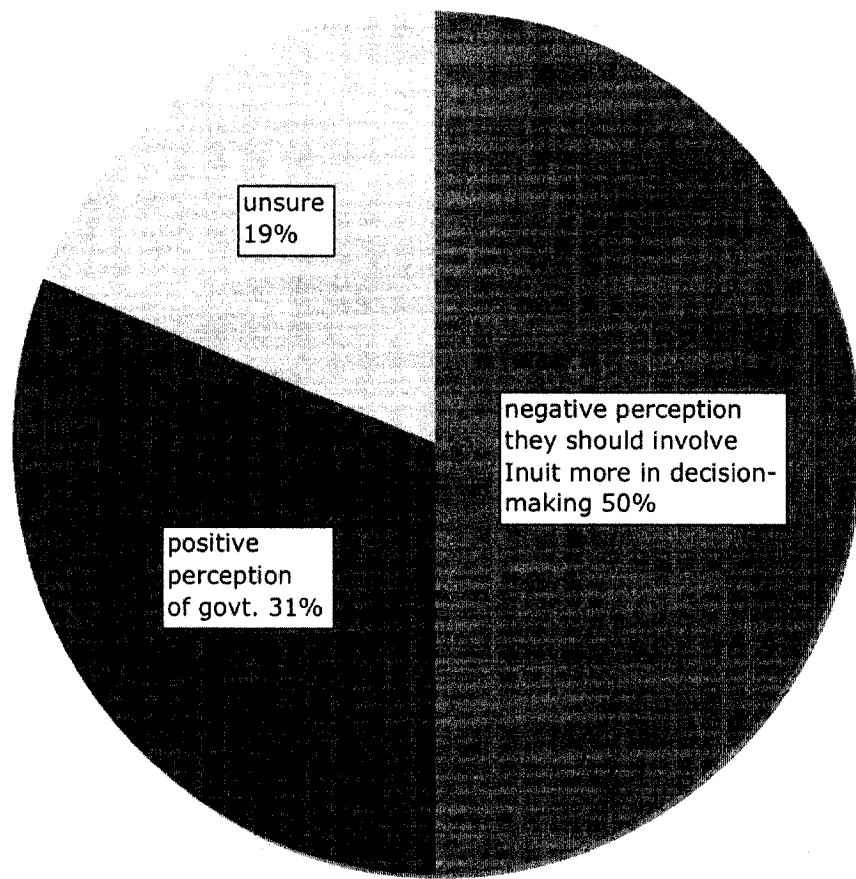
*I think they are doing a good job. A lot of people don't like it, but it is good for the beluga and good for everyone because they will be around longer. A lot of people disagree because they can't understand what DFO is trying to do, they are trying to help us and the belugas.*

Roger Tooktoo

*I used to see many belugas in our river. There were so many they would rub up against our canoe. You could feel them go underneath the canoe. (This was in the late 60s. By the early 70s numbers started to decline steadily).*

*I care about belugas, so I don't mind working with DFO.*

Hannah Tooktoo



**Figure 4.8** What are your perceptions on the government and DFO?

## **8. Decline in the number of beluga**

### ***Elders***

*From what I hear, beluga numbers are not declining, not at all. Still they are not here anymore. They have gone somewhere else. Although Inuit people have caught a lot in the past, it was what they needed to survive for the winter. They took only what they needed. This is not over harvesting.*

Jennie Mulucto

*Yes there has been I decline. I know because I have been around for a long time. I do not know why there has been a decline in the number of whales.*

Mina Mickeytook

*Yes, because of the outboard motors, and the floating dock we have at the mouth of the river. It's very loud and squeaky. It's moving all the time. Before the dock was put in the beluga would enter the river. But since the dock was put in the beluga do not enter into the river any more. The dock is metal and squeaking.*

Jobie Abraham

### ***Middle-aged hunters***

*Way back in the early 1960s there used to be a lot more whales than now. And now-a-days we are lucky to see just a few. They don't come here anymore. Number one, I think it's the over-harvesting. People were killing too many whales in the 1970s and 80s. That's why they have declined so much. I have heard about the Hudson Bay Company in the 1800s, that they killed 1000s [of beluga] per summer. I'm sure that has something to do with the decline of the number of whales.*

Moses Weetaltuk

*I do not believe the beluga is in trouble. It's the cycles. Hunters did not over harvest. All animals go through cycles. Sometimes there is more, sometimes there is less. The animal numbers will decline, and then later, there will be more. It's the cycle. There are also more chemicals up there than in the past. And the sun is stronger. Much stronger now.*

Sappa Flemming

*Yes. It seems that the way the ice has been forming and melting, it has changed the migration route [for the EHB beluga]. This is what I have noticed. It is not necessarily that the beluga numbers have been declining. It's the route that they take. It is no longer used because there is now almost permanent open water in Hudson Bay, and it used to freeze totally. When the ice used to begin to melt it would start from the shore, and that's where the beluga would migrate, near the shore. And now since the ice is unstable, they tend to use that open water to migrate. Climate change is playing a big part in this. The beluga numbers are not necessarily declining because all the animals, birds, seals, and other marine mammals, they decline for a period of time, and then they repopulate themselves. This is the same for the belugas. They will be abundant in the future around this coast again.*

Alec Tuckatuck

*I don't think they have declined, but in some years there is so many changes in just one season. This year there was open water all year long around Hudson coast. And there was ice around Sanikiluaq in the spring, so they went through the Hudson coast, that's why there is more beluga this year. And they have been in Richmond Gulf and Little Whale River all summer. Since they have been in Little Whale and Richmond Gulf there is hardly any in Cape Jones in James Bay. There was open water all winter around here. Some years when there is open water in Sanikiluaq some of them come through the Hudson Coast. According to my knowledge there has been more and more belugas, they are not declining at all.*

Simon Tookalak

*I do not believe belugas are declining. I am a hunter, and have been traveling around the harvesting area a lot. I can say for myself that I have been going out hunting alot. And not just in that area, I have also been hunting around Ivujivik and other villages too. When I am around that area I see beluga are everywhere, and so I don't believe that beluga are declining. From the histories I have heard from my father, mother, grandmother, and grandfather, and great grandmother and great grand fathers that they used to say that not only Inuit used to harvest beluga. There were also non-Inuit people that used to go out to Little Whale River to hunt the beluga. There were so many people hunting the beluga at that time. They were trying to get oil only. I think they were making the beluga decline, I don't think the Inuit were the only ones who were hunting the beluga.*

James Kasudluak

#### ***Young Adults***

*Yes. I remember when I was young I used to see a lot passing by or going into the river here. But I have barely seen them in the last five years or so.*

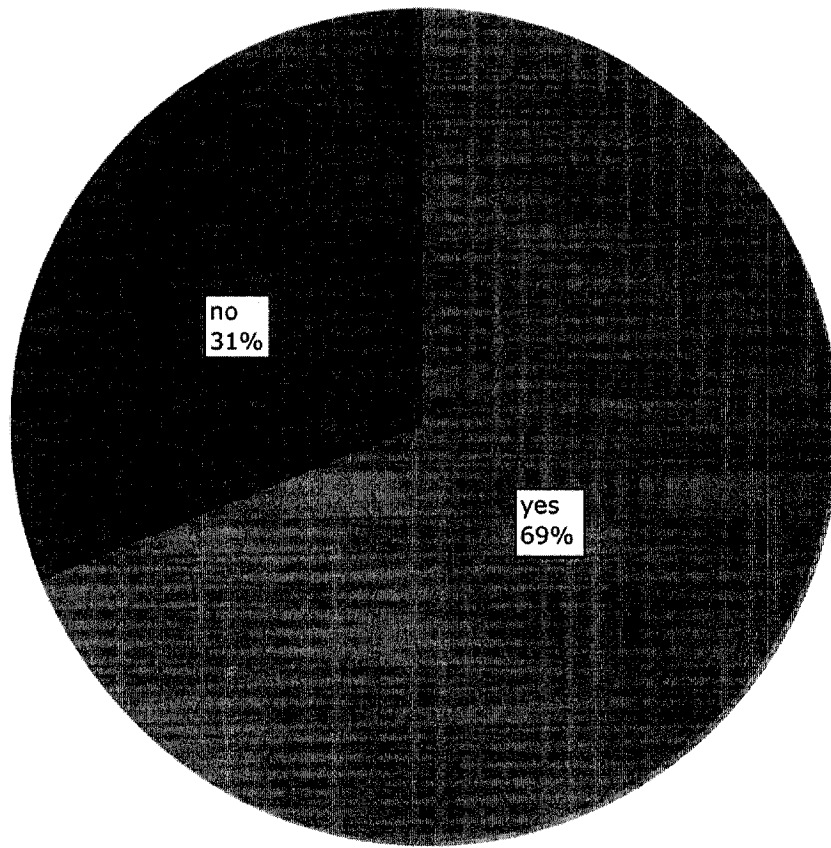
Roger Tooktoo

*Some years there seems to be no belugas at all, and some years they come back, they may go to different sides of the Hudson Bay.*

Jack Niviaxie

*Yes, I remember elders saying recently that they used to over-hunt. There were canoes overloaded with maqtaaq in the 60s and 70s.*

Isaac Kowcharlie



***Figure 4.9*** Has there been a decline in beluga numbers around your community?

## **9. Other local peoples as stakeholders in beluga co-management**

### ***Elders***

*Only the Inuit should be involved because they are the ones who are eating them.*

Jobie Abraham

*It should only be us who make decisions, because it is only us who uses the beluga and eat the meat. Other people from outside of the village should not be involved. Also I believe that Cree people should not be involved because Cree people do not eat beluga.*

Daivee Niviaxie

*Way back when, they [the Cree] used to come here only for the summer, there would be whales. But where they would winter there would be no whales.*

Mina Mickeytook

### ***Middle-aged hunters***

*This community is a multicultural community [Kuujjuarapik]. There's Inuit people, Cree people, French, and English. It's always been like that, living together. And the Cree used to hunt the beluga whale...we helped each other. When people see each other working together it helps. All community members should be involved, working together. DFO has a responsibility, maybe we can show DFO that we care about the beluga if we all work together.*

Sappa Flemming

*The people who are the most affected [the Inuit] should be involved for better understanding in the future.*

Myva Niviaxie

*Way back when food was scarce, and so they [the Cree] had to catch any meat they could. Now there are more choices. We live in the white man's economy now, they can go to the store to buy their meat to feed their family.*

Moses Weetaltuk

*Of course they should be involved. No one is to be left out. In the 1800s the Cree were assisting the white whalers, and being guides themselves. The Cree people were the guides and it's my strong opinion that the Cree should be involved because of their past involvement in the beluga hunt.*

Simonie Tuckatuck

### ***Young Adults***

*I don't know about Cree. They should have a voice in what happens.*

Tina Nuktie

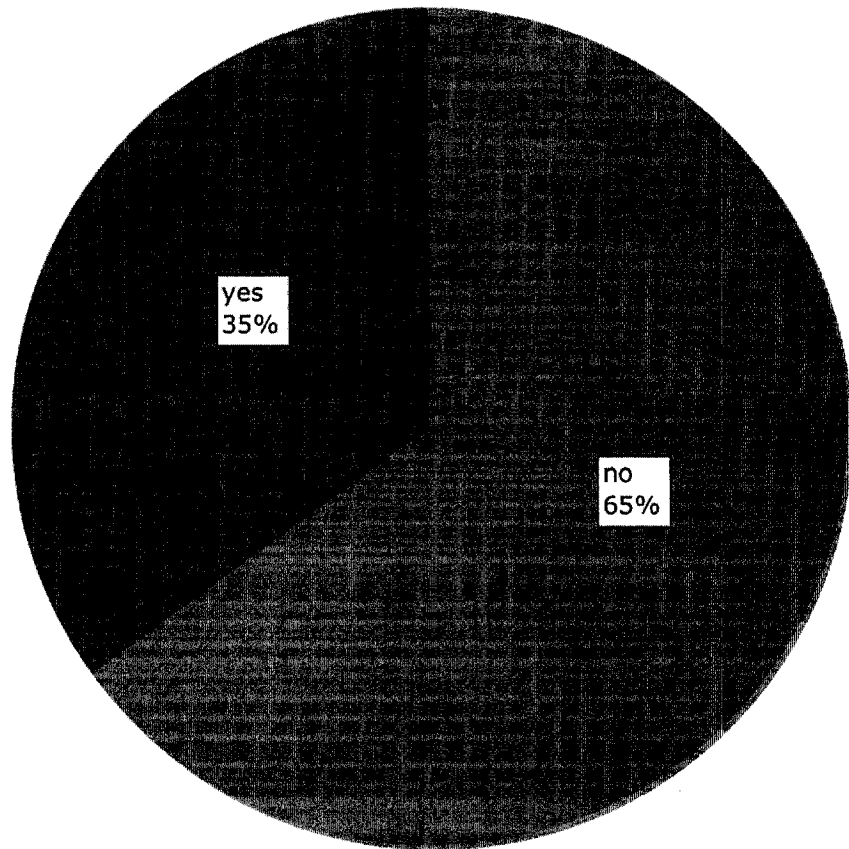
*The Cree used to be very good hunters of the beluga, but not any more, they don't want the beluga any more. So I think they should stay away.*

Isaac Kowcharlie



*It is not necessary for others to be apart of this. The Cree for example they don't hunt belugas. There are hardly any Cree on the sea. They are inland people.*  
Roger Tooktoo

*Everyone should be able to meet and discuss the issue.*  
Paul Crow



***Figure 4.10*** Should non-Inuit locals be considered stakeholders in the beluga co-management decision-making process?

## 10. Separate summer stocks of beluga in the Hudson Bay

### **Elders**

*It seems that there is only one stock because some years you see so many, others, not as many, sometimes they are white, sometimes they are grey. In Churchill there are 65,000, James Bay 7,000, for sure its different all the time. I don't believe the people who check the populations in the planes. The beluga could be under water for 10 to 15 minutes. And you always could see the plane going in lines back and forth, they want to find out more, but they always go too fast. They need to stay in one spot so they can make sure they count all of the beluga in that one spot. [availability errors].*

Robbie Tookalak

*I don't really have much to say about that. But those beluga have a feeding place, and they have another place where they have their babies, and they are usually in the river where they go to take off their skin. But they are not in these same places any more because their regions change a lot. But I hope they will go back to normal like they have in the past.*

Joshua Sala

### **Middle-aged hunters**

*The DNA says there are three distinct stocks, the EHB, James Bay, and the WHB. And the EHB whales are declining due to over harvesting, so they are setting quotas to protect the whales. And that's a good idea, but we need to harvest a few whales to keep the culture going, to teach the people, feed the people, to teach the children their culture.*

Moses Weetaltuk

*A beluga is a beluga; they all pass by at some point.*

Mark Weetaltuk

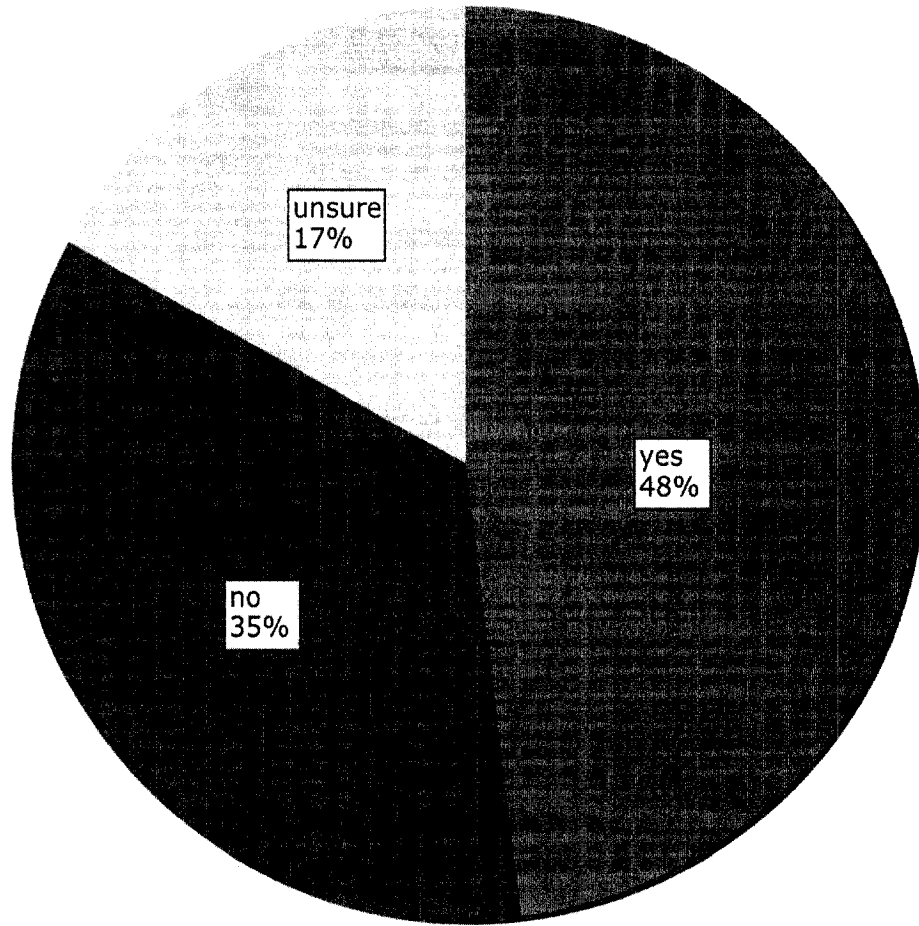
*I do believe so, because around here the whales are usually 3 to 4 meters long. Once in a while we would see a bigger one, a loner. It would be longer than the other ones. It would not belong to the pod. It would be bigger, from the James Bay area or the WHB area. So yes, I do believe they go to and come from different areas and different pods.*

Sappa Flemming

### **Young Adults**

*All the belugas seem to be.... I know they don't go to the same area all the time. I believe there is only one stock of belugas, but they go to different areas all the time. It is different every year. Some times they come, some times not at all. The number is always different.*

Jack Niviaxie



***Figure 4.11*** Are there separate stocks of beluga in the Hudson Bay?

## 11. Perceptions on Traditional Knowledge used for beluga co-management

### *Elders*

*It is very different. DFO studying surveys and Inuit TK because the DFO are studying surveys. I know they can misunderstand and miscount the belugas. I say this because the belugas start to move around and feed very, very early in the morning. The DFO studies and surveys, they start to survey at 7 am, but this is too late. The beluga are moving much earlier than the survey begins, so then the DFO people say there are no beluga in this area when actually there are. This is how the Inuit cultural knowledge is different. The Inuit get up very early in the morning, at 4 am. If the DFO want to know where the beluga are they need to get up earlier in the morning too, to find out 100% where the beluga are, and where they are moving to.*

*Yes our knowledge is fading because in the last 15 years we never give any knowledge or information to our people and younger generation. This is because we are trying to follow the regulations the government has given us. So yes TK has not been passed down to our younger generations very well.*

Willie Kamurluak

*Traditional Knowledge is strong within the community. It is not passing away. The Inuit should be in control of decisions. They should go where they want, when they want, and how they want.*

Jennie Mulucto

*In the 1950s when the people from the south were arriving and the government too, the hunting was 100% of community members, but since we have been in the communities at least 25% have started working for the government, the school, the coop. There are now less hunters because they have to work, and the population is growing so we have more hunters than in the past.*

*There are a lot of hunters in all of Nunavik, and they are not going to lose their knowledge. Because this is the country food we eat. And they always go hunting every weekend or camping and they go further distances now with the outboard motors and the newer equipment. The knowledge won't be stopped; I believe it's going to continue.*

Robbie Tookalak

*Traditional Knowledge is still strong, I go out with the young kids and we teach them how to harvest. Three quarters of the kids don't go. Yes its important to get the kids out, but some families don't go because it is too expensive, people don't have good canoes, the right equipment.*

Jobie Abraham

*Yes, when the government and DFO started to work with the beluga those surveyors started to use nets and putting radios on the beluga. When they do this they are giving the beluga very hard times. They make the belugas never want to go back to the same spot again.*

Davidee Niviaxie

### ***Middle-aged hunters***

*The younger kids are not as interested, there's more technology now. It is important to keep kids interested, there is always a way.*

