# The Documentation of Inuit and Public Knowledge of Davis Strait Polar Bears, Climate Change, Inuit Knowledge and Environmental Management using Public Opinion Polls

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# **Executive Summary**

Wildlife management in Nunavut has sometimes been a controversial endeavor. There has been a push to use more *Inuit qaujimajatuqangit* in the decision making process, but it has been slow, due to uncertainties about how it should be integrated into the process.

This report provides ideas on how *Inuit qaujimajatuqangit* can be more effectively utilized in wildlife management decisions making. First, *Inuit qaujimajatuqangit* does not consists solely of traditional knowledge, but also includes present-day Inuit knowledge.

Further, through the *Nunavut Land Claims Agreement*, wildlife management and conservation are related to each other, but are not one and the same. Conservation is a subset of wildlife management, but wildlife management more broadly includes human dimensions in it. Government, being ultimately responsible for wildlife management, and the Nunavut Wildlife Management Board, being the primary instrument of wildlife management in Nunavut, have to consider human dimensions in their decision-making processes.

Public opinion polls are a tool commonly used to gauge the public perspective on varying issues, including natural resource management. This study conducts a public opinion poll to determine the perspective of the Nunavut public in Iqaluit, Kimmirut and Pangnirtung regarding polar bears, climate change, *Inuit qaujimajangit*, and natural resource management.

Regarding *Inuit qaujimajangit*, most respondents indicated that:

- *Inuit qaujimajangit* means 'Inuit traditions' to them.
- They do not know how *Inuit qaujimajangit* should be used for various environmental issues.
- Speaking with Elders and Inuit were suggested ways to use *Inuit qaujimajangit*.

Regarding polar bears, most respondents indicated that:

- The fact that Nunavut has polar bears is appropriate.
- They think of polar bears as dangerous.
- There are currently 'many' polar bears.
- They prefer that there are 'some' polar bears.
- The polar bear abundance level is above their preference.
- The polar bear abundance level is within their tolerance.

Regarding natural resource management, most respondents indicated that:

• They are 'somewhat dissatisfied' with the degree of influence their people had over wildlife resource management.

Public opinion polls could be used in informing decision-making in Nunavut and measuring the impacts of those decisions. It may be possible to learn more about this by

examining how other jurisdictions, such as the Canadian federal government, integrate societal values and opinions into decision-making.

Further improvements in the methods used, and expansion into other areas of societal research may provide information useful for decision-making and provide means of reducing the tension and conflicts associated with wildlife management in Nunavut.

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#### Introduction

Tension and Inuit resistance to government wildlife management had been occurring in Nunavut prior to the Nunavut Land Claims Agreement (NLCA). Kulchyski and Tester (2007) examine some of the history of Inuit-Government relations involving wildlife management prior to the NLCA and Nunavut's creation. These tensions are one of the issues that led to the NLCA and why the NLCA includes an article devoted to Inuit harvesting rights and wildlife management in the Nunavut Settlement Area.

The signing and ratification of the Nunavut Land Claims Agreement led to a major effort in its implementation. Following the creation of the Nunavut Territory, reviews and revisions of pre-existing legislation, regulations and policies and the creation of new ones has been taking place. In trying to adapt government practices, the government has been emphasizing that it shall be guided by Inuit societal values, through *Inuit qaujimajatuqangit*. For example, since the creation of Nunavut, a new *Wildlife Act* was passed by the legislative assembly that incorporates *Inuit qaujimajatuqangit* principles, and some, but not all, of the principles, objectives and procedures of the NLCA (e.g. Bell, 2003).

Despite these efforts to be more representative of Nunavut society, particularly of Inuit society, through the incorporation of *Inuit qaujimajatuqangit*, tensions between Inuit and government persist in Nunavut's wildlife management. Polar bear management in particular, seems to have been the centre of the conflict (e.g. Clark et al., 2008, George, 2009). In this report, an effort is made to provide the wildlife management system in Nunavut with an understanding and information specifically about polar bear management in Nunavut, that hopefully leads to decreased tension and conflict and provides insights for the management of other wildlife species in Nunavut. In this introduction, *Inuit qaujimajatuqangit* shall first be elaborated on, and then, following a discussion of wildlife management as outlined in the NLCA, the use of public opinion polls in wildlife management will be discussed. Specific research objectives will then be presented.

# Inuit Qaujimajatuqangit Also Includes Present Knowledge

The term *Inuit qaujimajatuqangit* itself may be leading to some of the current conflict. There seems to be doubt as to what exactly *Inuit qaujimajatuqangit* means and how it should be applied in wildlife management.

For the most part, people think of *Inuit Qaujimajatuqangit* as meaning 'Inuit traditional knowledge'. However, present day knowledge is also part of *Inuit qaujimajatuqangit*. For example, Arnakak (2000) writes that:

To many people, the "traditional knowledge" aspect of *Inuit qaujimajatuqangit* is often the only side that is seen... *Inuit qaujimajatuqangit* ... is really about ... communities regaining their rights to a say in the governance of their lives...

The *Inuit Qaujimajatuqanginnut* Task Force (Government of Nunavut, 2002) also provided a definition of *Inuit qaujimajatuqangit* indicating that:

Though we tend to think of *Inuit qaujimajatuqangit* almost exclusively as traditional knowledge, it is more properly defined as "The Inuit way of doing things: the past, present and future knowledge, experience and values of Inuit Society.

From these, it becomes clear that *Inuit qaujimajatuqangit* is not just traditional knowledge, but consists also of the present-day knowledge, experience and values of Inuit society. Nevertheless, most *Inuit qaujimajatuqangit* documentation has focused on traditional aspects of *Inuit qaujimajatuqangit* (e.g. Keith *et al.*, 2004) or has focused on the knowledge of Nunavut society's opinion leaders, particularly elders and hunters (e.g. Dowsley, 2007).

Although the Government of Nunavut's *Inuit Qaujimajatuqangit* Task Force indicated that *Inuit qaujimajatuqangit* includes present-day knowledge, experience and values, there has also been some criticism expressed in public meetings, about the term (Personal observation). For some, it seems to suggest that the knowledge is ancient, even obsolete, 'Inuit traditional knowledge'. Another term, *Inuit qaujimajangit*, which lacks the *-tuqa*-infix found in *Inuit qaujimajatuqangit*, has sometimes been suggested and is more equivalent to 'Inuit knowledge' in general. In this study, the public shall be asked what *Inuit qaujimajangit*, as opposed to *Inuit qaujimajatuqangit*, means to them, and how it should be applied for various environmental sectors.

# 'Wildlife Management' and 'Conservation': Related, Not Synonymous

The Nunavut Land Claims Agreement provides a clear indication of the wildlife management system that will exist in Nunavut. For example, the objective of the NLCA is to create a wildlife management system that:

- is governed by, and implements, principles of conservation,
- fully acknowledges and reflects the primary role of Inuit in wildlife harvesting,
- serves and promotes the long-term economic, social and cultural interests of Inuit harvesters,
- as far as practical, integrates the management of all species of wildlife,
- invites public participation and promotes public confidence, particularly amongst Inuit, and
- enables and empowers the Nunavut Wildlife Management Board to make wildlife management decisions pertaining thereto.

Thus, through the NLCA, a number of human dimensions have been included in wildlife management. Public participation for example has to be invited. According to the British Columbia Office of the Auditor General (2008), governments engage in public participation when they "reach out to private or public organizations or directly to the public to seek their participation in the decision-making process". According to this report, public participation could take on a range of forms, such as, informing or

educating, gathering information, discussing, engaging or partnering. Other human dimensions seem to be the need to promote public confidence and the need to serve economic, social and cultural interests.

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The Nunavut Land Claims Agreement, also explicitly indicates that conservation is:

- the maintenance of the natural balance of ecological systems,
- the protection of wildlife habitat,
- the maintenance of vital, healthy, wildlife populations capable of sustaining harvesting needs, and
- the restoration and revitalization of depleted populations of wildlife and wildlife habitat.

From these, it becomes clear that conservation and wildlife management are not interchangeable, synonymous terms. In fact, conservation is a component, a subset, of wildlife management, but wildlife management more broadly contains human dimensions as well. It seems that, although *Inuit qaujimajatuqangit* does not appear in the NLCA, it is accommodated in the NLCA through the need to consider human dimensions in wildlife management. Further, since the NLCA indicates that Government is ultimately responsible for wildlife management, and that the NWMB is the primary instrument of wildlife management, Government and the NWMB have to consider human dimensions in their decision-making.

#### **Use of Public Opinion Polls to Gather Present Knowledge**

Public opinion polls are commonly used in other jurisdictions to learn about and respond to current public perspectives. For example, the British Columbia Ministry of Forests and Range (2006) spoke with 714 British Columbia residents and 181 visitors to determine the public acceptance of forest alteration. The Colorado Division of Wildlife (2006) received 1298 mailed questionnaires to gather information on public perceptions and opinions on Mountain Lions.

So that public opinion could be used in wildlife management decision-making, Peyton *et al.* (2001) used public opinion polls to assess the social carrying capacity (SCC) for black bears in Michigan's lower peninsula. Social carrying capacity defines the level of human/wildlife interactions that meet social demands for positive interactions, such as hunting, but does not exceed social tolerance of negative interactions, such as property damage (Peyton *et al.* 2001). Peyton *et al.* (2001) assessed SCC with questions designed to measure the maximum level, and the preferred level, of bear interactions and numbers.