George Flemming

*Our traditional way of doing things is that we pass on our knowledge to the young people by letting them watch what we do, we don't have any classrooms, we let them watch what we do. They watch over and over again, and then they try to do these things. It's not traditional knowledge because it's still going.*

Moses Weetaltuk

*I have never really seen what information the DFO has on belugas. I do know that DFO does not make use of maktaq. We make sure we make use of all the beluga. It's what we hunt the beluga for. It's our food, it's great food. If you haven't eaten it you don't really know. The DFO does not know our knowledge. DFO knows about migrations and reproductions, we may be even there.*

*It's still strong our TK, we have very good teachers. You gain knowledge by experience, and what the hunters do with the young boys; that's a yearly thing, an annual thing. And this is great. It will be around as long as we have belugas.*

Myva Niviaxie

*Traditional Knowledge is handed down from father to son. They are hunting methods, the same hunting methods that I learned from my father. It is not on paper. I did it, he showed me how to do it. It is a lot easier to do it when he showed me how. And I wanted to know. I always wanted to go hunting with my father. It's still strong. It's just sitting idle. It could be started again. We can pick it up where we left off. [He is referring to camping, etc.; the old way of life. People want to go and do this now and again. No one has forgotten how they used to live] We could pick it up where we left off.*

Sappa Flemming

*DFO knowledge and Inuit knowledge are very different. The DFO counts them. Inuit hunt them. The DFO really has no idea how much the Inuit want the beluga.*

Peter Tooktoo

*Our Traditional Knowledge is still strong, very much so. Because of Inuit identity, Inuit culture, that perception is only being looked into now. Because we are caring people, not the government, we care, so the beluga is very much involved in the Inuit, in every way. Because our culture is a hunting culture, we know about the animals. And we never over hunt, our ancestors never over hunt. We respect the animals because it's a large animal that has to be shared with the community, shared by all. So the link between the beluga and the Inuit is oneness, it is one.*

*The Inuit knowledge of the older people has not been handed down to the younger generation. It is not the fault of the elders, it's the government whose trying to control them, socially, politically, and spiritually. The white society always tries to impose rules and regulations on the Inuit even today.*

Simonie Tuckatuck

*It's very different. For us Inuit knowledge is a way of life, we know the land, we know the animal, we are the same as the animal. We often travel the same routes as the animal. We know them. They are here with us, we live with them everyday. I think DFO does not know about the beluga as much as we do because they are only here surveying and counting beluga. They don't even eat the beluga. They only care about counting the beluga, that's it. They cannot say they know how the beluga lives, or how many are in a particular area. They are very far away for most of the time. I don't believe that Inuit and DFO knowledge are the same, they are very different. We have very different ways of life.*

*I can see changes, even now. I will go back to the quotas; when the quotas were introduced our knowledge started to become less and less. I can see now in the new generations, they are becoming less interested and have less expertise about beluga because of when the quotas were introduced. Even the elders have started to talk less about the beluga now.*

*I was out harvesting the beluga in that area where the government told us to go out hunting, Cape Jones. The story goes that in that time before the quotas, I caught a beluga. I was very interested to know about the beluga, how to cook it, what were the best parts, all of those things. I wanted to be an expert on the beluga. But once the quota was introduced I lost my interest in the beluga. This makes it difficult and damages the interest. But now I have started to go back to be interested in the beluga, but I have lost all of that time, all of that knowledge I could have been learning. This is how the quotas started damaging the knowledge of the belugas. Even the elders don't talk about the knowledge of the beluga.*

*We don't lie when we talk about it, because they are there for us and we are there for them; we are as close as possible to the beluga because we are here. We are closer than anyone. From the beginning to the end of the beluga's life we are there, we see them. But for the scientists it helps a little, and they can give a little information. But for us we are here all the time, all four seasons. The scientists are not, they are here for only a small season. They cannot give as much information as we can because we are here all the time with the beluga.*

James Kasudluak

### ***Young Adults***

*As the beluga pass through our area we should be able to catch a few so we can continue to teach the children.*

Paul Crow

*I think it's fading a little bit because there used to be a lot more people hunting. But now a days not as many people hunt because they don't have the equipment for it, or the money. More kids need to go hunting. There are not enough adults to teach them. Some kids do not have fathers, or they don't have the equipment.*

Roger Tooktoo

*It is hard to believe when DFO makes the estimations of the populations for the belugas. The surveys; the first one was done in 1987, then five years later, then ten years ago. We would believe more if they checked every year, because every year is different. We are requesting that research be done annually due to the differences we see every year.*

Jack Niviaxie

## 12. Management recommendations

### *Elders*

*The Inuit should have control over the beluga harvest.*  
Jennie Mulucto

*The people who are descendants of the whale hunters should be in charge. The government should stop thinking for the Inuit.*  
Mina Mickeytook

*It would be more manageable for the Inuit to make their own quotas even though they are working with the government. If the Inuit believe the beluga are declining, they will set the quotas accordingly. I think that if the Inuit are making decisions, the rest of Nunavik will listen. If the local community organization believed the beluga was declining, for sure they would cut down the quota for each community. In Nunavik there is usually an elder's meeting every year. They usually mention the declining of the beluga is not true. But their knowledge is not being used at all. Even though they say the beluga is not declining, DFO does nothing with this knowledge. DFO does not believe this Traditional Knowledge.*  
Robbie Tookalak

*The side I don't like is when the two groups, Federal and Provincial Governments come to us and say that if you continue to harvest after the quota has been finished you will be prosecuted. They can take that person to the court. In our own culture we would never do that.*  
Willie Kuamurluak

*Our children, and our generation, there are so many sicknesses that are arriving to us; many diseases. Every time there is a new generation there are little changes. I believe our own flesh and blood, the new generation will not be able to eat beluga, they will not think of it as meat. Not eating beluga might happen in the near future because we are not training and teaching the next generation how to harvest the beluga. This is the biggest worry I have right now for the future. I would like to see the Inuit and DFO communicate and work together. It is us that really know the beluga. We are always there for them, and they are always there for us. We are very close with the beluga. And they are close with us too. So when the government tries to give us rules and regulations about the beluga we don't like it. It's always separate, Inuit and government never work together never work together.*  
Davidee Nivaxie

*Traditional Knowledge should be incorporated into the DFO management scheme. The way they started imposing the quotas without getting any Traditional Knowledge from the Inuit has been one sided and that needs to change. Traditional Knowledge needs to be incorporated into the beluga whale management scheme.*  
Samwillie Quarak



### ***Middle-aged hunters***

*At first one of my opinions was a zero hunt for ten years. No one would hunt or kill beluga whales for ten years, and then we would see after the ten-year period, see if they have increased in number. But they didn't go with that; they instead went with the quota system. I think each community can harvest 15 whales. And I think this is a step in the right direction.*

Moses Weetaltuk

*If you know the approximate numbers of all belugas, you could have better management. The people involved in this management have to work together and keep the public informed on everything. We need to know they are working together on this in the future and since the start of the quota years ago.*

Myva Niviaxie

*We don't need beluga all the time. It's a delicacy. I think the co-op being an indigenous merchant should supply beluga for the people. That could help too. The co-op could buy the beluga from the hunters in the community. They could set up a fund. And the money that comes in from the beluga could be used for the hunter's gas. That would help a lot for the hunters.*

*Lumaaq could do more; have more of a presence in the communities. When communities go over their quotas it is hard on everyone, not just the hunters.*

*Quite often meat gets left behind. The hunters want to get back before the maktaq gets dangerous to eat. If hunters are worried about storms and bad weather they will hurry and only take the maktaq and leave the rest of the meat. It is a waste of meat. But what can they do. It's not always easy.*

Sappa Flemming

*Negotiations for self-government, I would like to see big changes in the decision making process. Wildlife management board, I would like to see more Inuit involved, professionally and personally. I would like to see more Inuit input in the decision making process, that is recognized internationally, nationally, and regionally. Inuit would be much happier because their own people would be involved in the decision making process, because we care, we care about the animals. Its only in the early stages yet, its still coming into reality. That means Inuit are only just getting into the government business. The scientific community has always ignored them.*

*Our patience will show in the future and the government should honour our knowledge of the beluga and truly let us be involved in what we already know.*

*I would like the government of Canada not just to impose laws and regulations but to really understand us as Inuit people, who we really are, what our intentions are, so that the Canadian government would acknowledge us as people, as any other people in the world. We have a strong link to the beluga and its not going to die. The beluga is forever linked to the Inuit people, historically and in modern times. Because of that strong link, the government of Canada should recognize us and involve us in the decision-making process.*

Simonie Tuckatuck

*Stick with the quotas.*

Isaac Kowcharlie

### ***Young Adults***

*We need to have meetings and work together. If not, things go bad. There should be a community monitoring program put in place. There should be a number to call if we see them, and they should count them.*

Paul Crow

*They should continue to do what they are doing, like the quotas, but not forever.*

Roger Tooktoo

*Probably no choice but to listen to DFO, they know the population numbers.*

Betsy Crow

### **Conclusion**

The results consistently illustrate the different perceptions recorded between the three age categories. The elders' age category shows the greatest unwillingness to work with DFO on beluga co-management issues. The middle-aged hunters category shows a high level of hunting still going on with a willingness to work with DFO on beluga co-management issues, and the young adults category illustrates that these individuals have less interest in hunting and therefore a willingness to allow DFO to manage the beluga stock with the inclusion of Inuit. The following discussion section of the thesis will now analyze the results of the research.

## **Chapter Four: Discussion**

The twelve themes and three age categories that arose during the interviews in Kuujjuarapik and Umiujaq in September 2006 were previously presented in the results section of this thesis. Although not all themes have differing perceptions throughout the three age categories; elders, middle-aged hunters, and young adults, all themes were still divided into the age categories for the sake of organization and readability. The age categories are useful for the analysis of the majority of the themes and the discussion section will now provide analysis of the comments and perceptions provided by the participants. To recap the twelve themes include:

1. The importance of the beluga harvest
2. The integration of Traditional Knowledge into beluga management
3. Perceptions on the Lumaq Advisory Board
4. Perceptions on co-management
5. Seasonal and regional closures
6. The quota system
7. Other successful co-management strategies
8. Declining beluga numbers
9. Other stakeholders in the management regime
10. Separate beluga stocks in the Hudson Bay
11. Perceptions on traditional and scientific knowledge
12. Management recommendations

The perceptions within these twelve themes and three age categories will be useful for Inuit/DFO relations for beluga co-management in Nunavik.

### **1. Importance of the beluga harvest**

Although this was the first question asked during each interview, the theme arose regularly throughout all questions asked. All three age groups; elders, middle-aged hunters, and young adults had responses in this category that were similar. By reviewing Table 4.1 it is evident that most participants answered that they believed the beluga

harvest was extremely important because it is a tradition, a way of life, and a country food. Both Kuujjuarapik and Umiujaq have mixed economies where hunting, gathering, and fishing exist side-by-side with a wage economy. The country foods harvested in both villages are not only of economic value, but are also central to notions of Inuit identity and to the maintenance of social relationships (Freeman, 2006; Tyrell, 2007a).

According to Freeman (2006) hunting and fishing-based subsistence is the essential and continuing foundation of Inuit culture and identity. The participant's fathers, grandfathers, great grandfathers, and great, great grandfathers, have all hunted the beluga. This is a tradition that has always been a part of Inuit lifestyles in Nunavik.

More than one interviewee stated that spiritually they are one with the beluga (see Table 4.1). Because they hunt the beluga and have always hunted the beluga they know the beluga. If the Inuit beluga harvest stops the connection will no longer occur. Tyrell (2007a) also writes of the Inuit world perspective in which humans and whales share a social space.

The Inuit beluga harvest as a way of life; The Inuit beluga harvest is a way of life for most Nunavik Inuit. It is part of their culture, and a job for many individuals. Many people in these communities are not employed. Harvesting the beluga and living a traditional lifestyle is still occurring within these communities. These communities are not large. There may not be many opportunities to work fulltime, and living this traditional lifestyle is a positive and healthy way to provide for one's family and community. Not only is it important for these community members to provide food and nourishment to their families and communities, it is also important to provide a sense of usefulness and importance in a person's life who may otherwise be unemployed. This

type of connection and close relationship to the land promotes physical and emotional well being for the Inuit of Nunavik (Nickels, et al. 2006).

The beluga as a country food is an extremely important component in the diet of the Nunavik Inuit. As processed foods that are high in sugar, carbohydrates and saturated fats are the common theme in most grocery stores in the north, country foods that come from the land are rich in vitamins and minerals (Kishigami, 2005). Participants continually relayed the importance of beluga as a country food as part of their diet (see Table 4.1). This brings forward the importance of country foods for Inuit health. Beluga meat is high in vitamins and minerals. Although there are disagreements as to how much of the meat is actually consumed by the Inuit as most people speak only of the maktaaq, and the importance of the maktaaq to their culture. Many people speak of maktaaq as an Inuit delicacy and literally how they cannot seem to get enough of it. One man interviewed stated that one summer there was no maktaaq in their community and it was like someone had come into the community and painted all the walls black (see Table 4.1).

Another message relayed in these interviews was the importance of ensuring that the beluga does not become extinct. There are a large number of community members who are concerned about the low estimates of the Eastern Hudson Bay beluga stock population. They go on to state that if the stock were actually in danger of becoming extinct then the harvest would not be as important as saving the stock.

## **2. The Integration of Traditional Ecological Knowledge in beluga co-management**

It is a policy in Canada that Traditional Ecological Knowledge be considered and incorporated into resource management (Usher, 2000). National, Provincial, and

Territorial institutions have committed to the understanding and use of TEK (Posey, 1999). In some cases the commitments aim to respect, preserve, and promote the use of TEK in managing natural resources (Canada, 1995), and in other cases, the intent is toward the integration or harmonization of TEK with other sources of knowledge (Inuit Circumpolar Conference 1992; CFFS 1997; Manseau, et al. 2005).

During the interview process in Kuujjuarapik and Umiujaq, (see Figure 4.1) over half of the Elders interviewed believe that TEK should not be incorporated into the current management strategy because they believe that Inuit should have complete control over the management of the beluga stocks around Nunavik. This is a contrast from the perceptions from the middle-aged hunters and young adults. The majority of these two groups believe that TEK and DFO science should be melded together for beluga co-management purposes. However, 32% of participants were not able to comment on how they would like to see TEK incorporated into beluga co-management. When speaking with representatives from DFO they say this answer is common. The representatives from DFO believe that the hunters are not ready to take full responsibility of the management of the beluga stock. They do not believe the hunters will be able to put forth a co-management strategy at all. When they have approached the Inuit with the same question they too received no responses.

One reason for the lack of response to this question may be due to conflict of policy and decision-making differences between Inuit decision-making practices and the western style of management and decision-making practices. When DFO first began implementing beluga recovery management in Nunavik there was very little Inuit involvement and influence. By asking the Inuit of Nunavik to come up with a co-management strategy that would fit nicely into the current western styles of decision-

making is like trying to fit a circle into a square. DFO needs to include the Inuit of Nunavik as equal partners in decision-making practices if they want a successful management strategy. The first method of very little Inuit inclusion is not working; the current management strategy is not successful. There is outright resistance to the beluga management plan expressed through non-cooperation, and beluga management plans have been consistently ignored in Nunavik for the past 10 years (Tyrell, 2007a). Berkes and Fast (2005) acknowledge that evolving notions of governance are including alternative approaches which are more society-centered, with a focus on self-governance manifested in different types of networks and partnerships (Pierre and Peters 2000). Newer approaches are participatory, inclusive, and community based (Berkes, et al. 2000). Examples of this include the Beverly-Quamaniruaq caribou co-management board (Kendrick, 2000) as well as beaver management in the James Bay region (Moller et al, 2004). This is in sharp contrast to conventional state-centric or command and control management that communities have had imposed on them in the past (MEA 2003).

A significant portion, 16% of respondents, mostly elders (see Figure 4.1), stated that decision-making at the local level would be a good way to ensure TEK is incorporated in the management scheme. “An all-but insurmountable challenge for Inuit governance is to find ways to have local decision-making be in dialogue with and influence decisively national, regional, and global governance networks.” (Inuit Circumpolar Conference, 1992). Many respondents believed that if quotas were decided upon at the local level, hunters would be more likely to respect the quotas and not over-hunt.

An additional 52%, mostly middle-aged hunters and young adults (see Figure 4.1) said they would like to see Inuit and DFO working together, with both sides bringing

their knowledge to the table to create a beluga co-management policy. The Lewis, et al 2006 study is aligned with this type of strategy. This study argues that both TEK and scientific knowledge bases can bring different and complementary information to the management table. TEK is able to offer a longer historical record with greater observational intensity in areas closer to the shore. This is in contrast as well as complementary to the offshore information western science methods such as telemetry can offer a management strategy.

These respondents felt that they currently are not equal partners with DFO in beluga management strategies. And until they are equal partners no management strategy will ever be successful. These respondents are weary of any management strategies; they do not trust DFO and believe they will never be able to trust DFO. Many feel that they have been mistreated by government in the past and therefore should not believe anything the government has to say now. The Inuit of Nunavik as well as Indigenous peoples worldwide are deeply cynical about the capacity, motives or methodologies of Western research to deliver any benefits to indigenous peoples whom science has a long history of disregarding (Smith, 1999). There is a lack of respect for traditional knowledge among some scientists and government agencies. In many instances scientific knowledge will take precedence over traditional knowledge (Roberts, 1996).

Kendrick (2000) and Berkes et al. (2000) argue that co-management arrangements are key to successful incorporation of TEK in providing opportunities for communities, governments, and other stakeholders to work together on an ongoing basis, facilitating communication and learning between parties that were conventionally in resource management conflict. Beluga co-management is a necessary step in ensuring the management of the eastern Hudson Bay beluga stock is agreeable to all stakeholders.



### **3. Perspectives on the Lumaaq Board**

Due to the fact that the Nunavik Marine Region Wildlife Management Board, previously known as Lumaaq, was only created in December 2006, the management of marine resources in Nunavik is currently controlled by DFO, and DFO is legally responsible for the safety of the beluga stocks. Until such a time that the management board is in a position to begin managing, DFO regulations will remain in place.

In anticipation of an offshore agreement being reached, the Inuit approached DFO in 2005 with the idea for an advisory co-management board, Lumaaq. The board has no legislative powers, but acts as an advisory board for DFO on beluga management. The board is comprised of representatives from communities along Nunavik's Eastern Hudson Bay, Hudson Strait and Ungava Bay as well from the Makivik Corporation, the Anguvigaaq Hunters and Trappers Association in Sanikiluaq, the Kivalliq Inuit Association, the Nunavut Wildlife Management Board, along with marine biologists and DFO observers.

When the participants were asked about their perspectives on the Lumaaq board 48% answered that they had never heard of the board. An additional 34% stated that they do not hear from their representatives enough (see Figure 4.2), and 28% of those who stated they did not hear from their representatives went on to state that the reason behind this lack of communication was due to a lack of funding from Makivik Corporation for the Lumaaq representatives to perform their job to the best of their ability. When the information provided by the participants is broken down into age categories the percentages above represent mainly the Elders and Middle-aged hunters categories. Very few participants interviewed in the young adults category had heard of or had an opinion on the Lumaaq Board. This can lead to a few different assumptions; the first being that

Lumaaq representatives are not working hard enough to incorporate the younger generation in their work, or the second assumption being that the younger generation is not interested in the Lumaaq Board due to a lack of interest or opportunity in beluga harvesting.

Robbie Tookalak, the Lumaaq Representative for the eastern Hudson Bay communities stated in his interview that Makivik provides funds for him to travel to the communities he represents only once a year. Tookalak says this is not nearly enough. These funds only include the price of airfare, and do not include food or accommodation costs. He goes on to add that this is not nearly enough money for him to perform his job to his full capabilities.

There is inconsistent information depending on what source you speak to on this subject. During an interview in September 2006 with a representative for DFO, they indicated that DFO has supplied Makivik Corporation with funds DFO felt would adequately allow for the Lumaaq Representatives to perform their duties.