Public opinion polls are also means of ensuring public participation. For example, Beckley *et al.* (2006) include surveys as a possible public participation tool for forest management. Public opinion polls have also been used to measure public confidence in a variety of other systems. For example, the Office of the Superintendent of Financial Institutions (2005) conducted a poll of approximately 1000 Canadians to determine the level of confidence that Canadians have in their banks and insurance companies. As well, Latimer & Desjardins (2007), conducted a poll of 4502 Canadians to develop an understanding of public confidence in the criminal justice system, to solicit public

attitudes of criminal justice policies, and to understand what drives public confidence in the criminal justice system.

Public surveys have been used in the arctic in the past. Statistics Canada, for example, regularly conducts their national census in Nunavut. They also assisted Kruse *et al.* (2008) in their *Survey of Living Conditions in the Arctic* (SLiCA).

#### Study Goals and Objectives

Here, we conduct a public opinion poll to document "the present knowledge, experience and values of Inuit Society", a subset of *Inuit qaujimajatuqangit*, by speaking with residents of Pangnirtung, Iqaluit and Kimmirut, communities that harvest from the Davis Strait polar bear population, about their perspective on *Inuit qaujimajangit* and *Inuit qaujimajangit* application, polar bears, environmental governance and environmental issues.

- Input is elicited about
  - o their perspective of *Inuit qaujimajangit* and its application
  - o polar bears, including determining preferred polar bear population levels
  - o climate change, and other environmental issues, and
  - o environmental governance.
- Discuss if, and how the results can be used to inform decision making.
- Discuss further research and improvements that can be made.

#### Materials & Methods

#### **Survey Context**

This project was conducted from October 2007 to January 2008 in the communities of Pangnirtung, Iqaluit and Kimmirut, the Nunavut communities that harvest from the Davis Strait polar bear population.

#### **Survey Instrument Design**

The survey instrument was created by adapting questions from the Canadian census, the *Survey of Living Conditions in the Arctic* (SLiCA) project (Kruse *et al.*, 2008) and the work of Peter Bull and R. Peyton on social carrying capacity (e.g. Peyton *et al.*, 2001). Open ended questions about the use of Inuit knowledge for different divisions of the Nunavut Department of Environment were also included. The final survey instrument is included in Appendix I.

## **Sampling Frame Creation**

To create a sampling frame community maps were used to make a list of all the buildings in each community. This list would then be verified by walking or driving through the community and checking each building to see if it is an occupied residential unit and how many units are in the building. The verified list was then used to randomly select houses to be approached and asked to participate in the survey.

# **Interview Set-Up and Interviews**

To ask for people's participation, homes were approached on weekday evenings and on Saturday during the day and evening. In Kimmirut and Pangnirtung, householders that were initially unable to participate or not at home were approached again on subsequent days and asked again. In Iqaluit, householders who were unavailable or unable to participate were not approached again. In Iqaluit, other households were instead randomly selected from the sampling frame.

To invite participation in the survey, the interviewer (M. Kotierk) introduced himself and who he worked for, explained that the polar bear population size in their area was being estimated, and asked to anonymously interview them so that Inuit knowledge could also be used in polar bear management. After householders indicated that they were willing to participate, permission was obtained to audio record the interview for accuracy and quality control. In two cases, the written questionnaire was simply left with non-Inuit respondents and subsequently collected.

Interviews were conducted either in English or Inuktitut. Interviews had an average duration just below 2 hours, with interviews conducted primarily in English averaging just over 1 hour in duration and interviews conducted primarily in Inuktitut averaging just below 2 hours in duration.

#### **Characteristics of the Respondents**

A total of 43 northerners were interviewed with regards to polar bears, climate change and Inuit knowledge. Those interviewed consisted of 14, 16, and 13 people from Iqaluit, Kimmirut and Pangnirtung, respectively. Compared to the 2006 census data, this survey seems to over-represent those from Kimmirut and Pangnirtung and seems to under represent those from Iqaluit.

Twenty three males and twenty females were interviewed. This proportion of sexes appears to be similar to those identified in the 2006 Census for the three communities.

Thirty three Inuit and ten non-Inuit were interviewed. Compared to the 2006 census results, this suggests that Inuit are slightly over-represented in this survey.

Comparison of the ages of the respondents (Figure 1) to the 2006 Census data, suggests that younger members of the public (20-39 years old) were under-represented and middle-aged members of the public (40-59 years old) were over-represented.

Household size (Figure 2), mother tongue (Table 1), and educational level (Figure 3), were obtained from respondents.

Participation in elections was high, with city or hamlet elections having the highest participation (Figure 4).

Thirty Inuit and seven non-Inuit indicated that they had seen polar bears. Two Inuit and three non-Inuit indicated that they had not seen polar bears.

Twelve Inuit and no non-Inuit indicated that they had harvested a polar bear. Twenty Inuit and ten non-Inuit indicated that they had not harvested a polar bear. Most Inuit (20) and one non-Inuk indicated that they wanted to harvest a polar bear. Ten Inuit and seven non-Inuit indicated that they do not want to harvest a polar bear.

Twenty-six Inuit and one non-Inuk described themselves as hunters. Seven Inuit and nine non-Inuit described themselves as non-hunters. Weekends and holidays were the times most cited as how often people go hunting (Table 2). Ringed seal and caribou were the most hunted animals by the respondents (Table 3). Polar bears, hares, eggs, bearded seal and vegetation were tied for fifth among all foraging activities.

Additional responses were obtained and are presented in Appendix II.

# Response Analysis

The survey data were compiled into an Excel spreadsheet and maintained for analysis. Responses for close-ended questions were entered as one of the possible responses, and tallied using a conditional formula in the program.

For open-ended questions, the responses were either examined on the questionnaires or the audio recording listened to. Key phrases were identified in their response that would be used as a code to categorize their response. During scoring of subsequent respondents, efforts were made to categorize the response into codes that had been previously created. When this was not possible, new key phrases were used as codes.

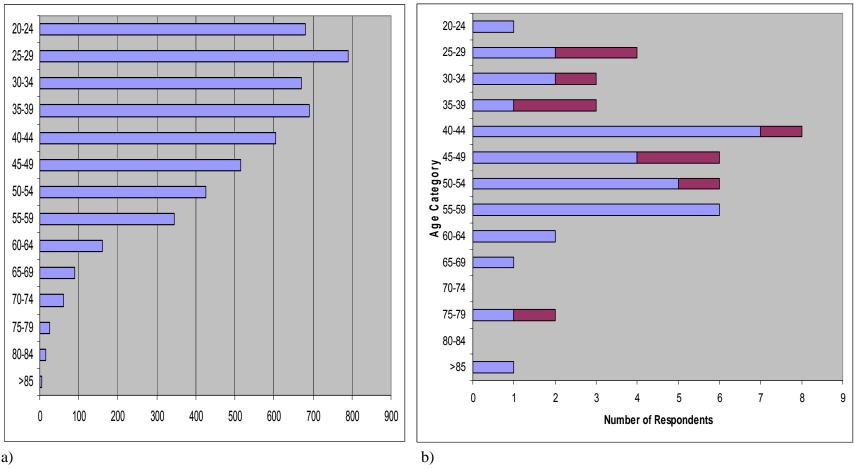


Figure 1: Age distribution of a) the 2006 Statistics Canada Census for Iqaluit, Kimmirut and Pangnirtung and b) Inuit (light blue) and non-Inuit (dark purple) respondents to this survey.

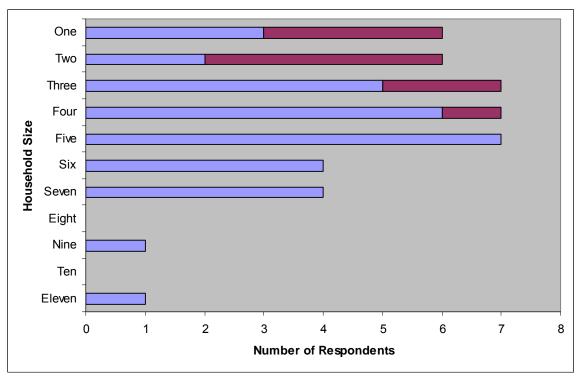


Figure 2: Household sizes of Inuit (light blue) and non-Inuit (dark purple) respondents.

Table 1: The mother tongue of interview respondents.

	Inuit	Non-Inuit	Total
Inuktitut	31	0	31
English	2	7	9
French	0	1	1
Other	0	2	2

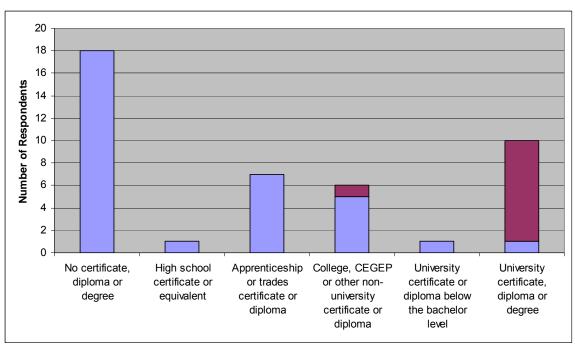


Figure 3: The educational level attained of Inuit (light blue) and non-Inuit (dark purple) respondents.

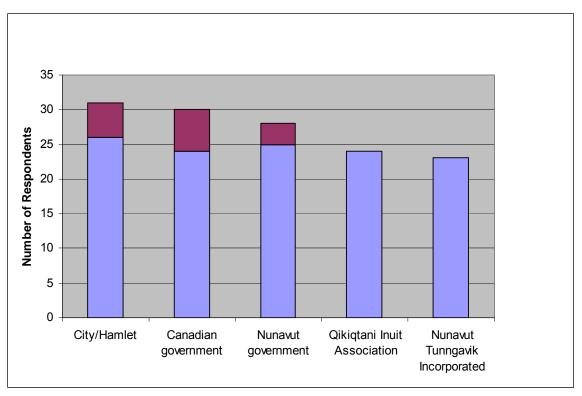


Figure 4: Election participation of Inuit (light blue) and non-Inuit (dark purple) respondents.

Table 2: The coded response on how frequently the respondents went hunting.

	Inuit	Non-Inuit	Total
Weekends/Holidays	9	1	10
Seasonally	5	0	5
Weekly	4	0	4
Weather-limited	4	0	4
Equipment & supplies-limited	4	0	4
Rarely	1	2	3
Never	2	1	3
Monthly	2	0	2
Invitation-limited	2	0	2
Other commitments limited	2	0	2
Don't know	1	0	1
Daily	1	0	1
Regulations-limited	0	1	1

Table 3: Coded responses about what respondents tended to hunt or forage.

	Inuit	Non-Inuit	Total
Ringed seal	20	0	20
Caribou	18	1	19
Char	17	0	17
Ptarmigan	7	0	7
Clams	6	0	6
Canada geese	5	0	5
Beluga whales	5	0	5
Hares	4	0	4
Eggs	4	0	4
Bearded seals	4	0	4
Vegetation	4	0	4
Polar bears	4	0	4
Eider ducks	3	0	3
Arctic fox	2	0	2
Wolf	2	0	2
Marine mammals	2	0	2
Walrus	2	0	2
Narwhal	1	0	1

#### Results

## Inuit Qaujimajangit

A number of open-ended questions were asked about *Inuit qaujimajangit* and its application. That *Inuit qaujimajangit* is 'Inuit traditions' was the most common response (Table 4). Other prominent responses were that *Inuit qaujimajangit* is 'meaningful', 'the Inuit lifestyle', or 'useful'.

Most respondents indicated that they did not know how *Inuit qaujimajangit* should be used in environmental management (Table 5), in dealing with wildlife (Table 6), environmental protection (Table 7), parks (Table 8), or environmental change (Table 9). A number of other themes regularly appeared in peoples' responses. These included that *Inuit qaujimajangit* could be used by speaking with elders; that Inuit are knowledgeable about their environment; and that *Inuit qaujimajangit* needs to be used more.

#### **Polar Bears**

Respondents were asked several questions about their opinion of polar bears. Most respondents indicated that the fact that Nunavut has polar bears is appropriate (Table 10). Most respondents also indicated that they thought of polar bears as dangerous (Table 11). The second most common response was that polar bears are magnificent.

Most respondents indicated that there are currently 'many' polar bears (Figure 5a). That there are 'some' polar bears were the most preferred level of polar bear abundance (Figure 5b). Most respondents indicated that the fewest polar bears that they could tolerate was if there were 'few' polar bears (Figure 5c) and that the most polar bears that they could tolerate would be 'many' polar bears (Figure 5d).

Most respondents, Inuit and non-Inuit, seemed to believe that the polar bear population was above their preferred polar bear population level (Figure 6a). This question was not explicitly asked, but was derived by comparing their responses to the questions regarding their preferred polar bear population level to the level they felt the polar bear population to be at currently. Most respondents, Inuit and non-Inuit, also seemed to believe that the polar bear population level was within their tolerance (Figure 6b). This seems to suggest that quite a few people were willing to tolerate polar bear population levels that are not at their preferred level.

Most respondents indicated that they did not know when it's possible to consume polar bears that have been immobilized (Table 12). The second most common response was that they will not consume meat from a previously immobilized polar bear.

Eighteen Inuit and six non-Inuit indicated that their home or campsite had never been approached by a polar bear. Fourteen Inuit and four non-Inuit indicated that their home or campsite had been approached by a polar bear. Most respondents indicated that bears approaching homes should be killed (Figure 7). The second most common response was that they should be deterred then if that was ineffective killed.

The majority of respondents indicated that they disagreed with the possible listing of polar bears under the U.S. *Endangered Species Act* (Table 10).

#### **Environmental Governance**

Most people indicated that they were 'somewhat dissatisfied' with the degree of influence that their people had in the management of natural resources like fish and caribou (Figure 8). This was the case for Inuit and non-Inuit. Amongst Inuit, respondents were equally likely to indicate that they were 'neither satisfied nor dissatisfied' as to say that they were 'very satisfied'. Most people indicated that they believe that Conservation Officers had the same idea of what is right and wrong as the respondent (Table 14).

Most people indicated that they were 'neither satisfied nor dissatisfied' with the degree of influence that their people had in the management of natural resources like oil, gas and minerals (Figure 9).

#### **Environmental Issues**

The quality of life as a whole had the highest level of satisfaction (Table 15). The amount of fish and game locally available and opportunities to hunt and fish ranked second and fourth in terms of public satisfaction respectively. The health of the environment was fifth and the influence that the respondent's people had to reduce environmental problems was seventh. The issues that had the lowest satisfaction levels were the job opportunities available in the communities and the cost of living, ranking thirteenth and fourteenth, respectively.

Climate change was the most cited environmental issue when asked what environmental issues were in the respondent's region (Figure 10). Most respondents indicated that they felt that global warming was a concern or that they were observing it (Table 16). Local contaminated sites were the next most frequent response.

Thirty one respondents (24 Inuit and 7 non-Inuit) indicated that there were additional environmental concerns. Nineteen (16 Inuit and 3 non-Inuit) indicated that there were no additional environmental concerns. Amongst those that indicated that there were additional concerns, the community dump was the most cited response (Table 17).

Table 4: Coded responses people gave about the meaning of *Inuit qaujimajangit* to them.

able 4. Coded responses people gave about the meaning of <i>mu</i>	ui gau	jimajangu	to men
	Inuit	Non-Inuit	Total
Inuit Traditions / Knowledge	6	4	10
It's meaningful	7	1	8
Inuit lifestyle	2	5	7
It is accurate	6	0	6
It's useful	5	0	5
Through Experience	4	0	4
Don't know	3	0	3
Useful for survival	3	0	3
Don't want Inuit culture changed	2	0	2
Through Observation	2	0	2
Need to pass it on	2	0	2
Useful for harvesting	2	0	2
Don't understand it	0	2	2
Need to incorporate it	1	1	2
It's important	2	0	2
We don't use it in some ways	1	1	2
Every country has IQ	1	1	2
Useful for making tools	1	0	1
I like it	1	0	1
Most knowledgeable about Inuit land	1	0	1
It causes me happiness	1	0	1
They Know Our Environment	1	0	1
An ideal	0	1	1
Best to combine IQ & science	1	0	1
Useful in the future	1	0	1
Heeding Qallunaaq ways more	1	0	1
More than an IQ day	0	1	1
Have workshops	0	1	1
IQ is being overused	1	0	1
IQ can mean many things	1	0	1
Inuit are knowledgeable in different areas, some more than others	1	0	1
Inuit don't know everything	1	0	1
Who defines what Inuit know?	1	0	1
How do Inuit know that others don't know it?	1	0	1

Table 5: Coded responses on how *Inuit qaujimajangit* should be used in environmental management.

gement.	1	ı	
	Inuit	Non-Inuit	Total
Don't Know	4	1	5
Speak with Elders	3	1	4
It needs to be used more	1	3	4
Inuit know their environment	4	0	4
It needs to be used	3	0	3
Inuit knowledge isn't being used	3	0	3
An Inuk can say what conditions were like	1	1	2
An Inuk can say what the conditions are like	1	1	2
Ask Inuit	2	0	2
Be in the environment	2	0	2
Combine with science	0	2	2
About environment	1	0	1
About snow	1	0	1
Don't change the culture	1	0	1
Has to be written first	1	0	1
People who have never been here are trying to control it	1	0	1
About how to do better work	1	0	1
About land	1	0	1
Has to be not just spoken about	0	1	1
IQ should be made into law	1	0	1
Speak with knowledgeable people	1	0	1
Don't just observe wildlife, harvest them	1	0	1
Be wise about it	1	0	1
Why changes are occurring	0	1	1
About how things were done	0	1	1
IQ too broad, need to define what Inuit know	1	0	1
Address health issues early	0	1	1
Provide counseling immediately for school difficulties	0	1	1
With respect	0	1	1
No concern	1	0	1
Stewardship & respect of animals is important	0	1	1
Teamwork	0	1	1
Being resourceful	0	1	1
Don't really remember the principles	0	1	1
You can learn more about it by trying	1	0	1
I don't truly know IQ	1	0	1
Inuktitut use is appropriate	1	0	1
You are helping with no meddling	1	0	1
Should be the foundation	0	1	1
Inuit are using it	1	0	1
<del>~</del>			