Almost half of the participants interviewed have never heard of the Lumaaq board (see Figure 4.2). The board is a relatively new addition to beluga co-management strategies in Nunavik. Although new, it is a very important addition as the board is meant to be relaying Inuit perspectives on beluga co-management to the Department of Fisheries and Oceans who is currently in charge of beluga management. Now that the offshore agreement has been signed between the Federal Government and the Inuit, the Inuit will need time, to determine a management strategy they will use to manage the beluga stocks around Nunavik.

#### **4. Perspectives on co-management**

The Inuit in Kuujjuarapik and Umiujaq seem to collectively agree (97% of interviewees) (see Figure 4.3) that co-management may be the solution to the current beluga situation. People in the Elders category were the only ones to disagree with the idea of co-management. And of those who do not like the idea of co-management only one person was not willing to try to come to a compromise with DFO, that compromise being a beluga co-management board.

Although more than half of all participants interviewed seem to agree that the addition of DFO to management of the beluga is a good idea, many participants are only willing to work with DFO because they believe they do not have any other choice. They believe the Government will always be involved no matter how hard they try and therefore see co-management as the best solution based on their current situation. Some of the reasons behind the positive idea of co-management may be that the Inuit will have a better idea of what is going on (see Table 4.4). The Joint Secretariat – IRRRC & AINA (Roberts, 1996) have concluded that poor communication between hunters and government representatives contributes to misunderstandings about hunting regulations and policies. They go on in concluding that communication between government agencies and local communities is important for ensuring understanding of local interests and goals.

The Lumaq board was created to ensure the Inuit voice is being heard with respect to beluga co-management decisions. However, this is apparently not the case. When 32% of participants (see Figure 4.3) have not even heard of the board before, it is apparent that the lines of communication are not as open as is necessary. The creation of a board with no money and no power does not create a successful co-management strategy. Although the board will now have power to create by-laws for beluga

management purposes, these by-laws will only be initiated if DFO agrees. If the Lumaq Board decides on a quota DFO considers too high the Minister of Environment will step in and make the adjustments he sees fit. Then the question will be asked, what is the point of the Lumaq Board if it actually does not have any power or money anyways?

Caulfield (1997), in his study of large whale hunting in Greenland, notes that despite hailing itself as an equal partnership between indigenous hunter-gatherers and wildlife managers, co-management can too easily become co-optation; a situation one indigenous leader disparagingly characterized as 'we cooperate and they manage' (Caulfield 1997).

Kishigami (2005) has argued that the management plans in Nunavik have been developed "by DFO officials who were not very familiar with traditional Inuit hunting practices in the region. Based on the way Inuit ignore the regulations and continue to hunt in as normal a manner as possible, it would appear that there was no agreement between DFO and Inuit as to what the management plan would entail, and that consultations were perfunctory rather than meaningful and successful for both parties (Tyrell, 2007a). The success of co-management plans is often reflected in the co-operation and involvement of local resource users (Caulfield, 1997).

Lane (2002) suggests that a common Western approach to participation in environmental management is to establish a stakeholder advisory committee. Reserving one or two seats at this table for indigenous representatives is unhelpful, as these indigenous participants cannot and will not represent the diversity of indigenous communities. Often representatives who are placed in this culturally invidious position simply boycott committee meetings.

## **5. Seasonal and regional closures**

The two communities involved in this research were both subjected to regional and seasonal harvesting closures within their traditional hunting territories. The hunters within these communities now have to travel hundred's of kilometers to the new territory, James Bay. DFO has designated this area as the new hunting territory in the hopes that the hunters from the Hudson Bay Arc communities will harvest whales mainly from the James Bay stock allowing for greater recovery of the eastern Hudson Bay stock. All participants involved expressed their views on this by-law, and continually discussed the danger involved in making the trip to the new hunting territory in a canoe with an outboard motor, traveling hundred's of kilometers in the waters of the Hudson Bay which are extremely unpredictable and dangerous. Some of the participants who agreed with the closures also stated that the closures are very hard on them for the same reasons as listed above (see Table 4.5). As noted in the Tyrell, 2007a study, the safety of the hunter and protection of the boat, which is learnt through the oral transmission of knowledge, must be ensured for a successful hunt. This knowledge cannot be transferred between the generations if the hunters are no longer harvesting within their traditional territories.

When comparing the responses in relation to the three age categories there are distinct differences. All elders interviewed were totally against the seasonal and regional closures. However there was a distinct split in opinion in the middle-aged and young adult categories. Approximately half of the participants within these two age categories collectively thought the closures were a positive addition to the beluga management strategy while the other half of participants within these two age categories did not agree with the seasonal and regional closures that were implemented by DFO.

Although many of the Inuit beluga hunters who live in these communities have stopped hunting for a while, many do not want to for fear of losing their Traditional

Knowledge of the beluga hunt (see Table 4.5). A similar situation occurred in the eastern Arctic during the middle of the twentieth century. The Inuit in this region ceased hunting the bowhead whale during this period, as the mammal was declared endangered. In 1996 the revival of the eastern Canadian Arctic Inuit bowhead hunt came as a result of the land claims process. Both the Nunavut and the Inuvialuit regions now have Home Rule governments and have taken over management responsibilities from the federal government (Freeman, 2006).

The issue was that the revival of the eastern Arctic bowhead hunt did not proceed without problems. This was the first hunt that occurred since the middle of the century, almost 50 years earlier. The first bowhead that was hunted was harpooned and shot several times, then eventually sank. Two days later, the carcass rose to the surface. The traditional knowledge of the bowhead hunt had not been used in over 40 years, and much had been forgotten (Freeman, 2006). The Inuit had to relearn much of their traditional knowledge of the bowhead hunt.

This is an example of what the Inuit of Nunavik fear could happen if the beluga hunt in Nunavik was closed completely. The experienced hunters in Kuujjuarapik and Umiujaq are already not able to hunt as much as in the past now that the regional and seasonal closures have been implemented. Last summer Kuujjuarapik had only two belugas and Umiujaq did not catch any beluga. This does not allow for the proper passing of knowledge through the generations on the correct techniques for the beluga hunt as is seen with the eastern Arctic bowhead hunt. If the lack of hunting continues, the Inuit of Nunavik fear they may lose their Traditional Knowledge by the time the next generation has their children.

Many of the participants interviewed felt that there was nothing they could do about the closures implemented by DFO and therefore felt that their hands were tied. Many participants mentioned the fact that they are not even able to reach their quota due to the far distances they now have to travel. They find this extremely unfair because the communities further north who do not have to leave their traditional hunting territories are able to reach their quotas much sooner. This also makes it much easier for these communities to then go over their quota leaving Kujjuarapik and Umiujaq to suffer because the total allowable catch for Nunavik is met before they have a chance to come anywhere close to their quota (see Table 4.5). An interesting point to mention is that the participants did not harbor resentment against the communities in the north who were considered by DFO to be over-hunting. According to Peter Tookalak (2006), the hunters from Kujjuarapik and Umiujaq understand how difficult it is for the hunters in the northern communities to not over-hunt, and therefore no resentment against these communities is apparent. Many hunters feel that DFO continues to implement these by-laws without supporting the population or seeking consultation with the communities. Many believe the government just comes in and makes unreasonable demands without any consultation. One woman stated that she felt this type of control was the return of colonialism (see Table 4.5).

## **6. The Quota System**

The majority of participants interviewed agree with the quota system (see Figure 4.6). However, the logistics of the quota system is where there are many differing opinions. The perceptions on the total allowable catch (TAC) for all of Nunavik, the distribution of the catch number between the communities, and who decides on the quota every season is where the community members have differing views. Some participants

believe the quotas are a positive aspect to the current management, but the TAC needs to be higher. This perspective seems to be in line with other Nunavik communities such as Quaqtaq who also believe the quota should be increased (Tyrell, 2007b). DFO's estimated TAC was achieved through mathematical models that predict the stock will likely disappear under present hunting levels in less than 10 to 15 years. DFO does not agree that the TAC should be raised. They go on to state that the population has been reduced by at least 50% and continues to decline (COSEWIC, 2006).

There are also many concerns about communities from the Hudson Strait over-hunting; therefore using up Kuujjuarapik and Umiujaq's quotas, before they have had a chance to use their quotas due to the dangers of traveling to the new hunting territory. According to DFO The Hudson Strait communities have a 22% chance of harvesting a beluga from the eastern Hudson Bay stock as all 3 stocks over winter in the Strait (COSEWIC, 2006). This is the reasoning behind the need for a quota system that includes all Nunavik communities in DFO's recovery plan. This is in contrast to communities in Nunavut who do not have quotas on their harvest as it is believed that they are only harvesting from the western Hudson Bay stock whose population is estimated to be approximately 50,000(DFOb). The community of Arviat harvests an average of 200 beluga per year (Tyrell, 2007a). This is a larger harvest than all 14 communities in Nunavik combined. Many participants felt that it is unfair that Nunavik communities are the only Hudson Bay communities subjected to a quota on their beluga harvest.

A large portion of community members felt that the quota system would more likely be followed if each community were allowed to decide on the harvesting quota for their community at the beginning of each season. This is a return to some of the



participants stating that decision-making needs to stay at the community level. This opinion is also in line with the suggestions from the Joint Secretariat-IRRC & AINA (Roberts, 1996) who agree that

Co-management increases communication between resource management agencies and user groups, and brings both parties together regularly to discuss wildlife management issues. Given this opportunity to learn the rationale behind management actions, users are more inclined to engage in self-regulation to support them.

When divided into the three age categories the results show that  $\frac{3}{4}$  of the Elders do not agree with the quota system. Approximately  $\frac{1}{2}$  of the middle-aged hunters are against the quotas, and all of the young adults believe the quota system is a positive addition to the management strategy.

Some participants do not think that DFO should be enforcing these quotas as the beluga harvest is part of their culture. While still others believe the quotas are necessary for future generations. Other results show that the quota system is not fair because the communities of Nunavut, Sanikilluaq in particular are not under the same restraints and jurisdictions. DFO estimates approximately 11.5% of the harvest in Sanikilluaq is from the eastern Hudson Bay stock (Hammill et al., 2004).

#### **7. Other successful co-management strategies**

Most participants (94%) (see Figure 4.4) have not heard of any other successful co-management strategies, and in most cases my Inuit Field Guide, Moses Weetaltuk did not even want to ask the question. Every time it came up he would automatically tell me that “we [Nunavik Inuit] do not know of any other strategies.” He thought this was a terrible question. Upon further investigation it was found that many Indigenous cultures believe authority to provide knowledge about land and resources emerges from an

individual's personal experience with places and resources for which the creator has specifically given the individual personal responsibility. From this perspective, knowledge that is "distanced" from those responsible for the land cannot form the basis of authoritative and legitimate claims to knowledge in land management decision-making (Davidson-Hunt et al., 2007; Lane, 2002). This may be one reason as to why Mr. Weetaltuk and the community members were not willing to ask or answer this question. In this case, they would not be willing to answer that question because it would not be up to them to judge another community's success in a co-management situation.

A second reasoning to the lack of knowledge regarding co-management strategies could be due to the absence of communication. According to R. Tookalak, Lumaag Hudson Bay Representative (2006), there is no budget that allows him and the other two Nunavik Representatives funds to travel to the communities they represent, to trade information, comments, thoughts, and ideas with their constituents. This includes information coming from Lumaag and the Government as well as information coming from the communities. If this communication gap between management and resource users is not filled, co-management will never be successful. The Joint Secretariat-INNC & AINA (Roberts, 1996) agrees that co-management committees help ensure that all parties are working with the same sets of information when dealing with critical issues. Misunderstanding results from poor communication.

#### **8. Decline in beluga numbers**

DFO and COSEWIC agree that the number of whales in the eastern Hudson Bay beluga summer stock has declined significantly enough to consider the stock endangered (COSEWIC, 2006). Even so, not all community members interviewed agree (see Figure 4.8). Although there is no noticeable trend in responses that can be detected through the

age groups for this theme, 31% of participants believe that the migration route of the beluga has changed due to more noise along the coast as well as changing sea ice dynamics. This change in migration route is believed to be the reason why community members are not observing as many belugas near their communities as in the past. DFO agrees that the migration routes for the beluga have moved farther away from the shore, however, their science stills tells them that the population has significantly decreased and that quotas and closures are still absolutely necessary (Lewis et al., 2006). Hunters from Quaqtq are requesting that more research be conducted into the impact of noise on the beluga migration. By placing all the emphasis on population numbers and the impact of subsistence hunting, some feel that other important factors in the movements and whereabouts of whales are ignored (Tyrell, 2007b).

The change in the cycles of the animals is the second reason. Berkes et al (2005) agrees with the cycles of the animals stating that societies are rarely, if ever, in balance with their resources...rather than assuming stability and equilibrium, we would be better off assuming that there will be crisis and cycles of change. To strive for stability and control, and to attempt to return to a non-existent past, leads to greater shocks and crises (Berkes et al, 2000). Berkes continues to view such management to cause a gradual loss of resilience, as well as reduction of variability and opportunity, thus moving ecosystems towards thresholds and surprises. From an Inuit perspective, the environment is always in flux. There are times when there are many whales (and other animals) and there are other times when there are few. The beluga whale management plan in Nunavik, on the other hand, is target based, seeking to return whale stocks to a former pristine state (Tyrell, 2007). This type of management, characterized by rules and regulations, and enforced by agents who are not resource users, emphasizes “steady states and the maintenance of

predictable yields... [and focuses] on controlling the resource” (Berkes et al., 2000: 1259).

This discrepancy of ideologies is similar to the situation when the Beverly-Qaminiruaq co-management board was set up. This co-management board was originally set up in response to a perceived sharp decline in the caribou herd. The government managers in this situation were hoping to educate indigenous caribou hunters who were perceived to be over-hunting. Shortly after the caribou co-management board was set up, communication began between the government managers and the caribou hunters began. It was determined that the caribou herd’s population numbers had not actually declined but that the herd had actually split in half. Half of the herd had migrated outside of the region the government’s aerial surveys covered (Kendrick, 2000).

#### **9. Other stakeholders in the management regime**

The majority of Inuit interviewed stated that because the Inuit are the only people who harvest the beluga they should be the sole decision-makers for beluga management. This includes all Elders and young adults. While a portion of the middle-aged hunters stated that because the Cree used to hunt the beluga either for the Hudson Bay Company or in times of food scarcity they should be included in any decision-making processes if they chose to do so (see Table 4.9).

A large majority of participant’s felt strongly that beluga management should only involve Inuit, as they are the sole users of the resource. Others felt that due to the presence of Cree in the area and the Cree’s previous harvesting practice’s, if the Cree wanted to be involved this would be acceptable as well. This also led to discrepancies in memory as well. Some participants stated that the Cree only hunted the beluga while working for the Hudson Bay Company; others thought that the Cree only hunted the

beluga during periods when food was scarce. One man stated that one summer in the 1960s all the Cree people in Kuujjuarapik became very sick. They believed it was due to the beluga meat, and so they never ate beluga again. Another woman stated that the Cree used to hunt the beluga and then share their meat with the Inuit. Some perceptions were that if all community members worked together to solve this issue that perhaps the Government would take the Inuit more seriously.

#### **10. Separate summer stocks**

Approximately 1/3 of the middle-aged hunters interviewed do not believe that there is a possibility of separate stocks of beluga whales, identified through molecular genetic analysis of samples in the Hudson Bay (deMarch & Maiers, 2001). This point is important when the Department of Fisheries and Oceans state that the Inuit of Nunavik are over-harvesting the stocks. This information directly conflicts with the Inuit perception of over-hunting. If the hunters do not believe that the stock is endangered, but instead believe the beluga migration patterns have changed then they may consider the TAC too low. Then they will not believe there is a need to follow the TAC quota, and may indeed completely disregard the by-law.

There are many differing opinions on the belief of separate summer stocks of beluga in the Hudson Bay. Approximately 17% of participants, which includes all elders and young adults with a small percentage of middle-aged hunters, were unsure of the question asked of them. Another 35%, all middle-aged hunters, stated they do not believe that there are indeed separate stocks of beluga, and 48% of participants, again all middle-aged hunters, do agree with DFO's notion of separate summer stocks of beluga in the Hudson Bay. When over half the participants interviewed were not in alignment with the notion of the separate stocks of beluga within the Hudson Bay, it is hard then for

these people to then align themselves with a management strategy that would put conservation as the top priority. As the numbers show over half of the participants interviewed are not convinced that there are indeed separate stocks. If in fact there are not separate stocks of beluga, and if one were to combine all Hudson Bay stocks, the estimated number of beluga would be between 30,000 and 57,000 beluga. If this is truly what the hunters believe, it would then be difficult for them to see conservation, quotas, and seasonal and regional closures as the management plan's top priorities.

### **11. Perceptions on Traditional and Scientific Knowledge**

Traditional knowledge is passed down by watching (Tuckatuck, 2006). There is no end point in gaining Traditional Knowledge; the acquisition of skill and knowledge is considered a lifelong endeavor (Palsson, 1994; Ingold, 2000). Younger participants believe the Traditional Knowledge of their culture could be in danger of disappearing. They say there is not as much interest in Traditional Knowledge in their generation for a number of reasons. The first reason is that they spend all of their time in school. This takes away from the time that past generations were able to spend on the land with their elders. They could be on the land daily learning from their elders. Many parents are also not taking the initiative to teach their children the knowledge that has been passed down to them. This could be due to the fact that more and more parents have full time jobs and are not able to get out on the land with their children to pass on the knowledge they have learned.

Another reason for the lack of knowledge being passed down is the great expense it now costs to get out on the land and do the hunting and teaching necessary to pass the traditional knowledge down. A large part of this is due to the high cost of gas that is now necessary to travel to their new hunting territory, south of the 55<sup>th</sup> parallel; James Bay.

Large portions of participants blame the government for the loss of Traditional Knowledge in their community. The bylaws imposed on the beluga harvest are an example of the government trying to control the Inuit socially, politically, and spiritually.

The white society always tries to impose rules and regulations on the Inuit up to today. DFO is not doing a great job because it seems that the Inuit have to fight and sometimes beg for changes on the decisions DFO has made. It is difficult for the Inuit to believe the estimates predicted by DFO when they are not done often enough and they are only estimates. The DFO doesn't really know exactly how many belugas are out there.  
(Simonie Tuckatuck, 2006)

Most participants agreed that Traditional Knowledge is very different from the Scientific Knowledge DFO has in regards to the beluga stocks around the Nunavik region. From a scientific perspective, based on population estimates harvesting whales will ultimately lead to a reduction in numbers; while for many Inuit, a failure to harvest whales who present themselves to hunters will result in the same outcome (Tyrell, 2007a).

[Elders] emphasized to middle-aged and young Inuit that once Inuit hunters stopped hunting beluga, the whales would avoid the area completely and finally disappear. They further appealed to other villagers, encouraging them to hunt beluga even if it meant going to jail. The elders stressed the necessity of maintaining reciprocal relationships between Inuit and their game animals (Kishigami, 2005: 130).

Some participants responded that Inuit Knowledge is a way of life, and is used for all four seasons. In contrast, the knowledge DFO has on the beluga is only recorded during the short summer season. Many participants stated that they do not think DFO has enough knowledge on the beluga when they only study them for such a short season and very sporadically through out the years. DFO seems to be surveying only once every five years. Many participants do not believe this is enough data to prove the stocks are actually in danger of becoming extinct.

From an Inuit perspective, and according to James Kasudluak, humans and whales are the same; they are one. This is in line with the Tyrell (2007a) study that states that Inuit perspectives regard humans and whales inhabiting a shared social space. This is in contrast to a management perspective where a distinction is made between the natural world and the human world, and the unmanaged actions of the latter can have detrimental impacts on the former.

## **12. Management Recommendations**

Throughout the interview process participants from Kuujjuarapik and Umiujaq consistently shared their views and opinions on current and future beluga management. Many ideas that the participants had were shared throughout the interview process. Half of the Elders interviewed believe strongly that the management of the beluga should always remain in the control of the Inuit. The majority of the Middle-aged hunters believe that working together with DFO is the most achievable solution to their present problem. However, they also state that the only way working together with DFO will be successful is if they are truly equal partners with DFO in future beluga co-management relations. Caulfield (1997) agrees that very rarely in co-management situations are the indigenous groups truly equal partners in management decision-making. The young adults interviewed either had no comment at that time or believed that the best scenario for future beluga co-management policies was to work together with DFO.