Table 6: Coded responses about how *Inuit qaujimajangit* can be used in dealing with wildlife.

manne.			
	Inuit	Non-Inuit	Total
Don't Know	7	2	9
Elder advice	2	2	4
It needs to be used more	3	0	3
It needs to be used	2	1	3
Ask Inuit	2	1	3
When harvested, all the meat is/was used	2	0	2
It needs to be taught	1	1	2
About how things were done	0	2	2
Should be the foundation	0	2	2
Personally not using it	2	0	2
Inuit live here	1	0	1
Qallunaat don't live here	1	0	1
When Inuit raise the issue	1	0	1
When Inuit are asked	1	0	1
Non-residents don't know	1	0	1
Inuit aren't just killers	1	0	1
Harvesting food will not cease	1	0	1
Wildlife are our clothes	1	0	1
Have a knowledgeable person constantly observing	1	0	1
Work with researchers to create understanding of their experience	1	0	1
Inuit thoughts should be taken seriously	0	1	1
Inuit thoughts should be respected	0	1	1
Inuit knowledge isn't being used	1	0	1
IQ should be made into law	1	0	1
Just Reading doesn't lead to true knowledge	1	0	1
Speak with knowledgeable people	1	0	1
Inuit are knowledgeable	0	1	1
Wildlife research should stop	1	0	1
By going out hunting	1	0	1
Be wise about it	1	0	1
An Inuk can say what conditions were like	0	1	1
An Inuk can say what the conditions are like	0	1	1
Why changes are occurring	0	1	1
Adapted to fit regulations	0	1	1
Some of it's dangerous	0	1	1
About what's safe to eat	0	1	1
Research collaborations	0	1	1
Can help future generations	0	1	1
Inuit knowledge is being used appropriately	1	0	1
Other	1	0	1
Wildlife are used	1	0	1
DoE does not use wildlife	1	0	1
Happy that we're trying to use it	1	0	1
Combined with science	0	1	1
Should be used daily	0	1	1
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Get information you're not aware of	0	1	1
There used to be no garbage	1	0	1
It has to be written first	1	0	1

Table 7: Coded responses about how *Inuit qaujimajangit* can be used in dealing with environmental protection.

environmental protection.			
	Inuit	Non-Inuit	Total
Don't know	5	3	8
It needs to be used	2	2	4
By preventing degradation	2	1	3
Speak with elders	2	1	3
Let Inuit be involved	3	0	3
Listen to Inuit more	3	0	3
Inuit knowledge isn't used	2	0	2
Listening to elders can lead to a good path	2	0	2
IQ should be made into law	2	0	2
About wildlife	2	0	2
Jobs would provide benefits	2	0	2
We're heard because of Mary Simon	1	0	1
Ask "How should we prevent degradation?"	1	0	1
We will continue to eat meat	1	0	1
Inuit don't just leave things behind	1	0	1
Inuit aren't trying to degrade the environment	1	0	1
We weren't informed about our dump	1	0	1
Ask Inuit	1	0	1
Inuit know the environment better	1	0	1
	1	0	1
Inuit truly know various things	-	0	
Inuit knowledge needs to be used more	1		1
About environment	1	0	1
Be careful	1	0	1
Understand that many problems are new problems	0	1	1
It should not be ignored	0	1	1
Should be the foundation	0	1	1
Combined with science	0	1	1
Identify locations	0	1	1
Consult early on	0	1	1
I don't want mining to proceed here	1	0	1
IQ can be used	1	0	1
Communities should not just be passed over	1	0	1
Thoughts of communities should be gathered/sought	1	0	1
Mining companies provide information about what they're planning	1	0	1
Mining companies could try to use IQ	1	0	1
Hunting areas are well known by Inuit	1	0	1
Mining is not a big concern since wildlife aren't stationary	1	0	1
Prefer that there are no roads	1	0	1
Inuit don't know - we've had little mining	1	0	1
As long as its known where wildlife have pathways	1	0	1
Inuit know that if animals have gone through an area, they shall return	1	0	1
Regular citizens are being asked too much for input. Decision makers			
should make the decision on their own	1	0	1
Each season has to be checked since each season has different wildlife	1	0	1
Create Inuit employment	1	0	1
Provide skills training	1	0	1

Inuit & Researchers combine for inspection & monitoring	1	0	1
Proper inspections / monitoring	1	0	1
Proper final site cleanup	1	0	1

Table 8: Coded responses about how *Inuit qaujimajangit* can be used in dealing with parks.

parks.	1		
	Inuit	Non-Inuit	Total
Don't know	8	1	9
Speak with Elders	2	2	4
It should be the foundation	1	3	4
IQ's used well	3	0	3
Can use IQ better	3	0	3
Ask Inuit	2	0	2
Preserve traditional areas/parks	1	1	2
IQ has to be used	1	1	2
Inuit don't deal with parks	2	0	2
About traditional areas	0	2	2
Hunters are still able to hunt in parks	2	0	2
Parks are appropriate	2	0	2
Partner with elders	1	0	1
Try not to have waste	1	0	1
Be sensitive to IQ	1	0	1
Burn or take garbage out	1	0	1
Be sensitive to the land	1	0	1
Inuit take care of their environment	1	0	1
Be careful	1	0	1
Don't understand the question	0	1	1
Ask "Is this what we should do?"	1	0	1
Government & Inuit working together	1	0	1
Inuit need to know how they'll keep using wildlife	1	0	1
IQ should not be changed	1	0	1
If they are informed	1	0	1
Inuit should be helped	1	0	1
Depends on what they know	1	0	1
Intelligently limit access	0	1	1
Used to protect parks	0	1	1
Respect Inuit access	0	1	1
Bring dogs	1	0	1
Bring deterrents	1	0	1
Have others involved	1	0	1
Not many Inuit at parks	1	0	1
Communities could display IQ more	1	0	1
They can try to find out more IQ	1	0	1
Not satisfied that people are dying off cliffs	1	0	1
As long as its known where wildlife have pathways	1	0	1

Table 9: Coded responses about how *Inuit qaujimajangit* can be used in dealing with environmental change.

environmental change.			1
	Inuit	Non-Inuit	Total
Don't Know	7	6	13
Ask elders	4	2	6
I don't know IQ	4	2	6
Inuit could communicate what's happening	3	1	4
Nothing gets done	2	2	4
Inuit knowledge is not being used	2	1	3
We can't control weather	2	1	3
IQ needs to be used more	2	1	3
Inuit know about climate changes	2	0	2
Ask Inuit	2	0	2
About proposed measures to deal with changes	0	2	2
Compare past patterns to current patterns	0	2	2
IQ should be used	0	2	2
Elders need to speak more to increase our understanding	1	1	2
Don't deal with politics too much	1	1	2
Too much politics	1	1	2
Involve youth	1	1	2
Explained as if it's going to melt right away	1	1	2
Limit mine exhaust	1	1	2
We hear that the climate is changing	1	1	2
I think about climate change too	1	1	2
The North will be one of the most affected but is one of the cleanest	1	1	2
Inuit are trying	1	1	2
Climate change research seems to be becoming alive	1	1	2
We're wondering what we have to do	1	1	2
We're trying not to change	1	1	2
We should associate to fight pollution	1	1	2
IQ useful	1	0	1
Have Inuit involved	1	0	1
Respect IQ Principles	0	1	1
Consider IQ Principles	0	1	1
Inuit & Qallunaat work together	1	0	1
Ask hunters	1	0	1
Ask communities	1	0	1
Warming not new	1	0	1
Warming faster	1	0	1
Elders know better than us city people	1	0	1
Record elders today	1	0	1
Inuit should be helped	1	0	1
About why changes are occurring	0	1	1
Should be the foundation	0	1	1
Combined with science	0	1	1
Must be a way to use TK records of past climate change	0	1	1
IQ likely won't change	1	0	1
Inuit lands should be researched	1	0	1

Table 10: The coded thoughts respondents indicated they had about the fact that Nunavut has polar bears.

nus poter ocurs.	Inuit	Non-Inuit	Total
It is appropriate	16	5	21
No concern	5	0	5
It's wonderful / beautiful	0	3	3
Overabundant	3	0	3
Don't like them in communities	2	0	2
Don't know	2	0	2
Intrusive	2	0	2
Climate change	1	1	2
Polar bears abundant	1	0	1
Don't like them to eat our food	1	0	1
They'll become depleted as they move to another area	1	0	1
Prevent us from spending time on the land	1	0	1
Believe Inuit	1	0	1
Want them to persist	1	0	1
Frightening / Dangerous	1	0	1
Not depleting	1	0	1
I want to see one	0	1	1
Unhappy	1	0	1
Would value people more than polar bears	1	0	1
Grateful	1	0	1
God-intended	0	1	1
Here a long time	0	1	1
Served a purpose	0	1	1
Needs successful management	0	1	1
Hunters	0	1	1
Don't know what they're now doing	1	0	1
Part of reason in Nunavut	0	1	1
Polar bear habitat diminishing	1	0	1
Polar bear abundance increasing	1	0	1
Polar bear characteristics need research	1	0	1
Fortunate to have them	0	1	1
Youth need to learn about them	0	1	1

Table 11: The coded thoughts respondents indicated they had about polar bears.