Many beluga co-management ideas and strategies that arose throughout the interview process are listed below. M. Weetaltuk (2006) a middle-aged hunter, spoke of a zero hunt for ten years. He believes in the work DFO is trying to accomplish, and believes in the necessity for conservation. DFO estimates show that a recovery target at



70% of the historical estimate (7,850) would allow for the removal of the endangered status of the eastern Hudson Bay beluga stock. DFO estimates show this target could be reached by 2046 with a complete closure of harvesting, approximately 40 years from now (DFO, 2005). His usage of scientific and traditional knowledge datasets have led him to agree with DFO that the harvest levels need to be lowered for a period of time. However, his Traditional Knowledge has told him that the population estimates may not be as low as DFO estimates, and therefore he believes the hunt may not have to be restricted for as long as DFO has recommended.

Some participants have requested food exchanges occur between the western Hudson Bay communities and the eastern Hudson Bay communities to make up for the maktaq the eastern Hudson Bay communities are missing out on due to the quota. Food exchanges between communities and across regions can ensure communities have sufficient quantities and selection of country foods throughout the year (Nickels et al., 2006). Perspectives on this strategy from the western Hudson Bay community of Arviat are mixed. In October 2002, Arviat Hunters and Trappers Organization (HTO) purchased 5,000lbs of maktaq from Arviat families for CN\$2.50 /lb. This was approximately 10% of the harvest for the year, or 20 -30 whales. DFO paid Makivik Corporation CN\$50,000 to help provide Inuit with an alternative solution to their subsistence needs. Makivik corporation approached Kivalliq Wildlife Board, which is responsible for wildlife issues on the west coast of Hudson Bay, with an offer to purchase some Maktaq. The request was passed on to Arviat HTO, and in October 2002, the sale took place. Arviat had two concerns over this; first was that hunters would begin to over-harvest to make money, the beginnings of the commercialization of the harvest as well as an opportunity to begin the same troubles as the east side of the bay. The second side was that the sale of maktaq

provided much needed money; this was not a moral issue if people need the money.

Arviat HTO made a decision not to sell more maktaq in 2003 and Makivik Corporation did not ask (Tyrell, 2007a).

Many participants also spoke of the need for the Lumaaq board representatives to have a more common presence within the communities they are representing. Hunters consistently told the researcher that they do not hear from their representative enough. Many of the participants interviewed have no idea what the Lumaaq board is, and still others who had heard of the board could not comment because they do not know what the board is all about. Lumaaq board representatives need to spend more time with their constituents to fully understand the perspectives of the community members they are representing at the co-management table.

Another portion of participants say it is impossible to have a successful co-management strategy without better estimates of the beluga numbers. This is consistent with perspectives from Quaqtaq hunters who are unhappy with the scientific methods upon which policy decisions are based, and feel there should be greater involvement of Inuit in the scientific research and in the reporting of findings (Tyrell, 2007b). All DFO reports that give population estimates state that there are large amounts of uncertainty in these numbers (Gosselin, 2005; Hammill et al., 2004; Lawson et al., 2006), and that all population estimates should be used with discretion for management purposes (Gosselin, 2005). Many participants felt that if there was more consultation with hunters better population estimates could be achieved. Due to the fact that the Inuit are in the same areas as the beluga all year long, they feel that they have a better sense of how, where, and during which season the belugas migrate. In the Tyrell (2007b) study hunters stated that they felt whale counts were being conducted at times of the year when Inuit know

there are few or no whales in a particular area, and therefore the methods used by DFO are perceived to be flawed. A large portion of participants felt that working together with DFO and Inuit should include community based monitoring. They felt very strongly that the Inuit should be reporting to the government their observations on the beluga migration. This would help to include Inuit in management and decision-making. Community based monitoring programs are becoming more prevalent within Arctic communities.

It can be difficult for these hunters to stop hunting when they are hesitant to believe the stock is actually endangered. This is especially so when one considers the deeply spiritual connection the Inuit have with the beluga. Because the Inuit of Nunavik have this close spiritual connection to the beluga, they find it extremely difficult to believe DFO scientists who are telling them that the beluga is in fact endangered. According to Inuit spirituality and in the words of Harry Brower Jr. "The whales; they give themselves". How then is it possible for the beluga to be in danger of becoming extinct?

The most common answer from the participants on beluga co-management is the idea that the government and Inuit of Nunavik need to work together to solve the beluga management issue. The government and decision-makers need to keep the public informed and up to date if trust is to be achieved. If the Inuit do not feel as though they are being kept up to date and in the know, their trust will begin to fade. This also leads to many participants not having any ideas or opinions on beluga co-management. This stems from lack of knowledge, which comes from the lack of Lumaaq representatives in the community as well as a lack of communication between the community and DFO.

There is a strong indication from a portion of participants that they felt they had no choice in the matter. They felt that DFO had taken control of the situation and it is now their position in life to listen to what DFO tells them to do.

In conclusion there were six management recommendations from the participants that have arisen through this research. They include;

1. Decreasing the harvest
2. Buying maktaaq from Nunavut
3. Lumaq and DFO spending more time in the communities
4. More precise population estimates from DFO conducted more often
5. Inuit inclusion and consultation in research and beluga management
6. Equal partnership with Inuit and DFO in co-management; The understanding that no one partner can comprehend and solve all problems within this issue will allow for mutual exchange and learning among all stakeholders involved (Nickels et al., 2006).

## Chapter Five: Recommendations

In order for a beluga co-management body to ever be considered successful by all stakeholders, the following six recommendations are put forward:

1. Building trust
2. Communication and Information Dissemination
3. Traditional Knowledge Inclusion
4. Youth Involvement
5. Capacity building for communities to deal with change
6. Annual scientific surveys

### **Building trust**

Trust develops under conditions where the multiple perspectives of diverse stakeholders are addressed, so that the information for management decisions is clear, accountable, and legitimate to all parties (Kendrick 2000). Lack of trust is an inherent aspect in beluga co-management dealings between the Inuit of Nunavik and DFO. The Inuit do not trust that government organizations have their best interest at heart due to past experiences; and DFO does not trust the hunters to manage the beluga stock with the best interests of the beluga at the forefront. Trust of both the Government (DFO) and the Inuit from each other is essential to a successful beluga co-management strategy.

To better understand the Inuit mindset the following quote is from Emma Larouque's Phd dissertation (1999).

The ultimate consequence of colonization is to weaken the resistance of the colonized Aboriginals to the point at which they can be controlled . What makes this unhappy (and on-going) Canadian story of control so complex is that colonization is not a uniform movement, nor is it a movement that is only in the past. Succeeding generations from every (Aboriginal) cultural group across Canada have experienced various versions of invasions repetitively. For Native peoples for there have been

at least three major periods and phases of colonization; pre-confederation consisting largely of explorers, missionaries, fur traders and expansionists; confederation which effectively ended Native independence through displacement and legislation, and the post-World War II era which brought in modernization. For Native peoples of Canada, the dispossession and the dying continues. The incursion is definitely not “of the past”. In fact, the grossest amount of final destruction has been taking place since World War II. Between 1940-1990s, the Canadian Government and society has been aggressively whipping Native peoples into “modernization”. (Laroque, 1999).

Laroque is telling us that Aboriginal people in Canada are still being colonized and controlled. It is evident that many of the beluga harvesters within these two communities feel the invasion of DFO regulations on their culturally and spiritually significant beluga harvest as another form of colonialism. It is also evident from my last field season that the community of Umiujaq feels strongly about the control the government is trying to force upon the Inuit.

The lack of trust in regards to DFO trusting the Inuit hunters to manage the beluga stock with the best interests of the beluga is evident through the interview the researcher had with a DFO representative in 2006. The representative implied numerous times throughout the interview that the Inuit have not shown any interest in proving to DFO that they have the capacity to manage the beluga stock to the standard DFO sees fit.

This lack of trust on both sides has held up any further pursuit of a co-management strategy that would be successful. Trust is essential for success. Trust amongst co-management parties plays a key role in creating space for innovation and mutual education to occur (Kendrick, 2000). One way to begin the long journey towards trust is through stronger lines of communication.

### **Communication and Information Dissemination**

Knowledge is continually evolving and expanding, and for true co-management to take place, each side must be open to learning from the other, and also facing up to its

own past mistakes (Tyrell, 2007). Communication and information dissemination is vital for a successful management strategy. All stakeholders need to have the capacity to obtain all relevant information and up to date research. If information and data were made easily available to anyone interested, more trust could be obtained. Although the government may believe the information is available to all stakeholders, it may not be available to everyone of all educational capacities. All information needs to be translated to Inuktitut and made available to all community members, whether information is delivered through the postal system, on the local fm stations, or through workshops and community visits. Information needs to be channeled through community visits from both Lumaq representatives as well as government and DFO representatives.

In Kugaaruk, Nunavut residents recommended that increased communication with the scientific community would address a number of their climate change-related concerns. It was suggested that a central office be created to facilitate this communication for the North as well as to collect community concerns in one central location. ‘If we had a central office to report to, if we can have a dialogue with those who know....if we can have a dialogue with the scientific community, we would be more than willing to help’ (Kugaaruk, Nunavut) (Nickels et al, 2006). A dialogue with researchers from DFO and Makivik would greatly increase the success of communication on this touchy subject. The Lumaq board needs to be the go between the scientific and Inuit communities. Both Kuujjuarapik and Umiujaq have requested this. If the Lumaq board had the financial capacity to make this a reality, a greater chance for success will be achieved.

In terms of traveling to the new hunting territory, more communication avenues need to be available to hunters to counter the safety issues of traveling to the new hunting

territory. In Kangiqsujaq, Nunavik in response to climate change making conditions on the land more dangerous to travel in it was suggested that a program be started to place signs on the land to identify hazards and prevent travel over dangerous areas (Nickels et al,2006). Signs may not be appropriate in the waters of the Hudson Bay but the hazards could be mapped out. Many hunters spoke of the dangers they have seen during their travels to the new hunting territory. If hazards such as shallow waters and sand bars could be pointed out, this may help alleviate some of the dangers people are encountering.

The community radio is also successfully used to report on weather conditions around the communities. This could prove to be helpful to hunters having to travel to Cape Jones. Nunavik should be added to the weather systems news and make forecasts available to the community (Nickels et al., 2006). Arctic Regions should be added to mainstream local weather forecasting so that Inuit communities could benefit from local scientific forecasts. Community members in Aklavik expressed concern about communications between the coastguard and communities. Improved communication would be imperative because of the often-critical nature of the situations involved, such as travelers missing or stranded-out on the land (Nickels et al., 2006). All of these communication tools could aid in making the journey to the new hunting territory safer for all hunters.

### **Youth Involvement**

The changes in Arctic environments threaten not only Inuit access to delicious, safe and nutritious foods from the land and sea, but also those things that hunters and community members learn while being out on the land; their Traditional Knowledge and skills, which have been cultivated over long periods of time spent on the land and passed



from generation to generation (Nickels et al., 2006). Many Arctic communities continually emphasize how environmental changes are impacting aspects of Inuit culture and lifestyle, which are based on subsistence hunting and life on the land. This is common with experienced hunters from Kuujjuarapik and Umiujaq who are now having difficulty completing a successful hunt in the new hunting territory. This equals the loss of a great knowledge base that once existed within this experienced hunter. When this is coupled with the strong sense of loss associated with a decrease in the amount of time spent on the land, a shift from the subsistence lifestyle has been a recognized result of environmental changes being experienced by Arctic communities today (Nickels et al., 2006).

Reports of the potential for future loss of the Inuit culture related to environmental change, focus on how this loss will impact Inuit youth. “Parents don’t always show kids the traditional ways/knowledge as much as before. This needs to be done, especially now with all these changes” (Nunatsiavut) (Nickel et al., 2006). Some participants felt that part of this responsibility should be shifted to the school board. Teaching Traditional Knowledge as well as beluga hunting practices and hunter training programs through the usage of videos and workshops might help to reinforce the importance of Traditional Knowledge and lifestyles.

Inuit youth inclusion in scientific research would go a long way to bridging the differences between the Inuit and scientific communities. Mark Stevenson, an anthropologist who has worked on Baffin Island with beluga whale hunters recounts the benefits of inclusion.

Inuit were hired to count whales from cliff tops at the calving grounds..... While this made some sense – Inuit powers of observation of animals on the Arctic landscape are orders of magnitude superior to those of southerners – it also promoted among Inuit participants a sense of

ownership in the survey data, the rationale and the methods by which they were collected, and the decisions sought by biologists using this information (Stevenson, 2006: 170).

This is a positive way to include youth in research being conducted. Not only would it possibly improve population estimates and inspire Inuit youth, it would also go a long way to bridge the current tensions between Inuit and government managers.

### **Traditional Knowledge Inclusion**

Many participants felt that their deep long-term knowledge of beluga whale behavior is over-looked by scientists. Inuit knowledge of beluga whales has been referred to in DFO publications as “tales” and “anecdotes” (Tyrell, 2007a). In the Nickels et al., (2006) study, participants stressed the fundamental need for inclusion of Inuit and Inuit Knowledge in all research. They emphasized the need for community involvement in future research opportunities on this and other topics. DFO scientists should involve community members in all stages of the process, from scientific research to gain greater knowledge of whale numbers, to including Inuit in the decision-making process (Tyrell 2007b).

A hunter from the Tyrell 2007 study in Quaqtuaq suggested that a holistic research project must be developed, that would cover all regions frequented by beluga whales and include the knowledge of Inuit and scientists from Nunavut to Nunavik to Greenland. In order to achieve this each community would choose its most knowledgeable and able hunters, to liaise with scientists, and assist them in their research. These hunters could inform scientist of the best times and places for counting whales, whale behavior at different times of year and so on. This type of project would be a collaboration between scientists and Inuit, and would require that scientists and DFO acknowledge that Inuit

knowledge of whales, other animals and the environment. This sentiment is inline with the beluga harvesters in Kuujjuarapik and Umiujaq. Community members want to be informed and be a part of this scientific research that is shaping their lifestyle and spirituality. To have all control over their lifestyles taken out of their hands is unfair, undemocratic, and colonialist in nature. Inuit must be included in all actions and decisions throughout the entire process. Without this there will never be trust and communication, and therefore success will never be achieved.

### **Capacity Building**

Many northern communities have shifted and made adjustments in their use of different types of travel equipment, machinery, technologies, supplies and infrastructure. Some of these responses have already taken place at the local level, while some communities identified their need for increased resources, equipment or support to respond to certain changes they are experiencing (Nickels et al., 2006).

Due to climate change the communities of Arctic Bay and Repulse Bay are experiencing winds that are now stronger and tend to be more unpredictable than in the past. Residents are buying larger and more powerful boats to compensate for these changing conditions. This adaptation has required investment in equipment and in some cases, has potentially significant economic ramifications for households and communities relying on traditional activities for much of their livelihood (Nickels et al, 2006).

Participants in Kuujjuarapik and Umiujaq have requested economic compensation for the capacity needed to now reach their new hunting territory, south of the 55<sup>th</sup> parallel in James Bay safely. The methods and equipment employed for their harvest were previously used for harvesting areas close to their community. To reach their new harvesting territory hunters now need more time, money, and new expertise to ensure a

safe harvest. This includes aspects such as more time off work, bigger boats and motors to handle the rough and unpredictable waters of the Hudson Bay. They also need to employ new methods of transporting the meat once harvested to ensure the meat will not go bad during the long journey home from the new territory.

Some communities in the Nickels et al., 2006 study focused on the need for responses involving better planning and provisioning of safety supplies, specifically for trips on the land and protection from the elements. Residents in Repulse Bay discussed at length the need today for better preparation for trips going out on the land and sea, as well as the need to bring ample safety supplies and equipment to cover a larger scope of potential conditions. Being prepared for all conditions is crucial; instances of being stranded out on the land for prolonged periods of time are occurring more frequently (Nickels et al., 2006).

The Nickels et al., (2006) study also explores basic community and individual capacity as an issue when discussing shifts away from subsistence based livelihoods because of changes in the environment and in relation to the long-standing history of research being conducted in the Arctic. Inuit expressed the need to reinforce the value and importance of local knowledge in all aspects of everyday life, and in particular in all learning that was taking place with regard to the challenges they face today (Nickels et al., 2006). These same sentiments were recorded within this research. If DFO continues to control the management of this beluga stock without the input of the Inuit and Inuit Traditional Knowledge, the Inuit will continue to react against this management system. They will continue to view this type of management strategy, as a form of government control over them and the management will never be successful. It is imperative that

information sharing, working together, youth involvement, communication, and trust are all present in any co-management strategy formed.

The communities of Kuujjuarapik and Umiujaq need to take responsibility for their actions as well. This could include community-scale research and information. An example could be this research; a start at delving into the problems and issues. Both communities have actively participated in this research and are well informed on the results of this research. Responsibility could also include community based monitoring of the beluga stock, as well as more outreach and educational programs. This was a request continually heard within the communities. Participants continually spoke of how they never hear from Lumaq, DFO, or Makivik. By being involved in this research they are making proactive steps to alleviate some of the communication tensions currently held between them and these organizations.

#### **Annual scientific surveys**

The majority of participants implied that they would like to see DFO researchers doing surveys annually. They do not believe that DFO has a sound enough data set to inform the public on the state of the eastern Hudson Bay beluga summer stock. They believe that more surveys and data collection with the inclusion of Inuit and Traditional Knowledge more often would offer a more complete data set that would in turn help hunters to comply with regulations set by DFO. They believe without more surveys and data collection no one will ever really be able to know and trust the stock estimates offered by DFO. This will also help with greater information dissemination and knowledge transfer between the two groups. The more information and communication, the more trust, dissemination, youth involvement, capacity building and Inuit Knowledge inclusion will be had.

All of these recommendations will only be successful if the number one “trust” on both sides is achieved. Without trust none of these recommendations and initiatives will be successful.

## **Conclusion**

Objective number one of this research was to identify the cultural and socio-economic importance of the subsistence beluga harvest in Nunavik. This objective can be summarized through research compiled by Freeman (2006), Tyrell (2007a), and Kishigami (2005). Maintaining hunting-based subsistence is the essential and continuing foundation of Inuit culture and identity (Freeman, 2006). The Inuit of Nunavik have always harvested the beluga whale. Beluga whale hunting is one of the most social subsistence hunting activities to take place in the Canadian Arctic. Through the harvest, distribution and consumption of beluga whales, Inuit identity and social relationships are affirmed (Tyrell, 2007a). The harvest instills a strong self-image for Inuit youth, while confirming and maintaining a sense of community (Kishigami, 2005).

Objective number two of this research was to identify the positive and negative aspects of the current beluga management plan. Tyrell, (2007a) notes that Inuit in Nunavik has consistently ignored beluga management plans implemented by DFO for the past 10 years. The science upon which the management plan is based is not deemed credible and, despite claims to co-management, most believe that their views and long term experience of beluga whales is not taken into account. Many hunters in Nunavik do not believe the whales are threatened or endangered. The methods employed by scientists are believed to be faulty, and do not give a clear and full picture of whale populations and their movements (George, 2005).

Tensions will always exist in the management of resources, and mistakes will be made (Tyrell, 2007a). COSEWIC currently lists the eastern Hudson Bay beluga summer stock as 'endangered' (COSEWIC 2006). DFO suggests that if current harvesting levels continue the stock could become extinct within 10 to 15 years. The relationship between

the objectives of this research and environmental change is directly related to DFO's predictions of extinction and the endangered status of this stock. DFO is declaring environmental change has occurred due to Inuit over-harvesting. This information is not in line with the Traditional knowledge of the Inuit of Nunavik. Elders consistently report that the stock is not endangered and in fact encourage more hunting to ensure the stocks continue to return. This is consistent with the outright refusal of some Inuit hunters to comply with the rules and regulations set out in the DFO management plan. Wildlife scientists and managers must develop greater openness to Inuit ideologies and relationships to animals, and to the ways the Inuit express their ideas and ideologies on these issues (Tyrell, 2007).