Table 11: The coded thoughts respondents indicated they had	1		I
	Inuit	Non-Inuit	Total
Dangerous	11	2	13
Magnificent	4	4	8
Like polar bears	5	1	6
Respect	1	3	4
Important to ecosystem	0	4	4
Good meat	3	0	3
Unsatisfied	2	0	2
No concerns	2	0	2
Many polar bears seen	2	0	2
Dissatisfied with quotas	2	0	2
Important to Inuit	0	2	2
They have berry feces	1	0	1
They become hungry	1	0	1
Don't want them to harm people	1	0	1
Don't want to see too many	1	0	1
Conditional fear	1	0	1
Shoot problem bears	1	0	1
Polar bears hear when they're spoken about	1	0	1
People are harmed by polar bears	1	0	1
People are likely to be killed by a polar bear	1	0	1
I have been in danger due to polar bears	1	0	1
Qallunaat thoughts are being followed	1	0	1
Have killed problem bears	1	0	1
People endangered	1	0	1
Too much concern by people	1	0	1
Many people are hurt because we are following Qallunaat rules	1	0	1
Polar bears are not afraid of people	1	0	1
Mothers with cubs have to be shot too	1	0	1
Hopefully there's enough	1	0	1
Government says there's enough	1	0	1
US says there's not enough	1	0	1
Government/US don't even come around	1	0	1
Meat eaters	1	0	1
Arctic animal	1	0	1
Must stay here	1	0	1
Amazing stories	0	1	1
Hate to see hungry polar bears	0	1	1
Used only for food	0	1	1
Keep at bay for safety	0	1	1
They need to continue being present	1	0	1
Polar bears are not declining	1	0	1
Love to see one	0	1	1
Polar bears declined by Qallunaat, yet protected by Qallunaat	1	0	1
Angering when you can't kill a present polar bear	1	0	1
Not enough ice for polar bears	1	0	1
Human-like	1	0	1
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There is a reason polar bears exist	0	1	1
Danger to settled populations	0	1	1
They're on ice now	1	0	1
Some are looking for food now	1	0	1
Hardly seen them	0	1	1
People need polar bear education	0	1	1
Why kill polar bears? Send them to zoos	0	1	1
Seal eaters	1	0	1
Want there to be few polar bears	1	0	1
Polar bears move from area to area	1	0	1
Male only harvest is detrimental	1	0	1
Polar bears concentrate at carcasses, decreasing adjacent areas	1	0	1
Important economically	0	1	1
Needs to be well managed	0	1	1
Never frightened	1	0	1

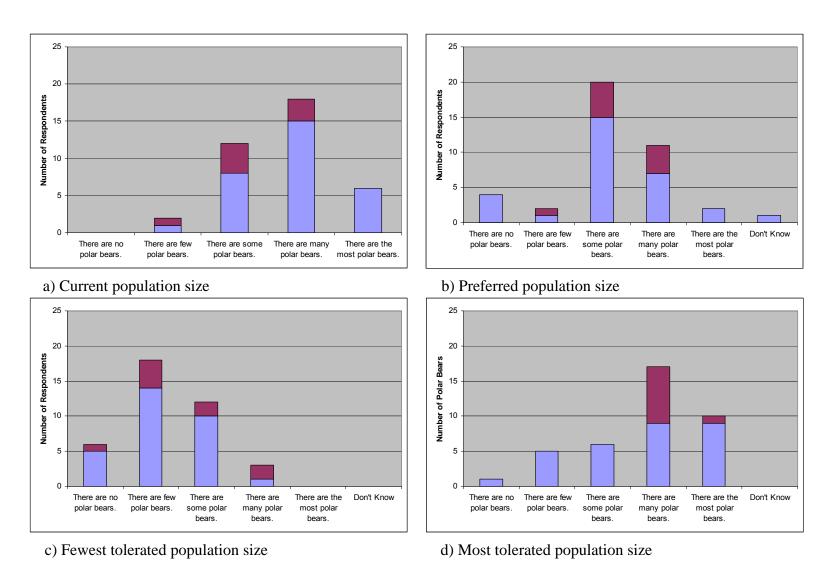


Figure 5: The responses of Inuit (light blue) and non-Inuit (dark purple) about the polar bear abundance a) currently; b) preferably; c) the fewest tolerated; and d) the most tolerated.

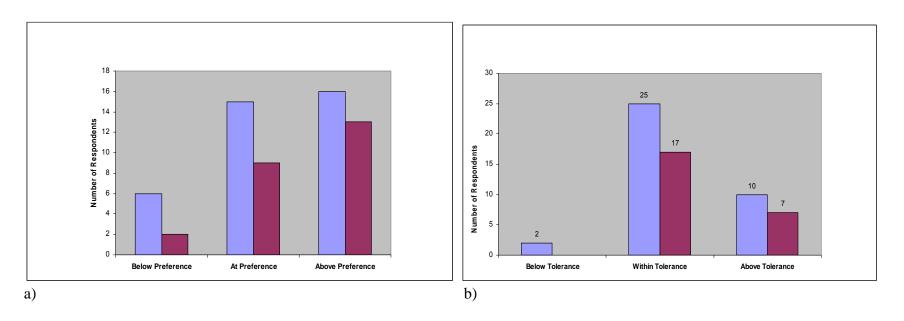


Figure 6: Comparison of the current polar bear population abundance to the a) preferred polar bear population abundance and to b) the polar bear population abundance tolerance of the overall public (light blue) and Inuit harvesters (dark purple).

Table 12: Coded responses about when is it possible to consume polar bears that have been immobilized.

	Inuit	Non-Inuit	Total
Don't Know	14	5	19
Won't eat handled meat	7	0	7
After 1 year	4	0	4
After 2 Years	3	0	3
After 2-6 Months	1	2	3
After 1-3 weeks	1	1	2
Don't want to eat polar bear	0	2	2
When we are older	1	0	1
Probably already eaten	1	0	1
Thinks not safe	1	0	1
Our food shouldn't be immobilized		0	1
After 10 years	1	0	1
Would like to understand why they're immobilized.	1	0	1
After 1 month	1	0	1
Refused to eat a previously immobilized polar bear	1	0	1
After 5-6 Years	1	0	1
Don't know if it's safe to eat	1	0	1
After a couple of days	0	1	1
With caution	0	1	1

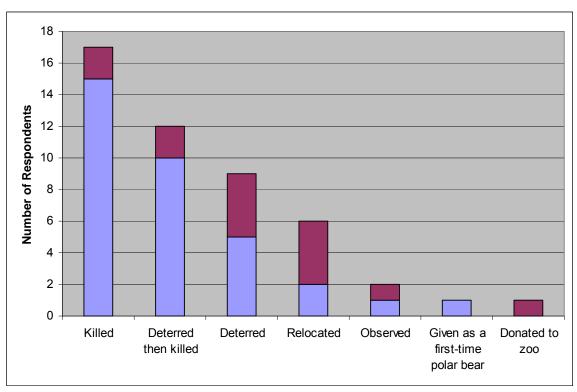


Figure 7: The coded responses on how Inuit (light blue) and non-Inuit (dark purple) respondents thought a polar bear approaching homes should be dealt with.

Table 13: The attitude people had about the possible uplisting of polar bears on the U.S.

Endangered Species Act.

	Inuit	Non-Inuit	Total
Disagree	20	3	23
Polar bears abundant	4	1	5
No arctic involvement/input	4	1	5
Animal displacement	3	0	3
Support	2	1	3
Don't know	1	1	2
They shouldn't be concerned	2	0	2
Immobilization is not appropriate	2	0	2
Polar bear abundance is not declining	2	0	2
Polar bear abundance increased	2	0	2
They don't know	2	0	2
Inuit use polar bears	2	0	2
Increased arrivals	2	0	2
Action on climate change is needed	2	0	2
Camping is unsafe	2	0	2
Paper-based	1	0	1
Polar bears are not warm climate animals	1	0	1
Inuit are knowledgeable	1	0	1
Researchers are not believable	1	0	1
American attitude is inappropriate	0	1	1
Inuit say there's a lot	0	1	1
American media is powerful	0	1	1
Qallunaat don't hunt polar bear	1	0	1
Environment needs help, not classification	0	1	1
Research is needed first	1	0	1
Polar bears are capable in water	1	0	1
Harvest restrictions are likely	1	0	1
Cabins are damaged	1	0	1
Garbage enticed	1	0	1
Polar bears hear	1	0	1
Polar bears are not toys	1	0	1
Polar bear depleted by Qallunaat, not Inuit	1	0	1
Concerned about listing	1	0	1
Harvest is important	0	1	1
Equivocal	0	1	1
Support Inuit	0	1	1
Ice-caused	1	0	1
Don't support sports hunting	0	1	1
Push outfitting	0	1	1
Americans being deceived	1	0	1
Traditional hunting exception	0	1	1
Threatened soon	0	1	1

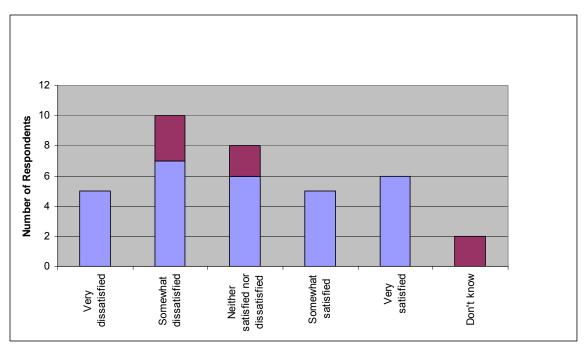


Figure 8: The satisfaction Inuit (light blue) and non-Inuit respondents had about the degree of influence their people had in the management of wildlife resources.

Table 14: Responses indicate that most people think that fish and wildlife officers have the same idea of what is right and wrong that they do.

	Inuit	Non-Inuit	Total
YES	17	4	21
NO	7	0	7
DON'T KNOW	6	5	11
NA	7	0	7

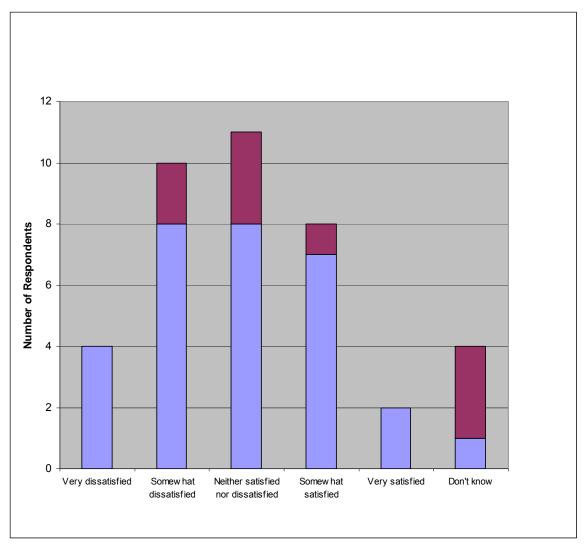


Figure 9: The satisfaction level that Inuit (light blue) and non-Inuit (dark purple) respondents had about the degree of influence their people had in the management of natural resources such as oil, gas and minerals.

Table 15: The satisfaction levels that people had as a ratio of those that indicated that they were somewhat satisfied with a particular issues compared to those that were

somewhat dissatisfied with a particular issue.

somewhat dissatisfied with a particular issue.	SOMEWHAT S.		
	Inuit	Non-Inuit	Total of Ratio
The quality of life in this community.	14	6	20
The amount of fish and game available locally.	6	5	11
Your life as a whole.	8.5	2	10.5
Opportunities to hunt and fish?	6	3	9
The health of the environment in your area.	4	5	9
Transportation to and from your community	2	1.3	3.3
The influence your people have to reduce environmental problems in your area.	2.4	0.8	3.2
The quality of education in your community	1.7	0.3	2.0
The recreational facilities in your community	0.8	1	1.8
The quality of health services in your community	1.2	0.5	1.7
The availability of goods in local stores.	0.4	0.8	1.2
How well the national government is dealing with needs in your community	0.6	0.3	0.9
The cost of living in your community	0.5	0.3	0.8
Job opportunities in your community	0.2	0.3	0.5

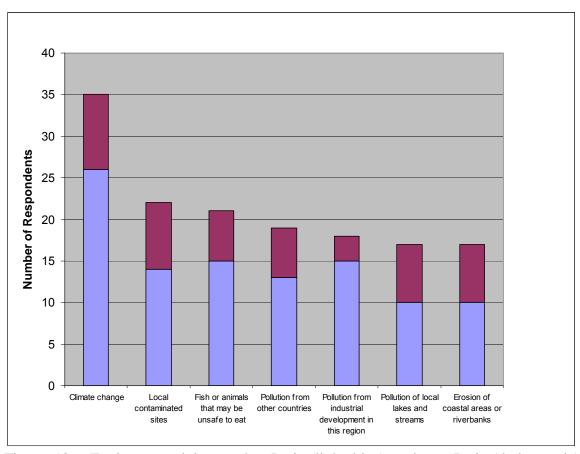


Figure 10: Environmental issues that Inuit (light blue) and non-Inuit (dark purple) indicated exist in their region.

Table 16: The coded attitudes respondents had in regards to global warming.

•	Inuit	Non-Inuit	Total
A Concern	12	2	14
Observing it	6	1	7
No concern	4	1	5
Believe it	3	2	5
Cultural impact	2	2	4
Delayed winter	4	0	4
Impact	2	1	3
Wildlife impact	2	1	3
Personal action	0	3	3
Not controllable	2	1	3
Caused by Earth's rotation	2	0	2
Urgent	0	2	2
Winterless	1	0	1
Sea level rise	1	0	1
Emissions caused	1	0	1
Don't know	1	0	1
Traditionally known	1	0	1
Greater concern needed	1	0	1
Heard of it	1	0	1
Warmer	1	0	1
Government Action	0	1	1
Industry Action	0	1	1
Not Recent	1	0	1
Daylight Changes	1	0	1
Cyclic Nature	1	0	1
Southern Caused	0	1	1
Adaptation training	0	1	1
Become gatherers	1	0	1
Early Spring	1	0	1
Future Impacts	0	1	1
Earth's Core Warming	1	0	1
Sea Warming	1	0	1
Currents Changed	1	0	1

Table 17: Additional environmental issues that people indicated were present in their region.

	Inuit	Non-Inuit	Total
Community dump	1	5	6
Climate change	3	1	4
Sewage	0	3	3
Arctic contaminants	0	2	2
Water quality	2	0	2
Ice changes	2	0	2
Air quality	1	1	2
Food safety	1	1	2
Vehicle use	0	2	2
Marine mammal safety	2	0	2
Ozone layer	1	0	1
Fuel drums left behind	1	0	1
Unclear	1	0	1
Polar bear management	1	0	1
Weather	1	0	1
World pollution	0	1	1
Rock quarry	1	0	1
Sea level rise	1	0	1
Permafrost melting	0	1	1
Wildlife	1	0	1
World population	1	0	1

### **Discussion**

Public participation in environmental management issues in Nunavut occurs frequently via public meetings and hearings. However, this may be one of the first times that the Nunavut public has been quantitatively polled on their opinions about *Inuit qaujimajangit*, polar bears environmental governance and environmental issues. As it will be discussed, there are many improvements that can be made. As well, since this is the first such survey, it is not possible to use this polling information to determine whether the public perspective about environmental management is improving, corroding or static. It may be possible to make some comparisons however, so this will be done throughout this discussion.

### Inuit Qaujimajangit

Most respondents associate *Inuit qaujimajangit* with traditional knowledge. Other common responses were that *Inuit qaujimajangit* is meaningful, the Inuit lifestyle, accurate and useful (Table 4).

Despite largely positive expressions on *Inuit qaujimajangit*, such as it being meaningful, accurate and useful, most people were unsure how *Inuit qaujimajangit* should be used in various environmental sectors (Tables 5-9). There were several suggestions and speaking with elders or Inuit was the most common response. That *Inuit qaujimajangit* either needs to be used or used more was another common theme.

In this light, the challenges that some public servants express about how to apply *Inuit qaujimajangit* into their work seems unsurprising. Despite over 5 years of Government of Nunavut efforts to utilize *Inuit qaujimajangit* in its operations, respondents still largely felt that *Inuit qaujimajangit* either needs to be used or used more. This seems to raise the possibility that the efforts of the Government of Nunavut have not been effective and may actually be corroding public confidence in environmental governance systems. If past measures of public demand for either *Inuit qaujimajangit* use or increased *Inuit qaujimajangit* use were available, it may be possible to determine if the Government of Nunavut's efforts have improved, corroded or had no effect on public attitudes.

To increase public and civil service awareness of how to integrate *Inuit qaujimajangit* into government operations, the Government of Nunavut could consider publicizing best practices and cases of *Inuit qaujimajangit* integration.

#### **Polar Bears**

Most people indicated that the fact that Nunavut has polar bears is appropriate (Table 10) but also indicated that they thought of them as dangerous (Table 11). The questions intended to gauge social carrying capacity seem to reflect these feelings with most people indicating that they preferred a medium-level of polar bear abundance and not the highest polar bear abundance possible (Figure 5b). Most of the public also indicated that they thought that currently there are many polar bears. Those that think the polar bear population size is at their preferred level is similar to those that think the current polar bear abundance is above their preferred level. Both are at about 40% of respondents.

Amongst Inuit harvesters, the ratio is slightly different. For 54% of Inuit hunters, the polar bear population is above their preferred abundance. For 37% of Inuit hunters, the polar bear population is at their preferred abundance.