Objective number three of this research is to identify Inuit recommendations for future beluga management plans. The management recommendations for policy implications and change from the participants in this research include;

- Decreasing the harvest. Two suggested ways to do this are implementing a zero hunt for 10 years as well as only hunting male belugas.
- Buying maktaaq from Nunavut communities. This type of policy occurred in 2002 when Maktaaq was bought from Arviat.
- Lumaq and DFO need to spend more time in the communities;
- More precise population estimates from DFO conducted more often; all DFO reports that give population estimates say that there are large amounts of uncertainty in these numbers.
- Equal partnership with Inuit and DFO in co-management; The understanding that no one partner can comprehend and solve all problems



within this issue will allow for mutual exchange and learning among all stakeholders involved (Nickels, et al. 2006).

Recommendations resulting from this research include;

- More trust from both the Inuit and DFO
- Greater communication and information dissemination into the communities
- Traditional Knowledge should be included into management decision-making
- Youth should be involved in more hunting expeditions as well as any research being conducted within their region
- Capacity building is essential for communities to deal with changes such as travel to the new hunting territory
- Annual scientific surveys should be completed to help with a need for more correct population estimates.

The results of this research were easily divided into three age groups. It is evident that the young adults are not hunting as often as the older generations. It is believed by some that by the next generation of Inuit, hunting will no longer play an important role in their lifestyles. The middle-aged hunters of the group were identified as having the perspective that hunting was still important to their lifestyle but realized the need to work together with DFO to come to a reasonable solution to the problem. The elder participants were the least willing to work with DFO. They are leery of the government and have an inherent lack of trust when encountering any dealings with the government. They do not believe the government has their best interests in mind and

some believe this issue is merely another form of control the government is trying to force upon the Inuit.

This being said, 97% of participants agreed that co-management is the best way to manage the eastern Hudson Bay beluga stock. However, they also believed the only way a co-management strategy will ever truly be successful is if the government and Inuit are equal partners in the endeavor. Without a truly equal partnership any beluga co-management strategy formed will never be successful.

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## **Appendices**

## Appendix I: **Beluga co-management questionnaire**

### Section I – personal history

1. Why is the eastern Hudson Bay beluga of interest to you?

### Section II

1. Have you noticed a decline in the number of beluga?  
Why do you think the beluga numbers have declined?
2. Does responsibility for past commercial/subsistence harvesting need to be addressed?  
Eg – Hudson Bay co.

### Section II – Current management practices

#### What are your opinions on:

1. quotas
2. harvesting in high density areas only – travel, access, etc
3. modern harvesting methods – outboard motors, rifles
4. perceptions of government. DFO. – are there changes within these organizations you would like to see take place?
  - Do you agree with DFOs take on the idea of four separate summer stocks within the Hudson Bay?
  - Does your traditional knowledge differ from DFOs? How does it differ?
5. Do you know of any other successful co-management strategies in use? Do you think it would be successful if used in this situation?
7. Are there other local people who are not harvesting beluga which would need to be considered stakeholders? Cree? Eco tourism operators?, etc...

### Section III – Future Management Strategies

1. What is your vision for a future management strategy?
2. Do different perspectives within the community need to be taken into account? Are there other perspectives who are interested in the outcome?
3. Is there anyone within the community who is against hunting the beluga?

### Section III –

1. Is there a loss of knowledge as the older hunters pass away?
2. What can be done to stop or regain the knowledge that has been lost?
3. Do you agree with co-management? Do you think that combining TEK and science is the right way to manage the stock?
4. Do you think Lumaq is doing a good job?

Do you have any other comments you would like to add?

Thank you

## Appendix II: Edited Transcripts

*Table 1A Importance of the beluga harvest.....*

Age category	Perceptions
Elders	<p>I really believe in the continuation of the beluga hunt because the meat has a lot of vitamins. It is very healthy for us to eat the beluga. And that helps us to have a healthy body. Willie Kumarluk</p>
	<p>I have known about these whales since childhood, they are part of my being It [the beluga harvest] should continue at all costs because it is a tradition of the Inuit. Mina Mickeytook</p>
Middle-aged hunters	<p>It is of interest to all Inuit people. It has been the food source of our ancestors up to today. That's why everyone in Nunavik is connected to the whale. Because everyone shares a piece of the beluga, and it is shared by the whole community. So everyone is involved one way or another. This animal is very important to the Inuit up to today. Simonie Tuckatuck</p>
	<p>Its tradition, and a very good one at that. Because it teaches you how important it is whether you hunt beluga or other species in our region. It teaches young men how to hunt and be involved, their lives become important. Men trade their knowledge with each other and with the younger ones. Myva Niviaxie</p>
	<p>If we are losing all the beluga then its not that important. You are them when you eat them. One summer we didn't have any beluga. It was like someone painted all the walls in our community black. I got to craving it. We pray we can continue the hunt. Jimmie Stone</p>
	<p>My father was a whaler. I grew up around it. I have known it from the start. I am a hunter. It is important to continue the beluga hunt because we don't want to lose our culture, any part of it. We still have our strong culture, and we want to keep it. That's why it is important to continue the beluga harvest. Sappa Fleming</p>

Middle-aged hunters	We don't go school for that, we participate in activities. This is how we learn to hunt. Alec Tuckatuck
	Because Inuit identity is strongly linked to the beluga. Our ancestors have always hunted them, they are our delicacy, and the mammal itself has spiritual significance. It is because of our strong link to the animal that will continue into the future, we will always have a strong link to the beluga. Simonie Tuckatuck
Young adults	Its part of our diet, and its been with Inuk culture for a long time. Hunting.....its one of the things we do. And also as a hunter it makes you happy to catch one. It's one of the best big game to hunt. It gives you great satisfaction to catch one. Peter Tookalak
	It's out tradition, our country food, it's for our good health. Angus Crow
	It's the best meat, it is so good, I love it. When you have some you just want to go on and on, you can't stop eating it. That's how I am. Roger Tooktoo

## The Integration of Traditional Ecological Knowledge in beluga co-management

Table 2A How would you integrate TEK in beluga co-management?

Age categories	Perceptions
Elders	Working together, elders with elders, and the people concerned, because they do know a lot. They should be listened to more and their knowledge should be put into co-management. Myva Niviaxie
	It would be better managed if run by local people making the decisions of how many can be caught each year, supervising it. If the locals make the decisions, for sure the local people would be more inclined to listen to what ever was being decided, not from outside sources. According to the offshore agreement we are going to have 3 local people making the decisions. Lumaaq will make these decisions. Robbie Tookalak
Middle-aged hunters	DFO needs to come to every community in Nunavik, not just under the table giving us tough situations. Simon Tookalak
	Maybe one way would be the negotiations for the new government in Nunavik, where the federal government and the Quebec government give the Inuit more power and more decision-making in all levels...social, economic, political, and other aspects, because TK doesn't die. It is passed on verbally to the next generation. Simonie Tuckatuck
Young adults	It's going to be the same story. I'm sure DFO has very good information on TK now. The more you use the research the less you are going to need it. They are going to continue to say the same thing about the area. You do not have to be a college student to find out what our TK is. Each hunter is basically going to say the same thing, and as the years go on DFO is not going to need the elders anymore. Its good that they are working with the TK, in the long run it is going to come in handy with how they work with their co-management and pursue their beluga studies. Peter Tookalak

Young adults	They need to work together and listen to each other. They need to agree. Roger Tooktoo
	Set up hunting groups and involve the elders. Isaac Kowcharlie
	TK should be passed down to the younger generation. It is passed down but it is slow. Slowly but surely Inuit are becoming more competent in working out there own way. Anthony Fleming

## Perceptions on The Lumaaq Board

Table 3A Do you think Lumaaq is doing a good job?

Age category	Perceptions
Elders	I only know of the legend. Jennie Mulucto
	I really want to have Lumaaq to support Inuit and Inuit concerns. I want that very much. Joshua Sala
	Lumaaq is not doing so well. We don't have money. I don't have money to travel to the communities I represent. There is nothing, no money on the Lumaaq communities. There are 3 local members [ one for Ungava Bay, one for Hudson Strait, and one for Hudson Bay] for Nunavik, but we don't have any money, we can't travel. I have a conference call with the local hunters, for example to Inujjuaq. Lumaaq is not 100% strong, but we have mouths, we talk. We are appointed by Makivik, I was appointed to be the representative of the Hudson Bay Coast, but have no money for travel. We have a meeting once a year, Makivik pays for airfare for that, but that's it. I hope it is going to be stronger when we are incorporated into the offshore agreement. Robbie Tookalak (HB Arc Lumaaq representative)
	They are doing a good job. I would like to see them work with DFO to count the beluga and see how many males and females. Jobie Abraham
	Lumaaq is not doing enough. They do not come to the communities enough. They are not giving enough. Samwillie Quarak
	Lumaaq is looking very weak because the head of the government is using only people that he hired. Those people from the government give those rules to the Lumaaq Corporation, and then Lumaaq says "I will do what you say". Lumaaq and the government never sit together. Just the hired people. The head government [the minister of environment] should sit down with Lumaaq and make negotiations and talk, not only just hired people. Davidee Niviaxie
	I don't have the minutes to their meetings, but they must be passing on our knowledge to the government in these meetings.

Middle-aged hunters	<p>They're trying hard, from what I hear. There should be good documentation about this whole thing. It needs to be documented. The management now, and how it was in the beginning when the Europeans arrived.</p> <p>Alec Tuckatuck</p>
	<p>Lumaaq committee is doing a very good job. I think they could do more if all the hunters and population were interested. The population needs to support them more.</p> <p>Simonie Tuckatuck</p>
	<p>I have not heard of them. That would be a good thing if the true powers are given to the Inuit in the decision-making process. Because I know the decisions would be carefully thought of.....Inuit based, Inuit knowledge based, rather than just scientific alone. There would be a humanness in that decision-making. Just laws and regulations by themselves do not work.</p> <p>Simonie Tuckatuck</p>
Young adults	<p>I think they are doing a good job but the powers they have are limited. Having knowledge and knowing what's going on around DFO, its good that Lumaaq committee. They give us information as to what DFO wants to do and if they were the management team for TK it would be good. They have to a certain degree, they are helping the Inuit people and the DFO to a certain degree. But they could do a better job uniting the whole Nunavik, because we are always separated by regions.</p> <p>Peter Tookalak</p>
	<p>They are doing a good job, but they need to get more involved with Inuit people.</p> <p>Paul Crow</p>
	<p>They seem to be doing a good job, but the hunters are still not catching any whales. We do not get enough information from them.</p> <p>Angus Crow</p>



## Perceptions on co-management

Table 4A Do you agree with co-management?

Age category	Perceptions
Elders	Where there's a will there's a way. We must work to find a way. Mina Mickeytook
Middle-aged hunters	That would be a welcome initiative, because it would mean more Inuit involved in all levels. Management level, decision-making level, it would be a welcome difference if the Inuit were involved more politically. It would mean DFO would not decide alone with all its rules and regulations. Simonie Tuckatuck
Young adults	Yes, I think they should work together. If they are going to help the beluga I'm all for it. Hannah Tooktoo
	Yes I do. It's good to talk about it. Everyone needs to get along. Angus Crow
	Yes, there is a need. Because science and TK go hand in hand. The DFO they don't know how to be out on the land, they don't know where the animals go or feed, so it's really important that TK be part of the co-management because they know the animals and their behavior, what they do. This information is important for the co-management. Peter Tookalak

## Seasonal and regional closures

Table 5A What is your opinion on the seasonal and regional closures implemented by DFO?

Age category	Perceptions
Elders	<p>I do not like it. But there is no choice if that's the law. There is nothing I can do about it.</p> <p>Jennie Mulucto</p>
	<p>Although we have a quota of 15, we cannot even reach it because of the vast distance to our designated hunting area. We cannot even reach the designated hunting areas. Also, our designated hunting area has shallow areas that are dangerous for people who do not know the area. This is us now that we have to travel there.</p> <p>Samwillie Quararak</p>
	<p>I disagree completely; this is not to my liking at all. The Inuit should be able to hunt what they want, where they want, and when they want.</p> <p>Mina Micketook</p>
	<p>We have to go almost 400 kms, and that site is an old army base. It has old metal pieces like drums, radar and old buildings. And they are still there. For sure there is mercury in this area. There are no rivers close by. We have to take water from ponds that are dirty and have lots of bugs. The water is always black and dirty; someone is going to get sick. We need to wash our clothes while we are waiting for the beluga in James Bay. Fresh water is not always close buy. It is not easy to hunt the beluga in James Bay. It is close to the army base. There are 1000s of old dirty drums left behind in that area from the army. There's a pipeline there. There are big towers still standing there, they are getting rotten, and this area is dangerous. Those towers are going to fall down. We have to report it to the government to clean it up. It's going to cost millions of dollars to clean it up. There are Cree hunting camps in James Bay at Cape Jones, they are hunting fish and geese in September. They were really pushy with two hunters from Umiujaq, and wanted to know what the Umiujaq hunters were doing in Cape Jones, which is not right. That's really bad. I think we have to have more meetings with the Crees, to you know, discuss it.</p> <p>Last year the government gave Kativik Regional government \$5000 for hunting. This money needs to go directly to the communities.</p> <p>Robbie Tookalak</p>
	<p>I know in Nastapooka they used to have a lot of belugas. But</p>

Elders	<p>each year it changes, it looks very different, because they move very fast. Now those beluga are at Little Whale River. Before the DFO used to put a lot of radios on the belugas. I think this is one of the reasons why the belugas don't go to Nastapooka any more. I blame the DFO for this.</p> <p>Joshua Sala</p>
	<p>I don't like that because it is very far for us to travel to the James Bay area. We did not get much beluga last year because it is so far for us to travel there. And the Cree people didn't like it when the Inuit try to go to James Bay area to hunt the beluga. They sometimes bother Inuit people who are trying to harvest the beluga. The Cree come out in their canoes and bother us.</p> <p>Willie Kumarluk</p>
	<p>Only the people who are working, making incomes can go out hunting now, because they have money to go out hunting. Those people who have no jobs, they cannot go to the places where DFO has told them to go hunting. Even when we see a lot of beluga passing in our area, we are not allowed to hunt them. It is very hard for those of us who do not have jobs. We would like to hunt them but we can't.</p> <p>When I tried to go out hunting beluga where the government told me I had to go, my boat and outboard motor had an accident, and the boat broke because of the waves and the outboard motor and the boat both sunk. Luckily there was another boat with me that could help. This was very dangerous and difficult for me when I tried to go there.</p> <p>Davidee Niviakie</p>
	<p>They are good because they are making Great Whale have more beluga.</p> <p>Jobie Abraham</p>
Middle-aged hunters	<p>The first year of the quota system DFO funded the Inuit for gas. Now local companies help, fundraisers for gas.</p> <p>For us it's not too bad because we are closest to the territory where we are allowed to hunt. But the costs of going down there are incredible because the gas prices are going up and up and up. It is very expensive to go down there and harvest. And some times the water related matters; it can be dangerous if the weather turns. Alec Tuckatuck</p>
	<p>I have no problems with the distance from the regional closures. And no opinion on the seasonal closure.</p> <p>Charlie Weetaltuk</p>
	<p>If we harvested in our own area there would be less disturbance</p>

Middle-aged hunters	<p>to the beluga's eating spots because we wouldn't have to travel through them. When we travel through their favorite eating spots, they go further away.</p> <p>When the hunters have to travel a far distance to catch the whale by the time they get back, the whale is not as fresh. It may take a few days to travel. If it is hot that affects the meat. The meat could become dangerous to eat. People have died from eating dangerous meat.</p> <p>Sappa Fleming</p>
Young adults	<p>They are good [seasonal and regional closures]. The beluga go to Little Whale River to have their babies, there and Nastapooka River. It is good for them to be able to rest and have their babies.</p> <p>Paul Crow</p>
	<p>They are just telling us and not really supporting us, you know, financially. You know I think they should have been more supportive. Both parties here, the community and DFO should work together. There is no financial support. And the weather, it's not always safe to go. We have to go very far to get the beluga now. Even if we see a beluga close by we can't catch them.</p> <p>I wish they could be more accurate with the amount of belugas we have in the Hudson Bay.</p> <p>Peter Tookalak</p>
	<p>Our hunters need help to get where they are supposed to go. And then when they come back empty handed, they have to pay again to go back.</p> <p>Angus Crow</p>
	<p>I am happy to hear this question because this is a very hard and difficult situation we have. The distance is way too far for us. When we go to the place where they told us to go, the beluga gets stinky and rotten. Sometimes when it is too windy and all that, we have to wait for the weather to pass. Sometimes it's a couple of days and by that time the beluga meat has gone bad and it is wasted. I also worry about the people in the village waiting for me to get back. They worry about us when we go to the place where the government told us to go beluga hunting. And people will start to worry that they too won't have any beluga to eat. That's one of the reasons I don't like the place the government told us to hunt. It is not easy now for us to go out hunting now. The expenses now are so great. The gas is so expensive. I am very happy now that the hunter support program helps to supply us with the gas. Also with the food we have to supply for ourselves, this is not easy, we don't have any</p>

Middle-aged hunters	<p>support for this. We have to calculate how long we will be there with our food supply. Our supply of food may finish early because of the weather and the financial situation. If we have to supply the gas then we don't have the money to supply our food. This is a very difficult situation.</p> <p>James Kasudluak</p>
	<p>It's good, especially on the Hudson side because there were a lot of belugas before, it is definitely for the better, I can say that.</p> <p>Peter Tookalak</p>
	<p>I do not like the idea of these designated hunting areas that are very distant. We should hunt here, around Kuujjuarapik, not far away.</p> <p>Alec Fleming</p>
	<p>I go hunting too, with my kids, and we have to go over 300 miles and its very expensive for fuel and canteen. And that site, James Bay, we hardly know that area and we hardly can find any belugas. That's why we never go to our limits, even though we love beluga.</p> <p>Jack Niviaxie</p>
	<p>I don't like this, but we have no choice because we have to allow for the beluga to repopulate. It is harder for people to go, but I guess it's a good thing because the beluga will come back.</p> <p>Roger Tooktoo</p>
	<p>Each community should have a closer hunting territory. Their designated areas should be closer, like they used to be.</p> <p>Leroy Fleming</p>

## Perceptions on harvesting quotas

Table 6A Do you agree with the harvesting quotas DFO has implemented?

Age category	Perceptions
Elders	<p>I do not like it. But there is no choice if that's the law. There is nothing I can do about it. Jennie Mulucto</p>
	<p>The quota is breaking our relationships, or family relationships and community relationships. Before the quota was introduced people were sharing, helping, and caring. When the quota was introduced, people started to complain because they never get any meat from the hunters. Because the harvesters are only hunting for themselves now. This has changed us a lot because it has broken our relationships and communications, and even causing problems like turning friends and family into enemies. Davidee Niviaxie</p>
	<p>Our quota for the year is 15 whales. So far we have only caught two due to bad weather and expense. The harvesters should not be hampered. They should be able to hunt without rules. We got two beluga this summer, and haven't had any since. We should be using our quota to the limit. There are other communities who finished their quota a long time ago [early in the summer], and are now using the rest of our quota. We should use our quota to the limit every year. We have only used our quota to the limit once or twice. DFO promised us 15 whales, but now DFO are saying no more. That's it, no more hunting this year. The hard part is why did they promise us 15 for our quota but now they are saying that's it no more hunting, even though we haven't reached out quota. Jennie Mulucto</p>
	<p>I disagree completely with the quotas. I wonder why they are enforcing these quotas when it is a part of our culture. There should not be quotas at all. Inuit should go hunting when they want, where they want, and how much they want. It has to be up to the Inuit. The whales are our delicacy, they are a delicacy. We love to eat them, and the quota should not be there. Mina Mickeytook</p>
	<p>I would like to mention more for the quota. In the past 5 years we have never reached our limit for the quota of 15, we usually get maybe two or three if we are lucky, because James Bay is very far from here. Robbie Tookalak</p>
	<p>Although we have a quota of 15, we cannot even reach it</p>

Middle-aged hunters	because of the vast distance to our designated hunting area. Samwillie Quarak
	I don't mind the quotas because there are very few whales. The quotas are the right idea. Alec Flemming
	I blame the government because it's them, only them who give us quotas. Joshua Sala
	I believe in the quota because I think it would be very dangerous to harvest a lot of belugas. The beluga number will decline if too many beluga are harvested. But maybe I believe also that the government giving us the quotas is not that bad, but I think that maybe us Inuit ourselves should be deciding on the quotas, because we have to look for the future. The state of the beluga for the future. Yes, I believe in quotas for the state of the people for the future. Willie Kumuarluk
	I hope everything is going to be fine in the future. We use the beluga whale, and the quota system is working up to a point, and I think it needs to continue. But, our population, the Inuit population is growing so fast. How and where can we get all the whales we need. On the Western Hudson Bay there are so many whales. We should try to get some of that whale here. Lumaag or some other entity should come up with a solution. They should harvest the whales there and bring the maqtaq back here for us to consume. Moses Weetaltuk
	It's a must thing that we have to follow until we really actually know just how many belugas are left in the Hudson Bay area, on both sides of the Bay. If we don't have quotas it would be much harder in the future, for our future generations. They implemented the quotas for that purpose, and we have been following the quotas very well. So we can respect them. Myva Niviaxie
	At first we did not like the quotas. Then we realized they were trying to do something for us, for our future generations. So our children's children will be able to harvest the beluga whale. Because it is in their culture, because it has always been their culture. Moses Weetaltuk
	We've lived with that from the beginning, and we are still living

Middle-aged hunters	<p>with that. We don't have the scientific knowledge that DFO has, even though we know the beluga, we don't have all the scientific information. So the quotas are livable. We can live with that for a certain period of time.</p> <p>Alec Tuckatuck</p>
	<p>Everyone should have quotas, and they must be equal. In the north people should be able to hunt year round. There is very little food, and people may need to eat it.</p> <p>Jimmie Stone</p>
	<p>If everyone respects the quota I believe the numbers [of beluga] will go upwards instead of downwards. Maybe the cycle will go up.</p> <p>We used to catch one in the morning and one in the afternoon. Then the whales would come back in the evening.</p> <p>[It has been noted that once a whale is caught the pod will leave the area. But by the next day the pod will return to the traditional area.]</p> <p>But now there is a lot more disturbance so the whales have left. They do not come back anymore.</p> <p>Sappa Fleming</p>
	<p>Since we can't even catch 10, the quota seems to be ok, if there were more hunters interested the quota would not be enough. They are not interested because of the price of gas and food. Some of the hunters do not even bother going so far for beluga hunting. Example for myself, sometimes I pay my own gas and food. Sometimes I do two trips a year. Sometimes only once a year.</p> <p>Simonie Tuckatuck</p>
	<p>I think it is useful because now we don't kill too many whales, and now we don't waste food.</p> <p>Mark Weetaltuk</p>
Young Adults	<p>It seems to be a lot better for all Nunavik people, because different communities like Kuujjuarapik and Umiujaq, and all those four communities close by they used to catch a lot, Umiujaq and Great Whale, we didn't try to catch like 70 whales per year. Especially those four communities and Sanikiluaq too, they were catching too many whales, about 60 to seventy belugas per year. And catching so much, but with the quota right now we have been practicing this for more than ten years, it is more balanced now for each community for harvesting.</p> <p>Roger Tooktoo</p>
	<p>In some areas we need the quota, like in the big populated areas,</p>



Young Adults	<p>they need that. But in the small communities like Umiujaq we only need like 3 to 4 beluga to feed our community. And we never see anybody. We don't go to those areas and catching so many beluga at once. We don't need the quota.</p> <p>Jack Nivaxie</p>
	<p>I am not comfortable with the quota. The Inuit should be able to eat maqtak or wild harvests whenever they want.</p> <p>Peter Niviaxie</p>
	<p>I don't mind the quotas because the beluga are endangered.</p> <p>Paul Crow</p>
	<p>Good job. I wish they would be more strict on the amount of belugas to be hunted.</p> <p>Isaac Kowcharlie</p>
	<p>Its good, with the rate that we were going before the quotas were introduced we were killing any amount we wanted. If we kept up that rate we would not have any belugas in 15 to 20 years. Its good that the quotas were introduced, especially on the Hudson side, because we were getting at least 100 to 200 hunters in one area to harvest beluga, which was a little bit too much of a number. So its good that quotas were introduced especially for the future generations and since the communities were killing any amount they wanted, the quotas are good for us.</p> <p>Peter Tookalak</p>
	<p>I don't really believe in the quotas the government has introduced to the Inuit people because it hurts me. Once the quotas have been introduced to the people they are only hunting for themselves, they are no longer sharing. Hunters used to share the beluga, the meat, everything. Nothing was ever wasted. We helped each other. Now that the quotas have been introduced it has created selfishness, and a lack of communication. It has hurt the Inuit way of life. We can only catch as much as they say; this is not enough for us. The government says only 5 belugas per year. This is not enough for everyone. I want to follow the regulations but I want the quota adjusted. They used to say at the 55<sup>th</sup> parallel there is no regulation; we can harvest as many beluga as we want. Above the 55<sup>th</sup> parallel we have to follow the quotas. When we go hunting now below the 55<sup>th</sup> parallel they are saying there are regulations, I don't understand what the government is saying, they are always saying something different.</p> <p>James Kasadluak</p>
	<p>This is a good idea because we want belugas in the future too. If</p>

Young adults	they over hunt them they're gonna be extinct. So I don't mind because there will be more in the future. They will make more babies and the numbers will increase. Roger Tooktoo
	No they are not good. The hunters used to hunt them for the whole community. But now that our population is getting bigger, It's not enough. There is not enough beluga for everyone. It's very good to eat it and we don't waste the food. We dry the meat that we eat. Betsy Crow

## Perceptions on the Government and DFO

Table 7A Government perceptions

Age category	Perceptions
Elders	<p>Why is it that the government is imposing their rules on the Inuit. The Inuit should get to harvest what they want, and the government should not impose their rules on the Inuit.</p> <p>Jennie Mulucto</p>
	<p>I do not agree with the quota system and the allotted hunting areas, not one bit. Inuit should be able to hunt where they want, when they want, and how many they want. I do not understand why the government is doing this, there is no need.</p> <p>Jennie Muucto</p>
	<p>I don't know if I can answer that. But I want to say what gave the government the authority to impose these quotas and other regulations on the Inuit. Is this the continuation of colonialism or what?</p> <p>Mina Mickeytook</p>
	<p>I really want the government and DFO to work harder. They only work when the weather is nice in the summer time. They only do their studies and surveys in the summer time when it is nice out. I want them to study and survey the beluga in the winter time to because the beluga are more endangered during the winter, because there are only small openings in the ice that they can breath through. This will let them know that the beluga are in danger in the winter time too.</p> <p>I really want to say thank you very much. We need you to come and ask us questions. This can help us and tell the dictators what you heard. This will be helpful, things may be adjusted. Maybe this will be helpful in the future.</p> <p>Davidee Niviaxie</p>
	<p>Well with DFO's imposed rules, I really do not think I can do anything about it, and I am also thinking about the future generations. This is not just about us. I would like to see the future generations go hunting as well. But the distance we have to travel to harvest the whales is a problem. I want to know if this can be changed to a closer place.</p> <p>Samwillie Quarak</p>
	<p>I'm not too sure, I really don't have anything to say against them. There closures are a little too far. It's not too bad for us, but the farther north communities, its too far. If they could make them closer it would be nice. We should be able to hunt at least five beluga around our village.</p>

Elders	Jobie Abraham
	<p>I don't really agree with the government and DFO giving laws and regulations to the Inuit people about the 55<sup>th</sup> parallel, because the 55<sup>th</sup> parallel belongs to the Inuit and the regulations and laws should be made by the Inuit people. I don't agree with these rules that they give us about the beluga.</p> <p>The beluga harvesting area is too far. If it is going to continue the government has to help us. I want the government to support us in our transportation, they need to take action. This costs us a lot of money. They need to help us; they should take us to the area we need to go. They should support us by airplane, and support us with water to drink; there is a lack of water there. Or we need bigger boats with freezers on them. The beluga meat goes bad after a couple of days. The hunters may get stuck for a few days and the meat goes rotten. They get stuck because of the weather.</p> <p>I would like to very much work with the government, and they help us very much. I am grateful but I want them to understand. Willie Kumuarluk</p>
Middle-aged hunters	<p>I could not say they are doing a good job, because people have hunted in this community for a long time. They know the cycle of the animals. The number has declined, but the elders still say it's the cycle. The animals will return. DFO does not understand this. Sappa Flemming</p>
	<p>I would like to see them more involved with the elders and the Traditional Knowledge, and also, as much as possible, when they are out there [collecting data] involve the Inuit. When they are out there doing the count, Inuit should be out there with them, so both sides can collect the information. They should be more receptive. Myva Niviixie</p>
	<p>I think they [DFO] are doing the right thing for our generations to come. But their demand on places to hunt they are too distant. Moses Weetaltuk</p>
	<p>No, no a 1000 times no. During the history of the 1800s, the Canadian government, in its own laws, has allowed European whalers to hunt so many up to today, I still don't agree with DFO, how they are trying to manage the marine animals. The whole Nunavik region can't even get 500. So I don't see any good perceptions on DFO. Simonie Tuckatuck</p>

Middle-aged hunters	
	<p>It would be much better if DFO would be interested in going to the communities to help out with what problems we have. We don't even have safe drinking water. I believe there may be mercury in the water near James Bay. They have very small ponds to get water, and they have so many bugs in the drinking water we have to drink. If they could help out when our motors break down it could be very helpful.</p> <p>Simon Tookalak</p>
	<p>Without DFO we would know a lot less. As long as they don't lie, I'm ok with them. Some people tend to lie to get what they want.</p> <p>Jimmie Stone</p>
	<p>I do not have enough knowledge on DFO to comment.</p> <p>Charlie Weetaltuk</p>
Young Adults	<p>I think they need to work together with the community. In a way I think it's a good thing to have the quotas. Here, in this village we have been following the quota. And now we are hearing that they may be cutting off the quota completely.</p> <p>Peter Tookalak</p>
	<p>I think they are doing ok because sometimes we catch too much, sometimes not enough. I think traveling further evens this out.</p> <p>Angus Crow</p>
	<p>I do not like the way they are handling the belugas. Its our traditional food, its very good to eat, and the amount we can harvest is getting lower. It is making us fight over the meat and the maqtak.</p> <p>Betsy Crow</p>
	<p>Yeah, I would like to see changes. I went to the zoo in Montreal. I saw a beluga whale there, and I didn't like it. This is what I eat. What are people in the south going to do to help us out?</p> <p>Tina Nuktie</p>
	<p>It's good that the DFO is working with the Inuit knowledge. If the DFO did not step in for sure we would have no beluga left. I like the work that they are doing, it's going to be good for our future generations, although our kids do not know how to hunt anymore, its going to be good for our future generations.</p> <p>Peter Tookalak</p>
	<p>I don't really agree with what DFO is doing by totally closing</p>

<p>Young Adults</p>	<p>the Hudson side, but the control needed to be there. It's good that they made control out of it, making quotas for each community. But their information, I think is wrong, coming from the information from the elders in the area, and they don't really know where the belugas are in the winter time. And when they do their surveying in the summer, they have to depend on hunters to count them. They should really be doing this on their own. So I don't really believe their surveying data, but in another way I really think that what they are doing with the quotas is a good thing. But the biologists need a better mechanism. They know there are three different stocks but they don't really know the numbers of them. They estimate the numbers. And in closing the Ungava and the Hudson Bay side, that I agree with because there is going to be over-hunting and no beluga left for our future generations.</p> <p>Peter Tookalak</p>
	<p>The government and DFO need to do some adjustments. The distance for us is too far. We can only harvest where they tell us. This is especially true for the elders. We haven't had any beluga for one year and we miss our meat, our country foods so much. For the elders, they have been eating beluga for many years, they need their own country foods. The elders cannot wait to eat their own country foods. If they cannot make this possible we should be able to catch at least two belugas in that very close area for the sake of the elders, so they can eat their own food. If the government could allow this for our elders, this would help. Us younger people, we could wait for the beluga that comes from the area where the government told us to hunt them. I wish the government could adjust that for the sake of the elders. We have no choice as Inuit people. We are very sensitive to laws, and we would never break the law. This is in the Inuit culture. We follow the rules that we have. But at the same time the government should see our circumstances and adjust the rules accordingly.</p> <p>When the quota was introduced and the government gives us laws, we have to follow them. It hurts us and gives us pain very much. This food is given to us and it's very hard to follow the government rules that tell us not to eat our own country foods. We want to break the rules because they are making it so difficult for us. In the future it might happen, people might break the laws, because the government is giving us laws too difficult to follow.</p> <p>James Kasadluak</p>
	<p>I think they are doing a good job. A lot of people don't like it, but it is good for the beluga and good for everyone because they will be around longer. A lot of people disagree because they</p>

Young Adults	can't understand what DFO is trying to do, they are trying to help us and the belugas. Roger Tooktoo
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## Decline in beluga numbers around the community

Table 8A Has the number of beluga that migrate by your community each year declined?

Age categories	Perceptions
Elders	<p>From what I hear, beluga numbers are not declining, not at all. Still they are not here anymore. They have gone somewhere else.</p> <p>Although Inuit people have caught a lot in the past, it was what they needed to survive for the winter. They took only what they needed. This is not over harvesting.</p> <p>Jennie Mulucto</p>
	<p>Yes there has been I decline. I know because I have been around for a long time.</p> <p>I do not know why there has been a decline in the number of whales.</p> <p>The reason why, partly anyway, is from the subsistence harvest by the Cree, they caught many whales.</p> <p>Mina Mickeytook</p>
	<p>Yes, because of the outboard motors, and the floating dock we have at the mouth of the river. It's very loud and squeaky. It's moving all the time. Before the dock was put in the beluga would enter the river. But since the dock was put in the beluga do not enter into the river any more. The dock is metal and squeaking.</p> <p>Jobie Abraham</p>
	<p>Yes, we saw a group only once this summer compared to many years past the numbers have declined, definitely.</p> <p>The number one reason is the noise pollution around the mouth of Kuujjuarapik. Outboard motors and ships.</p> <p>No, I have not heard or seen Inuit hunters over harvesting the beluga whale. Especially in the last 10 years. Before that the HBC. I heard that in the 1800s, they hunted many whales. I have seen the boilers for the fat. They hunted so many whales that they needed these big huge boilers to cook all the fat. I've seen these boilers at Little Whale River.</p> <p>Samwillie Quarak</p>
	<p>From an Inuit perspective, the way we know or experience, every year is different. Some years some animals don't pass by, where as some other times there are only white belugas with calves, it varies each season some. Some years there many be only male belugas, some times there are more cows with calves. It's hard to tell what the numbers are like because it is always</p>



Elders	<p>changing every year. There are 7000 belugas in James Bay? We would like to know where because we hardly see any belugas. We see more belugas passing by us on the way to James Bay. At Sanikiluaq, as soon as the ice breaks the belugas go there, and before then the other area from Belcher Islands to Nunavik, if the ice doesn't break right away, in this area, the beluga don't cross from Belcher to Nunavik. These are the same beluga that Nunavik people and the Belcher Island people hunt. And the Belcher Island people hunt a lot from our stock. [If the ice doesn't break as quickly between the Belcher Islands and Nunavik, the beluga stock will migrate around to the western side of the Belcher Islands]. We know there are 3 different stocks of beluga. That stock that goes to Belcher Islands, they hunt the same stock that goes through here.</p> <p>There are three feeding areas where the beluga goes to the river to remove the outer skin. For example, Nastapooka River, for the last two years there's hardly been any belugas there. In the Richmond Gulf there seems to be a lot more the past two years there. Its always different, they always go to different sites. Maybe for 2 or 3 years there won't be any belugas there because they will go to a different site. There are 3 different stocks of beluga, and when they go to those three different sites Little Whale, Nastapooka, and Richmond Gulf, to peel off their skin, there seems to be more at the same time. It is always changing, different every year. Most of the time there are a lot of females in Little Whale and Nastapooka.</p> <p>They mentioned that the belugas are declining. Like on their survey there seems to be 60 to 65,000 beluga passing by Churchill, 7000 passing by James Bay, 3000 for our side, and nothing in Ungava Bay.</p> <p>I read a book on the HBC about the 1870s, they caught a lot of belugas, like 400 at one time. The Inuit were using harpoons not rifles at that time, and we try not over-harvest, we try to catch only enough for the family or community. And I never noticed any Inuit trying to catch more than they need. But right now and around the 1950s when there was outboard motors and rifles they tried to control their own harvesting. But the population of Nunavik has grown so much, and the motors go faster now, and more rifles to chose from. In less than a decade we have noticed that people are catching more,</p> <p>Robbie Tookalak</p>
	<p>I have noticed that the beluga has declined this year. But when I go out working for the survey people it seemed like there were a lot of beluga around Umiujaq at that time. During the last three years we have started to see many more beluga.</p> <p>We moved here in 1986, there were a lot of belugas at that time. But now it has very much changed because there are a lot of canoes and boats with outboard motors, even some speed boats.</p>

Elders	<p>This is why the beluga is not around Umiujaq as much. People from Inukjuaq come here to harvest as well. We used to harvest the beluga in the wrong spot, at that time when they are taking their skin off in the rivers, but now we know where to go. And we know that belugas are increasing and babies are feeding and growing in the Nastapooka area as well as Little Whale River. Yes I believe this is true because I worked for the archaeologist and there were buildings there built from the HBC, and I know because he explained to me that in 1749 there were some HBC workers who harvested the beluga to get the oil in Richmond Gulf, Little Whale River, and even in Great Whale River.</p> <p>Willie Kumarluk</p>
	<p>There was not much beluga in the past, but there are a lot of belugas right now. We can see them everywhere now. Because in the past, way before, we couldn't really see any. Before we used to see them once or twice per summer. There was not much beluga. I can say this because I have seen them myself. I am saying this because of what I have read in history. I am saying this because this is what I have seen with my own eyes. I don't know the exact dates, maybe in the 1800s. There were a lot of people harvesting beluga, because they were trying to go for the fat, the oil. At this time there were a lot of belugas around. I blame those people who were trying to get the beluga only for the oil. They are the reason why the beluga declined. And now after hunting all those beluga it takes many years to bring them back, we used to have many beluga before. But now it is slowly on the rise again.</p> <p>Davidee Niviixie</p>
	<p>Yes in Umiujaq the decline is obvious. In 2003 there were some scientists here from DFO putting the radios on the belugas back, and they started to make belugas afraid to go close to that area, especially around Nastapooka and Little Whale River. There used to be people who harvested beluga besides Inuit. I know this because there used to be a bucket, a very big bucket that used to be full of fat from the beluga. These people made oil for their lamps from all that fat.</p> <p>Joshua Sala</p>
Middle-aged hunters	<p>Yes. Way back in the early 1960s there used to be a lot more whales than now. And now a days we are lucky to see just a few. They don't come here anymore.</p> <p>Number one, I think it's the over-harvesting. People were killing too many whales in the 1970s and 80s. That's why they have declined so much.</p> <p>I have heard about the Hudson Bay Co. in the 1800s, that they killed 1000s [of beluga] per summer. I'm sure that has</p>