This information can be used in setting measureable management objectives. example, decision makers can ask if having a large proportion of society feeling that the current polar bear population size is above their preferred population abundance level, while slightly less feel that the polar bear population size is at their preferred level of abundance, with a small proportion feeling that the level is below their preference (Figure 11a) is satisfactory or not. If decision makers are not satisfied with that, they can then create other management objectives - for example, decision makers could have a management objective of all of society feeling that the polar bear population size is too small (Figure 11b), too large (Figure 11c) or at their preferred size (Figure 11d). Alternately, and perhaps more attainable, decision makers may decide to have a management objective of a balanced society where most people feel the polar bear population is at their preferred population size and an equal proportion of society feel that the polar bear population size is below or above their preference (Figure 11e). Regardless of the management objective, decision makers can then work to reach those goals by taking management action, such as public education, development and implementation of community bear plans, harvest management and other tools. The effectiveness of the actions in reaching the societal goals can then be measured by subsequently determining societal perceptions again. Depending on the subsequent survey, corrections can be made or actions can be maintained as necessary.

Some members of the public also indicated that they prefer that there are no polar bears. Some of these respondents indicated that they preferred that there are no polar bears due to the disharmony that polar bear management has created. It may be an unexpected consequence of the way that the polar bear management system has been implemented and indicative of a corrosion of public confidence in the polar bear management system.

However, studies elsewhere indicate that 10% of the respondents appear intolerant of polar bears is similar to other jurisdictions for similar wildlife species. Peyton *et al.* (2001), for example, found that 5% to 28.9%, with an average of 17.7%, of their respondents prefer that no black bears existed in their zone.

Focus groups on the different segments of the population would be useful to further understand the characteristics of people's perspectives about polar bear abundance. For example, it could help to determine why people have the attitude they have and how strongly held the various attitudes are. In turn, this information could be used to effectively inform management activities in order to promote public confidence.

The immobilization of polar bears, and the handling of wildlife in general, has been a controversial issue in Nunavut and this seems to be reflected in the responses about the consumption of immobilized polar bears (Table 12). To make immobilization more acceptable, the Government of Nunavut provides financial compensation for polar bears that are harvested within one year of being immobilized. Most people indicated that they

did not know when it is possible to consume polar bear meat following that animal's immobilization. But many people also indicated that they would not eat immobilized meat (Table 12). The high level of people who indicated that they do not know when immobilized polar bear meat can be consumed could also be an indication that the consumption of polar bear meat is not a priority concern for them. Unfortunately, without measures of public confidence, it is not possible to tell if public confidence has increased since financial compensation has been in practice.

Most people indicated that their home or campsite had never been approached by a polar bear. However, a large portion of the respondents also indicated that their home or campsite had been approached by polar bears. As such, Nunavut residents seem to have a higher rate of problem polar bears than in other jurisdictions. In Colorado, for example, nearly 1 in 7 respondents indicated that they had seen a Mountain Lion in their community or within 5 miles of their rural home (Colorado Division of Wildlife, 2006).

Most respondents indicated that polar bears approaching homes should be destroyed or first deterred then destroyed (Figure 7). Conservation officers do try to deter problem polar bears and then kill them if there are continued issues.

Most people also indicated that they disagreed with the then-proposed up-listing of polar bears under the U.S. *Endangered Species Act* (Table 13). The Government of Nunavut as well, was aligned with this perspective when they indicated that they were disappointed with the subsequent decision to up-list the polar bear on the United States Endangered Species Act (Government of Nunavut, 2008).

### **Environmental Governance**

Most people indicated, as well, that they were neither satisfied nor dissatisfied with the degree of influence their people had in the management of natural resources, like oil, gas and minerals. This seems to suggest that people feel their participation is more effective than it is for wildlife management. On another question, more people seemed somewhat satisfied with the influence their people had to reduce environmental problems in their area than they did in the quality of education or health services in their community.

Most people indicated that they were somewhat dissatisfied with the degree of influence that their people had in the management of natural resources like fish and caribou. This seems to suggest that the public may feel that their participation is less effective than for mineral, oil and gas management.

Who the respondents' people are was not explicitly stated, so it is unclear what that means. People were asked to provided their cultural background and that could be an indicator of which cultural group the respondents identified themselves as belonging to while they answered these questions.

As well, why a particular person is dissatisfied or satisfied with their people's influence level is unclear. For example, some non-Inuit replied that they were someone dissatisfied because they felt their people had too much influence. More research would help identify

why people responded the way they did. As well, when these questions were discussed in Inuktitut, it eventually became apparent that they questions could be understood in multiple ways. Some people seemed to be responding based on the level of influence they perceived their people to have, while others seemed to be responding to indicate how satisfied they are that their people have any influence at all, as opposed to no influence at all.

Respondents indicated that they felt that Conservation Officers had the same idea of what is right and wrong as they do. So, perhaps the public feels that other parts of the wildlife management system can improve. It may be useful to determine which part of the wildlife management system the public feels could improve so that resources could be focused on those areas of concern.

The influence that the respondent's people had to reduce environmental problems ranked seventh in terms of their satisfaction. Comparison of these results to those found for SLiCa (Kruse *et al.*, 2008) is presented in Table 18. It appears that the satisfaction levels are similar to those of Inuit around Bering Straits. The Inuit of Greenland and the indigenous peoples of Chukotka seemed to have lower satisfaction levels.

#### **Environmental Issues**

Respondents expressed a high level of satisfaction with their quality of life (Table 15). The 'amount of fish and game available locally', and the 'opportunities to hunt and fish' ranked second and fourth in terms of public satisfaction. The health of the environment was fifth. The issues that had the lowest satisfaction levels were the job opportunities available in the communities and the cost of living.

Climate change was the most cited environmental issue present in the respondents' region. Most respondents indicated that they felt that global warming was concerning or that they were observing it (Table 16). Thirty one respondents (24 Inuit and 7 non-Inuit) indicated that there were additional environmental concerns. Nineteen (16 Inuit and 3 non-Inuit) indicated that there were no additional environmental concerns. Amongst those that indicated that there were additional concerns, the community dump was the most cited response (Table 17). Again, without prior indications of public sentiment regarding these issues, it is difficult to comment on how effectively the public feels these issues are being dealt with.

### Sampling

Comparison of some of the demographic information to national census information suggests that more middle-aged members of the public participated in this survey than youth. There may be a number of explanations for this. The most likely explanation is that this bias is due to the fact that householders were solicited to participate in this survey and that householders are more likely to be middle-aged. Another possible explanation, perhaps less likely, is that younger members of the public felt that they were not knowledgeable about polar bears or *Inuit qaujimajangit* and did not feel qualified to contribute their viewpoints.

### **Methodological Improvements**

A number of issues have become apparent with this approach and efforts can be made to address these in future surveys. First, because this was the first time a public opinion poll was attempted, many issues were the subject of the questionnaire. The survey instrument had up to 100 questions, and as a result of this, interviews were quite lengthy. By making the surveys more focused, we could eliminate some of the questions and reduce the interview duration.

Second, because of uncertainties about using Inuktitut and about random telephone sampling, random, face-to-face household surveys were used. These were time consuming to arrange and about two respondents could be spoken with in an evening. This could be improved by using other technologies, such as telephones and mail out questionnaires, but these may introduce other sampling biases (Bernard, 2002).

Both of these issues have combined to create issues with the sample size of the survey. With only 43 respondents, the sophisticated statistical analysis that can be done is limited. The changes suggested above could help to increase the sample size or more canvassers could be used to carry out the survey.

As well, many of the questions were open-ended and poorly designed. In some cases, it seemed that people were not addressing the issue intended or may have given socially desirable responses. Continued development on the questions can improve this as would surveys that are designed to focus on particular issues. The coding of open-ended questions in particular needs to be scrutinized further and improved.

As was indicated, sampling for this survey was biased. Speaking with the householder may be the most obvious source of the bias, but gathering basic information about people who decline to participate may help to understand this better. If speaking with the householder is the source of the bias, this could be addressed by asking to speak with the person who's birthday just passed, or who's birthday is next to occur. As well, the census information could be used to make targets of how many people in particular categories have to be spoken with.

Another issue was that a small segment of the public was not part of the sampling. Outpost camps located outside Iqaluit, Kimmirut and Pangnirtung were not part of the sampling frame. As well, residents living in large apartment buildings were a small portion of those that were to be asked to participate, but were difficult to contact to see if they would participate in the survey. Other segments of the public may not have been part of the sampling frame, but the creation of the sampling frame is likely reliable.

### The Use of Public Opinion in Decision Making

*Inuit qaujimajatuqangit* contains within it the present day knowledge, experiences and values of Inuit Society and it's possible to gauge these with, amongst other tools, public opinion polls. It has already been mentioned how public opinion could be used in setting measurable management objectives. How societal interests, whether measured through

public opinion polls or not could be used in wildlife or environmental management systems will now be discussed briefly.

It may be possible for Nunavut to be informed by how other jurisdictions integrate scientific information with societal knowledge, experience and values. The Canadian federal government, for example, has developed a framework on how science and technology advice should be used in Government decision making (Government of Canada, 2000). One of the desirable outcomes of this framework is to "ensure that the public and parliamentarians are confident that government is using science in the best interest of all Canadians." This objective is similar to the Nunavut Land Claims Agreement objective of creating a wildlife management system that promotes public confidence, particularly amongst Inuit.