Middle-aged hunters	something to do with the decline of the number of whales. Moses Weetaltuk
	<p>Yes, they used to come along time along time ago to Kuujjuarapik in herds. But now a days we hardly ever see any; this summer they came by once. In places like Nastapooka, Little Whale River, and Kuujjuarapik we don't see as many as we used to.</p> <p>It might be due to over-hunting a long time ago. Production of beluga may have been altered from the way they used to populate themselves. The big slaughters that occurred in the past, in the days of mast ships, it was during that time.</p> <p>Myva Niviaxie</p>
	<p>I used to see many belugas in our river. There were so many they would rub up against our canoe. You could feel them go underneath the canoe. (This was in the late 60s. By the early 70s numbers started to decline steadily).</p> <p>I care about belugas, so I don't mind working with DFO.</p> <p>Hannah Tooktoo</p>
	<p>I do not believe the beluga is in trouble. It's the cycles. Hunters did not over harvest. All animals go through cycles. Sometimes there is more, sometimes there is less. The animal numbers will decline, and then later, there will be more. It's the cycle.</p> <p>There are also more chemicals up there than in the past. And the sun is stronger. Much stronger now.</p> <p>Sappa Flemming</p>
	<p>Yes. It seems that the way the ice has been forming and melting, has changed the migration route [for the EHB beluga]. This is what I have noticed. Its not necessarily that the beluga numbers have been declining. It's the route that they take. It is no longer used because there is now almost permanent open water in Hudson Bay, and it used to freeze totally. When the ice used to begin to melt it would start from the shore, and that's where the beluga would migrate, near the shore. And now since the ice is unstable, they tend to use that open water to migrate. Climate change is playing a big part in this.</p> <p>The beluga numbers are not necessarily declining because all the animals, birds, seals, and other marine mammals, they decline for a period of time, and then they repopulate themselves. This is the same for the belugas. They will be abundant in the future around this coast again.</p> <p>Alec Tuckatuck</p>
	<p>When I was a teenager they used to be here. Now a days, in the last five years they hardly come. This year, we finally noticed</p>

Middle-aged hunters	they came here; it was a surprise. Peter Tooktoo Jr.
	Yes, we hardly see any now. 4 weeks ago we had some in the Great Whale River for a couple of hours. Jimmie Stone
	<p>They always mention about the declining numbers. How can they tell the belugas are declining? The Inuit knowledge says the beluga are passing by and every year it is increasing. We always here the government saying they are declining. We want to ask the government why they are saying the beluga is declining when the Inuit knowledge and experience is saying there are more beluga.</p> <p>Those three villages used to go out hunting in the beluga area, even way before Umiujaq became a village. Even way in the past, even before Akulivik became a village, way way in the past, they had been harvesting in that area. Its not just 10 years ago, its much farther in the past. Because Akulivik and Umiujaq are very new villages that we have in Nunavik.</p> <p>It was not only Inuit harvesting that time before, it was also the HBC. It was not only the Inuit who are to be blamed for over-harvesting. Inuit hunted the beluga only to survive, it was their country food. It was the main thing they ate. The HBC only harvested for the oil for the lights and stuff. But now from the past we can see the kind of effect the past has on us. From a decline that long ago. And we know what kind of effect this will have on future generations if over-harvesting still happens. The HBC is no longer harvesting for the oil, its only Inuit harvesting for their country foods.</p> <p>Davidee Sappa</p>
Middle-aged hunters	<p>Lady in the corner – You are coming here and asking us all these questions. Why? When you go back home what are you going to do with this information? Are you going to use this information to give us hard times?</p> <p>Robin Gislason - I am recording the perceptions of your community as well as Kuujjuarapik's on this issue. I will record this information and pass it on to whom ever is interested. I feel as though this information can only be helpful. But I'm not sure what you mean by hard times?</p> <p>Lady in the corner – The DFO will give us more hard times, having to travel so far. Is this information going to make it harder and more dangerous for us to catch the beluga? I have four kids, if my boyfriend dies while traveling so far, are you or</p>

<p>Middle-aged hunters</p>	<p>DFO going to help me? Is this information we are going to give you bring us more hard times?</p> <p>Robin Gislason - I would think not. I am here to record your perspectives and hopefully give them a larger platform. I do not foresee any negative responses to this information. You are telling me what you would like everyone else to know about the situation you are in. This is a good chance to tell DFO and the government what your issues and concerns are, and how your voice needs to be a part of the co-management strategy.</p>
	<p>I don't think they have declined, but in some years there is so many changes in just one season. This year there was open water all year long around Hudson coast. And there was ice around Sanikiluaq in the spring, so they went through the Hudson coast, that's why there is more beluga this year. And they have been in Richmond Gulf and Little Whale River all summer. Since they have been in Little Whale and Richmond Gulf there is hardly any in Cape Jones in James Bay. There was open water all winter around here. Some years when there is open water in Sanikiluaq some of them come through the Hudson Coast. According to my knowledge there has been more and more belugas, they are not declining at all.</p> <p>Simon Tookalak</p>
	<p>I do not believe belugas are declining. I am a hunter, and have been traveling around the harvesting area alot. I can say for myself that I have been going out hunting alot. And not just in that area, I have also been hunting around Ivujivik and other villages too. When I am around that area I see beluga are everywhere, and so I don't believe that beluga are declining. I also don't believe it when people say the beluga are declining. I don't believe that word because when I am traveling and out hunting I see a lot of beluga everywhere. I see so many beluga in that area every time I go out hunting in that area.</p> <p>From the histories I have heard from my father, mother, grandmother, and grandfather, and great grandmother and great grand fathers that they used to say that not only Inuit used to harvest beluga. There were also non-Inuit people that used to go out to Little Whale River to hunt the beluga. There were so many people hunting the beluga at that time. They were trying to get oil only. I think they were making the beluga decline, I don't think the Inuit were the only ones who were hunting the beluga. Also in Nastapooka area. There were other Inuit people from the north who used to come to the Nastapooka to hunt the beluga. This was also making the beluga decline. Belugas were very low because of the non-Inuit hunting in the past as well as the people from the north coming down and hunting here. But I</p>

Middle-aged hunters	don't really believe they are declining now. James Kasudluak
Young adults	Yes. I remember when I was young I used to see a lot passing by or going into the river here. But I have barely seen them in the last five years or so. Roger Tooktoo
	Some years there seems to be no belugas at all, and some years they come back, they may go to different sides of the Hudson Bay. Jack Niviaxie
	Do the DFO really know how many beluga are in the world? I don't believe they are endangered. God gave us the beluga for food, so we would have something to eat, why are they stopping us? When my father was hunting and the females were having babies, he would only kill the males, not the females, because he knew we wanted to eat it in the future. Betsy Crow
	Yes, I remember elders saying recently that they used to over-hunt. There were canoes overloaded with maqtaaq in the 60s and 70s. Isaac Kowcharlie
	I have another theory as to why the beluga stock is declining in this area. Umiujaq was never a community until 1985. There was hardly any people hunting in this area before then because we were all in Kuujjuarapik. Before Umiujaq became a community they used to roam around here all the time, because there was no noise here. But when we became a community all the belugas went somewhere else because of the noise, they don't know how to deal with that. The Nastapooka River was an area where the beluga was plentiful and since the quotas were introduced to our community, Inukjuaq and POV people were over-hunting the area, so the DFO closed the area because they saw that the beluga would be gone in 20 years if we kept that up. That's why the quota is good for us. Although the beluga is not in decline that's just my opinion, they have moved somewhere else, cause its now a community, and they hear the motors. They are not stupid animals, my own opinion is that they are not in low numbers, they have moved somewhere else. POV and Inukjuaq were over-harvesting. They were sending 100 to 200 people to Nastapooka to get their catch there, which exceeded the quota in the first 2 years. So it was necessary to sort of control these two areas here, I believe this is what the

Young adults	<p>DFO is trying to do. The beluga have moved somewhere, but in the future when they come back, maybe they could get three or four from this area.</p> <p>[POV and Inukjuaq were considered by Peter to be over-harvesting once the quota system began]. Before these communities used to get 40 in just one hunt, Inukjuaq would, so the controls sort of worked, but they didn't work for the people who respected the quotas.</p> <p>[Umiujaq – summertime, before the 80s a few families would come up here from Kuujjuarapik and camp here. It seems that this year their number is a little bit bigger than in previous years. Since we built the breakwater marine infrastructure here we didn't see them for the last 3 years. Maybe this year they have started to come here again, it varies every year. Some years you don't see them at all, and some years you see quite a few. Before the quotas were introduced, I remember one time there were quite a few hunters from the three villages (HB Arc) who were harvesting a lot. To my knowledge over-harvesting never occurred before the quotas were put into place. This is in the last 15 years. POV also used to come down here to hunt as well. Peter Tookalak</p>
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### Other local peoples involvement

*Table 9A Are there other local people besides the Inuit who should be considered stakeholders in beluga co-management?*

Age category	Perceptions
Elders	<p>Only the Inuit because they are the ones who are eating them. Jobie Abraham</p>
	<p>It should only be us who make decisions, because it is only us who uses the beluga and eat the meat. Other people from outside of the village should not be involved. Also I believe that Cree people should not be involved because Cree people do not eat beluga. Davidee Niviaxie</p>
	<p>Not very much because they stay here only temporarily. And I don't think that I would want them to be associated with that because they are only temporary. But in Great Whale, with the Cree, maybe they should be involved, and let the government involve them too, because they are in an Aboriginal region too. Willie Kumarluk</p>
	<p>Way back when, they [the Cree] used to come here only for the summer, there would be whales. But where they would winter there would be no whales. Mina Mickeytook</p>

Middle-aged hunters	<p>This community is a multicultural community [Kuujjuarapik]. There's Inuit people, Cree people, French, and English. It's always been like that, living together. And the Cree used to hunt the beluga whale, we helped each other. When people see each other working together it helps. All community members should be involved, working together. DFO has a responsibility, maybe we can show DFO that we care about the beluga if we all work together.</p> <p>Sappa Flemming</p>
	<p>The people who are the most affected [the Inuit] should be involved for better understanding in the future.</p> <p>Myva Niviaxie</p>
	<p>Way back when food was scarce, and so they [the Cree] had to catch any meat they could. Now there are more choices. We live in the white man's economy now, they can go to the store to buy their meat to feed their family.</p> <p>Moses Weetaltuk</p>
	<p>Cree, a long time ago were harvesters, when HBC was doing their commercial whaling in the community. And today they no longer have interest in harvesting beluga. The Cree used to eat the beluga. One time the beluga, one summer they were very, very sick, 100s died from some kind of weird kind of sickness. That's when the Cree people stopped eating them; in the early 70's. They were noticeably not normal. Their skin and behavior were not normal. This was the summer the Cree stopped eating the beluga. This is also the same time they found out there was a lot of mercury in the beluga meat. They used to use the beluga for fuel (the fat), and snowshoe making.</p> <p>Alec Tuckatuck</p>
	<p>Only Inuit use the beluga whale. They are the ones who harvest, eat, and make boots from the beluga. Inuit are the only ones who should have control.</p> <p>Peter Niviaxie</p>
	<p>Of course they should be involved. No one is to be left out. In the 1800s the Cree were assisting the white whalers, and being guides themselves. The Cree people were the guides and its my strong opinion that the Cree should be involved because of their past involvement in the beluga hunt.</p> <p>Simonie Tuckatuck</p>
	<p>According to my knowledge for the Inuit it is ok, but the Cree used to catch one beluga per month, because they eat it too, not</p>



Middle-aged hunters	<p>raw, they boil it. So Crees too used to catch at least once a month. Today when we catch beluga we give them a little since they want to eat the beluga too, we give them also the meat, because they like to eat it too.</p> <p>Simon Tookalak</p>
	<p>Only the village of people should make the decision for themselves. There should not be any outsiders making decisions for them. They could help us if we ask for help on decisions, but the village themselves should make their own decisions.</p> <p>James Kasudluak</p>
Young adults	<p>I don't know about Cree. They should have a voice in what happens.</p> <p>Tina Nuktie</p>
	<p>The Cree used to be very good hunters of the beluga, but not any more, they don't want the beluga any more. So I think they should stay away.</p> <p>Isaac Kowcharlie</p>
	<p>No, the Cree don't eat or hunt belugas. It's only the Inuit who use the beluga. Maybe Nunavut, the Belcher Islands, because they hunt the same beluga we do. They are part of the problem. DFO is kind of ignoring that since they don't have jurisdiction over that area. It should be a global thing. If DFO is going to enforce any restrictions on an animal it should be a global thing, not just Nunavik areas. It seems that only the Nunavik people are paying for this problem. I would like to see something similar happen in Nunavut seeing as how they are part of the problem too. Because we don't really know where beluga go. They say there are 3 different stocks. It's also that Nunavut has to be involved in this issue. I'm sure they will be in the future, but how come it is taking the DFO so long, they should've made it a global thing, not just a Nunavik thing.</p> <p>Peter Tookalak</p>
	<p>It is not necessary for others to be apart of this. The Cree for example they don't hunt belugas. There are hardly any Cree on the sea. They are inland people.</p> <p>Roger Tooktoo</p>
	<p>Everyone should be able to meet and discuss the issue.</p> <p>Paul Crow</p>
	<p>The Inuit live here and know the beluga, only the Inuit should be involved.</p> <p>Leroy Flemming</p>

## Separate summer beluga stocks

Table 10A Do you believe that there are separate summer stocks of beluga in the Hudson Bay?

Age category	Perceptions
Elders	<p>It seems that there is only one stock because some years you see so many, others, not as many, sometimes they are white, sometimes they are grey. In Churchill there are 65,000, James Bay 7,000, for sure its different all the time. I don't believe the people who check the populations in the planes. The beluga could be under water for 10 to 15 minutes. And you always could see the plane going in lines back and forth, they want to find out more, but they always go too fast. They need to stay in one spot so they can make sure they count all of the beluga in that one spot. [availability errors]. Robbie Tookalak</p>
	<p>I don't really have much to say about that. But those beluga have a feeding place, and they have another place where they have their babies, and they are usually in the river where they go to take off their skin. But they are not in these same places any more because their regions change a lot. But I hope they will go back to normal like they have in the past. Joshua Sala</p>
	<p>I can't really answer that question. The DFO surveys tell us that the beluga are staying in the same spot. The DFO gives us information from their surveys and I believe them. But I also believe that the belugas migration patterns are moving to Churchill because of all the noise from the canoes and the outboard motors. I hear that there are a lot of belugas in Churchill. Those are our belugas that have now moved to Churchill. Willie Kumarluak</p>
Middle-aged hunters	<p>The DNA says there are three distinct stocks, the EHB, James Bay, and the WHB. And the EHB whales are declining due to over harvesting, so they are setting quotas to protect the whales. And that's a good idea, but we need to harvest a few whales to keep the culture going, to teach the people, feed the people, to teach the children their culture. Moses Weetaltuk</p>
	<p>All beluga are the same, they travel everywhere, they just don't come here any more. We see a few once in a while, but none this year. I used to go camping with my family every summer</p>

Middle-aged hunters	and there would be so many beluga, but now we don't see any. Hannah Tooktoo
	A beluga is a beluga, they all pass by at some point. Mark Weetaltuk
	I do believe so, because around here the whales are usually 3 to 4 meters long. Once in a while we would see a bigger one, a loner. It would be longer than the other ones. It would not belong to the pod. It would be bigger, from the James Bay area or the WHB area. So yes, I do believe they go to and come from different areas and different pods. Sappa Flemming
Young adults	All the belugas seem to be....I know they don't go to the same area all the time. I believe there is only one stock of belugas, but they go to different areas all the time. It is different every year. Some times they come, some times not at all. The number is always different. Jack Niviaxie

## Perceptions on Traditional and Scientific Knowledge

Table 11A Perceptions on Traditional knowledge

Age category	Perceptions
Elders	<p>Traditional Knowledge is strong within the community. It is not passing away. The Inuit should be in control of decisions. They should go where they want, when they want, and how they want.</p> <p>Jennie Mulucto</p>
	<p>In the 1950s when the people from the south were arriving and the government too, the hunting was 100% of community members, but since we have been in the communities at least 25% have started working for the government, the school, the coop. There are now less hunters because they have to work, and the population is growing so we have more hunters than in the past.</p> <p>There are a lot of hunters in all of Nunavik, and they are not going to lose their knowledge. Because this is the country food we eat. And they always go hunting every weekend or camping and they go further distances now with the outboard motors and the newer equipment. The knowledge won't be stopped; I believe it's going to continue.</p> <p>Robbie Tookalak</p>
	<p>Inuit are very careful about the beluga because it is their food. They only take what they need. The Inuit have a lot of knowledge about the beluga too. For example we know where they go to have babies and to feed. When they are having babies they are going to be close to the shore. But I believe the two groups have very different knowledge. The Traditional Knowledge on hunting beluga is not here as much as before. As our children grow they are not interested in going out to hunt belugas, or having knowledge on how to hunt the beluga. And still I blame the government for this, because in the past, before the government took over teaching our children, our children used to learn a lot about hunting beluga and knowledge about the beluga because they used to follow their fathers when they would go out hunting beluga. But now they go to school instead, they are in the school most of the time and never have time to follow their father's when they go out hunting. I blame the government for this, because we never have our children to go out hunting with us anymore. I can really see this change in this generation.</p> <p>Our children are not learning about hunting belugas because the hunting area is so far away. It is hard to see how this can be changed and take it back. I don't know, it's hard to say.</p> <p>Joshua Sala</p>

Elders	<p>Some knowledge has been lost. The stomach of the beluga used to be cleaned to store food. This is not done any more. This was called bouqtaq. Also the intestine used to be stuffed with whale fat, cooked, and then dried for later use. Niqkuq is the word for dried meat. The stomach was used to store food for later use. This is no longer necessary as we have fridges and other things.</p> <p>Mina Mickeytook</p>
	<p>It's still strong. A few younger people can't go because they cannot afford it.</p> <p>Leroy Flemming</p>
	<p>Traditional Knowledge is still strong, I go out with the young kids and we teach them how to harvest. Three quarters of the kids don't go. Yes its important to get the kids out, but some families don't go because it is too expensive, people don't have good canoes, the right equipment.</p> <p>Jobie Abraham</p>
	<p>Yes, when the government and DFO started to work with the beluga those surveyors started to use nets and putting radios on the beluga. When they do this they are giving the beluga very hard times. They make the belugas never want to go back to the same spot again. They usually had a feeding place and all that, that they would always go to. But they never wanted to go back to that spot again after the DFO put the radios on their backs and caught them in their nets. I think the future will be very hard for the future generations because of the government and DFO.</p> <p>Davidee Niviaxie</p>
	<p>DFO claims the numbers of whales has decreased, this could be true because they are not seen as often. It could be that DFO is telling the truth about the number of whales, but I cannot say for sure. The Traditional Knowledge is going slowly, but it is still here. It is starting to fade away. The younger generation's hunting methods are slowly changing. This is how I feel.</p> <p>In the olden days, the older more experienced whalers led the hunt. There are no real leaders now. No mastermind of the hunt. The tradition was the elder or older hunter led the hunt. Now they just go out and hunt.</p> <p>Samwillie Quarak</p>

<p>Middle-aged hunters</p>	<p>It is very different. DFO studying surveys and Inuit TK because the DFO are studying surveys. I know they can misunderstand and miscount the belugas. I say this because the belugas start to move around and feed very, very early in the morning. The DFO studies and surveys, they start to survey at 7 am, but this is too late. The beluga are moving much earlier than the survey begins, so then the DFO people say there are no beluga in this area when actually there are. This is how the Inuit cultural knowledge is different. The Inuit get up very early in the morning, at 4 am. If the DFO want to know where the beluga are they need to get up earlier in the morning too, to find out 100% where the beluga are, and where they are moving to.</p> <p>Yes our knowledge is fading because in the last 15 years we never give any knowledge or information to our people and younger generation. This is because we are trying to follow the regulations the government has given us. So yes TK has not been passed down to our younger generations very well.</p> <p>Willie Kamurluak</p>
	<p>The younger kids are not as interested, there's more technology now. It is important to keep kids interested, there is always a way.</p> <p>George Flemming</p>
	<p>Our traditional way of doing things is that we pass on our knowledge to the young people by letting them watch what we do, we don't have any classrooms, we let them watch what we do. They watch over and over again, and then they try to do these things. Its not traditional knowledge because its still going.</p> <p>Moses Weetaltuk</p>
	<p>I have never really seen what information the DFO has on belugas. I do know that DFO does not make use of maktaq. We make sure we make use of all the beluga. It's what we hunt the beluga for. It's our food, it's great food. If you haven't eaten it you don't really know. The DFO does not know our knowledge. DFO knows about migrations and reproductions, we may be even there.</p> <p>Its still strong our TK, we have very good teachers. You gain knowledge by experience, and what the hunters do with the young boys; that's a yearly thing, an annual thing. And this is great. It will be around as long as we have belugas.</p> <p>Myva Niviaxie</p>

<p>Middle-aged hunters</p>	<p>Traditional Knowledge is handed down from father to son. They are hunting methods, the same hunting methods that I learned from my father. It is not on paper. I did it, he showed me how to do it. It is a lot easier to do it when he showed me how. And I wanted to know. I always wanted to go hunting with my father. It's still strong. It's just sitting idle. It could be started again. We can pick it up where we left off. [He is referring to camping, etc.; the old way of life. People want to go and do this now and again. No one has forgotten how they used to live] We could pick it up where we left off. Sappa Flemming</p>
	<p>They used to come here in abundance, when the ice formed solidly. But now with global warming, and ice conditions changing, they changed their routes somehow. The traditional knowledge of beluga is still very much strong. I don't think it is going to go away. Because people are interested and it's delicious. We call it Eskimo gum, because we love it so much. We'll pass on our knowledge like the elders said to us, the methods for harvesting. I don't think traditional knowledge of beluga harvesting will go away. Alec Tucktuck</p>
	<p>In the summer of 1966 the beluga were very sick, we didn't eat the beluga that summer. They were not scared of us, it seemed like they wanted to be killed. They would come right up to the canoe. There were holes in their skin. The fat was showing through their skin. We did not hunt the beluga that summer. Mark Weetaltuk</p>
	<p>It is passing away. Before they used to finish the whole beluga, but now the hunters only bring back the muktuk. Anonymous</p>
	<p>DFO knowledge and Inuit knowledge are very different. The DFO counts them. Inuit hunt them. The DFO really has no idea how much the Inuit want the beluga. In some ways our Traditional Knowledge is still strong. I remember how my father used to hunt, and I try to hunt the way he did. But now its much more difficult. The money and the distances are so great. Its just too much. To regain the knowledge that has been lost when the beluga are here we should hunt them. Some people may want to hunt but never have because they have to travel so far. Peter Tooktoo</p>

Middle-aged hunters	The DFO are listening to scientists, and the Inuit are relying on DFO for information. Our Traditional Knowledge is still strong. We have a lot of elders. When we open a beluga, young people are around. They learn how not to waste. Some people are lazy and just eat the blubber. Jimmie Stone
	My opinion is that it is declining slowly. It is not as strong as it has been in the past. Peter Nivaxie
	<p>Our stock has been depleted, not by over-harvesting, but by the nature cycle. The cycle of the whale, and the human factor too. The human factor, say ....the Inuit, they hunted for food. That means if they are hungry they go whale hunting. When the food is scarce and the whole community has hardly anything to it itself.</p> <p>Our Traditional Knowledge is still strong, very much so. Because of Inuit identity, Inuit culture, that perception is only being looked into now. Because we are caring people, not the government, we care, so the beluga is very much involved in the Inuit, in every way. Because our culture is a hunting culture, we know about the animals. And we never over hunt, our ancestors never over hunt, up to today we never over hunt. We respect the animals because it's a large animal that has to be shared with the community, shared by all. So the link between the beluga and the Inuit is oneness, it is one.</p> <p>DFO is not doing a great job these days, because it seems the Inuit have to fight and sometimes beg for the decisions that the DFO has made. In life everything changes. The Inuit knowledge of the older people has not been handed down to the younger generation. It is not the fault of the elders, it's the government whose trying to control them, socially, politically, and spiritually. The white society always tries to impose rules and regulations on the Inuit even today.</p> <p>Simonie Tuckatuck</p>



<p>Middle-aged hunters</p>	<p>Since DFO has taken over, they seem to be getting rid of our traditional food, and they cannot help us in other ways, support us in other ways. We have been doing the same work for 100s of years. I believe our TK is sliding away because DFO is in charge and they cannot help us. We are trying to maintain our traditional skills with management.</p> <p>I would prefer that DFO come to Umiujaq and get the whole details, what we do, how we do it, and what are the problems, and how they are endangering us. They are endangering us because I have lost two engines, two motors in Hudson Bay, they broke down, and they don't even give me a new one since they told me to go there to hunt.</p> <p>Simon Tookalak</p>
	<p>I can see something very different from the DFO because we Inuit live in the land where the beluga lives as well. We cannot lie because we see it the way it is. We don't lie when we talk about it, because they are there for us and we are there for them; we are as close as possible to the beluga because we are here. We are closer than anyone. From the beginning to the end of the beluga's life we are there, we see them. But for the scientists it helps a little, and they can give a little information. But for us we are here all the time, all four seasons, spring, summer, fall, and winter. The scientists are not. They are here for only a small season. They cannot give as much information as we can because we are here all the time with the beluga.</p> <p>James Kasudluak</p>
	<p>It's very different. For us Inuit knowledge is a way of life, we know the land, we know the animal, we are the same as the animal. We often travel the same routes as the animal. We know them. They are here with us. We know them well because we are here, we live with them everyday. I think DFO does not know about the beluga as much as we do because they are only here surveying and counting beluga. They don't even eat the beluga. They only care about counting the beluga, that's it. They cannot say they know how the beluga lives, or how many are in a particular area. They are not here like we are. They are very far away for most of the time. We are all the same as other villages in the north, they know the beluga like we do. When I go to the hunting area, I see with my own eyes how the beluga live, and I can even make my own survey about the beluga with my own knowledge. I don't believe that Inuit and DFO knowledge are the same, they are very different. We have very different ways of life.</p> <p>James Kasudluak</p>

<p>Middle-aged hunters</p>	<p>I can see changes, even now. I will go back to the quotas; when the quotas were introduced our knowledge started to become less and less. I can see now in the new generations, they are becoming less interested and have less expertise about beluga because of when the quotas were introduced. Even the elders have started to talk less about the beluga now; what the beluga is all about, and what the beluga do. They know, they don't even pass it on through the generations now, because of the quotas. The TK is ok for the caribou, fish, and other animals because there are no quotas for these animals. But I can see now for the beluga the TK is going because of the quotas. They have changed the people's way of life and the knowledge about the beluga because of the quota. I was out harvesting the beluga in that area where the government told us to go out hunting, Cape Jones. There were some other people from other villages in the camp. The story goes that in that time before the quotas, I caught a beluga. I was very interested to know about the beluga, how to cook it what were the best parts, all of those things. I wanted to be an expert on the beluga. But once the quota was introduced I lost my interest in the beluga. How to hunt the beluga and cook the beluga, and knowledge about the beluga. Because the quota broke my interest in the beluga. This makes it difficult and damages the interest. But now I have started to go back to be interested in the beluga, but I have lost all of that time, all of that knowledge I could have been learning. This is how the quotas started damaging the knowledge of the belugas. Even the elders don't talk about the knowledge of the beluga.</p> <p>James Kasadluak</p>
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Young adults	<p>Its totally different, DFO is more scientific, and TK is relying on animal behavior, and what we do with these animals. Elders knowledge has always been about taking care of our animals, we don't try to over-hunt them, we don't try to over-harvest them, we only try and take what we need. So it's totally different, but I think they work hand in hand. The quotas are the best scenario we have right now. Orally speaking from the elders it has been passed on to me, but I am not passing it on to my kids, its gonna die down with the elders if we don't make a note of it, make a history their knowledge. But I don't think its right to do that. But its gonna die down if we don't do something about this. I am definitely not passing this knowledge down to my children. They are not hunting, they are just in school. They are not out on the land. This totally different from my generation and my father's generation, how can I pass on this TK? These young kids today they don't even know how to hunt anymore, so its gonna die down over the next 10 years.</p> <p>I think the big organizations like Akaluvik has to make some sort of a record or a library to pick up all this knowledge that is passing away. I think it's their job to pick up the Inuit knowledge and save it for the Inuit people. They are doing a good job to a certain degree, but I think they should have an agent in every community where they are seeing that TK is being lost. When harvesting the beluga the Inuit have a certain way of doing things, and the way to harvest the beluga, the elders, they try to enforce the newer generation to do it this way, to pass their knowledge onto us. So it comes hand in hand. TK has a big hand when it comes to sharing the beluga with the people and how to hand it out.</p> <p>Peter Tookalak</p>
	<p>As the beluga pass through our area we should be able to catch a few so we can continue to teach the children.</p> <p>Paul Crow</p>
	<p>We have lost some of our Traditional Knowledge even though we still hunt. We need to talk to elders more.</p> <p>Isaac Kowcharlie</p>
	<p>The older Inuit have successfully passed their knowledge on to the younger Inuit. There is no loss of knowledge. Everyone is able to hunt.</p> <p>Anthony Flemming</p>
Young Adults	<p>I think it's fading a little bit because there used to be a lot more people hunting. But now a days not as many people hunt because they don't have the equipment for it, or the money.</p> <p>More kids need to go hunting. There are not enough adults to teach them. Some kids do not have fathers, or they don't have the</p>

Young Adults	<p>I think it's fading a little bit because there used to be a lot more people hunting. But now a days not as many people hunt because they don't have the equipment for it, or the money.</p> <p>More kids need to go hunting. There are not enough adults to teach them. Some kids do not have fathers, or they don't have the equipment.</p> <p>Roger Tooktoo</p>
	<p>Why can't they just leave us alone, and let us do what we want with our food.</p> <p>TK is slowly fading. Slowly but surely.</p> <p>Our elders should be speaking more.</p> <p>Inuit always share what we get. If I caught a beluga I would share it with everybody. DFO and the government, it feels like they are stopping us from sharing or doing what we do. They say the beluga are fading away. They are doing what they are doing to try to stop the numbers from decreasing. I think they will do what they want no matter what.</p> <p>There should be a training course from the school board on how to be a hunter to ensure our Traditional Knowledge is not lost.</p> <p>Tina Nuktie</p>
	<p>It is hard to believe when DFO makes the estimations of the populations for the belugas.</p> <p>The surveys; the first one was done in 1987, then five years later, then ten years ago. We would believe more if they checked every year, because every year is different. We are requesting that research be done annually due to the differences we see every year.</p> <p>A lot of people would like to hunt but the equipment is so expensive right now and some people are getting less interested. The population is growing and for sure the hunting knowledge is not going to go away. We Inuit hunt for country food.</p> <p>Jack Niviixie</p>
	<p>There is a loss of Traditional Knowledge because when people catch a beluga they do not want other people to find out. It's a secret because they don't want to share anymore. Everyone used to gather together when someone caught a beluga. It's no longer the same. The tradition is changing. People are not being taught properly because there are no more gatherings. People are not learning how to cut the whale properly.</p> <p>Angus Crow</p>

## Management Recommendations

Table 12A Beluga management recommendations

Age categories	Perceptions
Elders	The Inuit should have control over the beluga harvest. Jennie Mulucto
	The people who are descendants of the whale hunters should be in charge. The government should stop thinking for the Inuit. Mina Mickeytook
	<p>It would be more manageable for the Inuit to make their own quotas even though they are working with the government. If the Inuit believe the beluga are declining, they will set the quotas accordingly. I think that if the Inuit are making decisions, the rest of Nunavik will listen. We don't kill beluga for trophies, we take the whole meat, as much as possible. Maybe that would be the best management strategy possible. The people who make the quotas, like DFO and the government, they probably have not noticed for example, in Inujjuaq, they have not caught any belugas because the trip is so long. Same for Great Whale and Umiujaq, we have to go to James Bay to catch beluga. Some years they never catch any, like last year they only caught one or two. If their local organizations decided how many per community, it would be better managed for each community, more fair. If the local community organization believed the beluga was declining, for sure they would cut down the quota for each community.</p> <p>I believe it would be better managed with Inuit knowledge and science, and with the government too, like working together, like each year how many being harvested in each community and the whole Nunavik too. If they work together it would be better managed, like some years there are hardly any belugas, some days there seems to be more.</p> <p>In Nunavik there is usually an elder's meeting every year. They usually mention the declining of the beluga is not true. But their knowledge is not being used at all. Even though they say the beluga is not declining, DFO does nothing with this knowledge. DFO does not believe this Traditional Knowledge.</p> <p>Robbie Tookalak</p>
	I don't like harvesting beluga area, because it is too far for me to go. The person who tries to go out hunting that far may have an accident, or might get lost somewhere in that area. If someone goes out in that area which is so far; I always think to myself, I hope that person who is out there hunting is going to come back safely. This is a worry I have when they go hunting.

Elders	<p>But the side I don't like is when the two groups, Federal and Provincial Governments come to us and say that if you continue to harvest after the quota has been finished you will be prosecuted. They can take that person to the court. I don't like that, I don't like to see that. This happening to the Inuit. In our own culture we would never do that. We never used to have that. We would not be prosecuted. This never existed to us in our culture. I don't want this to happen to us. It should be Inuit Knowledge culture, because we used to have that in the 1700s. The quotas, if we could make our own quotas that would be very much appreciated to us as Inuits.</p> <p>Willie Kuamurluak</p>
	<p>We do not have any farm to make a farm for beluga. And because we don't have a farm it is going to be very hard for the future. Our children, and our generation, there are so many sicknesses that are arriving to us; many diseases. Every time there is a new generation there are little changes. I believe our own flesh and blood, the new generation will not be able to eat beluga, they will not think of it as meat. Not eating beluga might happen in the near future because we are not training and teaching the next generation how to harvest the beluga. This is the biggest worry I have right now for the future.</p> <p>I would like to see the Inuit and DFO communicate and work together. Because it is usually the government making the rules for the Inuit. And the government does not really have knowledge about the beluga, but still they try to make the rules. They try to make the rules without ever really seeing the beluga. But it is us that really know the beluga. Its us, we are always there for them, and they are always there for us. We are very much close with the beluga. And they are close with us too. So when the government tries to give us rules and regulations about the beluga we don't like it. I really want to see them work together so that the government understands us and we understand them. I want to have negotiations where everyone agrees, not separating government and Inuit. It's always separate, they never work together.</p> <p>Davidee Nivaxie</p>
	<p>I really want to say that our hunting area is much too far away. I want to see the government make our hunting area closer to our community. It is very hard to follow what the government has given us. It has even made us suffer to go out hunting for our own food. I want the government to listen to our voices more. I wan them to see our burdens.</p> <p>Joshua Sala</p>

Elders	
	DFO should cooperate with the Inuit elders. Jobie Abraham
	Traditional Knowledge should be incorporated into the DFO management scheme. The way they started imposing the quotas without getting any Traditional Knowledge from the Inuit has been one sided and that needs to change. Traditional Knowledge needs to be incorporated into the beluga whale management scheme. Samwillie Quarak
Middle-aged hunters	At first one of my opinions was a zero hunt for ten years. No one would hunt or kill beluga whales for ten years, and then we would see after the ten-year period, see if they have increased in number. But they didn't go with that; they instead went with the quota system. I think each community can harvest 15 whales. And I think this is a step in the right direction. Moses Weetaltuk
	If the research continues and the beluga numbers go up again, we might go back to our traditional hunting methods; which is to hunt them anywhere, to harvest them any where. Because we have to go a long ways right now, and its very dangerous in that territory at certain times. Alec Tuckatuck
	If you know the approximate numbers of all belugas, you could have better management. That way we can better understand how many there are, and plan for the future. We can co-manage to get them to healthy numbers again. The people involved in this management have to work together and keep the public informed on everything. We need to know they are working together on this in the future and since the start of the quota years ago. Myva Niviaxie
	The current method is way too dangerous. Other communities up the coastline [north] experience rough waters traveling to the south of the 55 <sup>th</sup> parallel. The waters are rough, motors get broken. Plus the gas, the price, the costs, its too expensive. [This is especially true for the communities further north, Umuijaq, Inukjuak, and Puvirnitug]. We don't need beluga all the time. It's a delicacy. I think the co-op being an indigenous merchant should supply beluga for the people. That could help too. The co-op could buy the beluga from the hunters in the community. They could set up a fund. And the money that comes in from the beluga could be

Middle-aged hunters	<p>used for the hunter's gas. That would help a lot for the hunters.</p> <p>Lumaaq could do more; have more of a presence in the communities. When communities go over their quotas it is hard on everyone, not just the hunters. The elders and community members. They are used to having it. It's their delicacy. They miss their delicacy.</p> <p>Quite often meat gets left behind. The hunters want to get back before the maktaq gets dangerous to eat. If hunters are worried about storms and bad weather they will hurry and only take the maktaq and leave the rest of the meat. It is a waste of meat. But what can they do. It's not always easy.</p> <p>Sappa Flemming</p>
	<p>Continue with the quota, report on how many are born each year, whether the numbers are up or down.</p> <p>Mark Weetaltuk</p>
	<p>I would like to have more accurate numbers for the beluga in the area. I would like to see DFO work together with Inuit people. Things were a lot easier before the quota.</p> <p>Peter Tooktoo</p>
	<p>Why were quotas ever created if they are not applied to every community? It doesn't matter what community has more beluga. There is other food besides beluga. One beluga could feed up to 300 people; add it up. In Ivujivik, they take one per day.</p> <p>Jimmie Stone</p>
	<p>no answer. I need time to think about that</p> <p>Peter Niviaxie</p>
	<p>Negotiations for self-government, I would like to see big changes in the decision making process. Wildlife management board, I would like to see more Inuit involved, professionally and personally. I would like to see more Inuit input in the decision making process, that is recognized internationally, nationally, and regionally. Inuit would be much happier because their own people would be involved in the decision making process, because we care, we care about the animals.</p> <p>No, its only in the early stages yet, its still coming into reality. That means Inuit are only just getting into the government business. The scientific community has always ignored them. I believe that very much. Because we have maintained patience all the time when we face governments. Our patience will show in the future and the government should honour our knowledge of the beluga and truly let us be involved in what we already</p>



Middle-aged hunters	<p>know.</p> <p>I have a good opinion of our future government, I would like the government of Canada not just to impose laws and regulations but to really understand us as Inuit people, who we really are, what our intentions are, so that the Canadian government would acknowledge us as people, as any other people in the world. We have a strong link to the beluga and its not going to die out. The beluga is forever linked to the Inuit people, historically and in modern times. Because of that strong link, the government of Canada should recognize us and involve us in the decision-making process. That is my opinion.</p> <p>Simonie Tuckatuck</p>
	<p>Stick with the quotas.</p> <p>Isaac Kowcharlie</p>
	<p>The quota has been introduced and the government gives us laws; we have to follow them. It hurts us and gives us pain very much. This food is given to us and it's very hard to follow the government rules that tell us not to eat our own country foods. We want to break the rules because they are making it so difficult for us. In the future it might happen, people might break the laws, because the government is giving us laws too difficult to follow.</p> <p>James Kuarluak</p>
Young adults	<p>More support for the hunters financially.</p> <p>Angus Crow</p>
	<p>I would eat it, and there would be no rules.</p> <p>Tina Nuktie</p>
	<p>It would be managed if close by like Richmond Sound or Nastapooka River, if we could just catch like five or ten in these close areas without going over. I believe it would be better managed that way.</p> <p>Jack Niviaxie</p>
	<p>People should go to the south to hunt and leave northern environments for birthing.</p> <p>We need to have meetings and work together. If not, things go bad. There should be a community monitoring program put in place. There should be a number to call if we see them, and they should count them.</p> <p>Paul Crow</p>
	<p>The community has been trying to work together to get the total</p>

Young Adults	<p>allowable catch so that everyone gets a fair share. This is the new management that the community is trying to put in place since before we didn't have any management to harvest the beluga. It was only the hunter who got most of the meat, but today its different, its managed by the community, and I think its better now. But I don't know of any other co-management strategies in use.</p> <p>I would keep the total allowable catch for each community. And for the bigger communities they need more, because there are a lot of people in the community. But by looking at how many people are in each community would be better than giving everyone a one shot deal, like 15 for each community. And looking at the Hudson Strait area where they always over-harvest, this is the area where the DFO has to concentrate on, more enforcement over there.</p> <p>Peter Tookalak</p>
	<p>They should continue to do what they are doing, like the quotas, but not forever.</p> <p>Roger Tooktoo</p>
	<p>I do not know.</p> <p>Alec Flemming</p>
	<p>Probably no choice but to listen to DFO, they know the population numbers.</p> <p>Betsy Crow</p>