The federal government framework could inform how the Government of Nunavut and co-management partners ought to use science and technology advice in their wildlife and environmental management decision making. For example, as a means of evaluating the effectiveness of the federal government framework, it is recommended that:

Departments should work cooperatively to measure, through the use of public surveys, focus groups, case studies and other means, the level of public confidence in the government's ability to address science-based issues. These efforts should measure whether the public is confident that an appropriate process was used to inform decisions with the best available science advice.

A second federal government framework that deals with the application of precaution in science-based decision making about risk (Government of Canada, 2003) could prove just as informative. Again, one of the objectives of this framework is to:

Increase public and stakeholder confidence... that federal precautionary decision making is rigorous... Ultimately, the framework provides a lens to assess whether precautionary decision making is in keeping with Canadians' social, environmental and economic values and priorities (Government of Canada, 2003).

Some of the important principles in this framework are that:

- It is legitimate that decisions be guided by society's chosen level of protection against risk (Government of Canada, 2003).
- A high degree of transparency, clear accountability and meaningful public involvement are appropriate (Government of Canada, 2003).

These sorts of objectives and principles in both documents make it clear that scientific information alone is not sufficient to reach appropriate, durable, implementable decisions. Societal values and interests are an important element in federal government

decision making processes and the Government of Nunavut could emulate their processes.

#### **Areas of Future Social Research**

With the NLCA and the two federal government frameworks in mind, knowledge gaps and lack of documentation about Nunavut society seem to become apparent. Some possible areas where social research could prove beneficial include:

- Trying to understand how Nunavut society, particularly Inuit, interpret the principles of conservation and believe they should be applied.
- Trying to understand what the long-term economic, social and cultural interests of Inuit harvesters are.
- Trying to understand how economic, social and cultural interests of Inuit harvesters are prioritized and if there are particular interests that Inuit and the public feel are either over- or under-served or promoted.
- Trying to understand if the public, particularly Inuit, feel that the management system integrates the management of all species of wildlife and what the public, particularly Inuit, considers practical.
- Trying to understand if the public, particularly Inuit, feel that their participation is effective and how the wildlife management system can be changed in order to invite more public participation.
- Trying to understand how confident the public, particularly Inuit, are in the wildlife management system.
- Trying to understand Nunavut society's chosen level of protection against risk.

### Summary

In summary, the results of a public opinion poll conducted in Iqaluit, Kimmirut and Pangnirtung is reported on and discussed in this report. The public perspective was solicited regarding *Inuit qaujimajangit*, polar bears, and various environmental resource management issues.

Regarding *Inuit qaujimajangit*, most respondents indicated that:

- *Inuit qaujimajangit* means 'Inuit traditions' to them.
- They do not know how *Inuit qaujimajangit* should be used for various environmental issues.
- Speaking with Elders and Inuit were suggested ways to use *Inuit qaujimajangit*.

Regarding polar bears, most respondents indicated that:

- The fact that Nunavut has polar bears is appropriate.
- They think of polar bears as dangerous.
- There are currently 'many' polar bears.
- They prefer that there are 'some' polar bears.
- The polar bear abundance level is above their preference.
- The polar bear abundance level is within their tolerance.

Regarding natural resource management, most respondents indicated that:

• They are 'somewhat dissatisfied' with the degree of influence their people had over wildlife resource management.

Public opinion polls could be used in informing decision-making in Nunavut and measuring the impacts of those decisions. It may be possible to learn more about this by examining how other jurisdictions, such as the Canadian federal government, integrate societal values and opinions into decision-making.

Further improvements in the methods used, and expansion into other areas of societal research may provide information useful for decision-making and provide means of reducing the tension and conflicts associated with wildlife management in Nunavut.

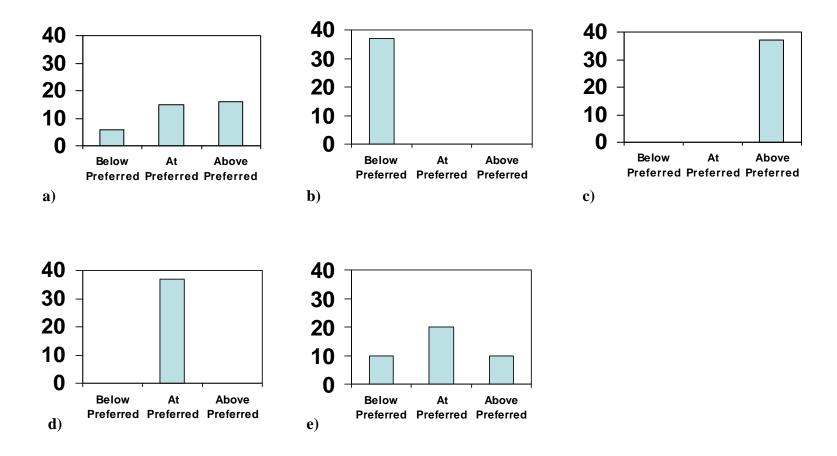


Figure 11: The (a) public sentiment with respect to the current polar bear abundance and possible management objectives, where all of the public feels there are (b) not enough polar bears; (c) too many polar bears; (d) that the polar bear abundance is at their preference and, (e) where the public is balanced, with some feeling like there are too few or too many polar bears, and more feel like the polar bear abundance is at their preferred abundance level.

Table 18: Satisfaction rates (%) with the influence over the management of natural resources like fish, caribou, oil, gas and minerals, and over reduction of local environmental problems around the circumpolar arctic and of participants to this survey.

Southeast Baffin Island Northwest **Bering Straits** North Slope Greenland Chukotka Arctic (This study) Very satisfied Somewhat satisfied Neither satisfied nor dissatisfied Somewhat dissatisfied Very dissatisfied 

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Peter Bull provided me with some helpful literature regarding social carrying capacity research they had done in the United States.

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Without any of this help, this work would not have turned out as well as it did. There is still a lot of room for improvement, and that is solely my fault.

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# Appendix I Survey Instrument

Interview:	Date:	Start Time:
Hayaahald maankana.		

<sup>1.</sup> Including yourself, list the persons that usually live here, at this address? Include all persons who usually live here, even if they are temporarily away.

No.	2. RELATIONSHIP TO RESPONDENT	3. Date of Birth: Day/Month/Year	4. GENDER	5. CULTURAL BACKGROUND OR BACKGROUNDS
1	RESPONDENT		1. MALE 2. FEMALE	A9a. ○ 8 DK A10a. ○ 9 NA A11a.
2	○ 8. DK ○ 9. NA ○ 0. INAP		1. MALE 2. FEMALE 9. NA 0. INAP	A9a. ○ 8 DK A10a. ○ 9 NA A11a.
3			1. MALE 2. FEMALE 9. NA 0. INAP	A9a. ○ 8 DK A10a. ○ 9 NA A11a.
4			1. MALE  2. FEMALE  9. NA  0. INAP	A9a. o 8 DK A10a. o 9 NA A11a.
5	<ul><li>○ 8. DK</li><li>○ 9. NA</li><li>○ 0. INAP</li></ul>		1. MALE 2. FEMALE 9. NA 0. INAP	A9a.  o 8 DK  A10a.  o 9 NA  A11a.
6	<ul><li>○ 8. DK</li><li>○ 9. NA</li><li>○ 0. INAP</li></ul>	○ 98. DK ○ 99. NA ○ 00 INAP	1. MALE 2. FEMALE 9. NA 0. INAP	A9a. ○ 8 DK A10a. ○ 9 NA A11a.

Household members:

**Mobility:** 

No.	,			7. Where did this person live 1 year ago?	8. Where did this person live 5 years ago?
1	□ Nunavut     □B. C.     □Manitoba     □Sask.     □Ontario	□N. W. T. □Nfld.Lab. □P.E.I. □N. B. □ outside Can	□Yukon □N.S. □Alberta □Quebec nada	□Lived at the same address as now □Lived at a different address in the same city or town □Lived in a different city or town. Specify the name of it □Lived outside Nunavut: Specify the name of it.	□Lived at the same address as now □Lived at a different address in the same city or town □Lived in a different city or town. Specify the name of it □Lived outside Nunavut: Specify the name of it.
2	□ Nunavut     □B. C.     □Manitoba     □Sask.     □Ontario	□N. W. T. □Nfld.Lab. □P.E.I. □N. B. □ outside Can	□Yukon □N.S. □Alberta □Quebec nada	□Lived at the same address as now □Lived at a different address in the same city or town □Lived in a different city or town. Specify the name of it □Lived outside Nunavut: Specify the name of it.	□Lived at the same address as now □Lived at a different address in the same city or town □Lived in a different city or town. Specify the name of it □Lived outside Nunavut: Specify the name of it.
3	□ Nunavut     □B. C.     □Manitoba     □Sask.     □Ontario	□N. W. T. □Nfld.Lab. □P.E.I. □N. B. □ outside Can	□Yukon □N.S. □Alberta □Quebec nada	□Lived at the same address as now □Lived at a different address in the same city or town □Lived in a different city or town. Specify the name of it □Lived outside Nunavut: Specify the name of it.	□Lived at the same address as now □Lived at a different address in the same city or town □Lived in a different city or town. Specify the name of it □Lived outside Nunavut: Specify the name of it.
4	□ Nunavut □B. C. □Manitoba □Sask. □Ontario	□N. W. T. □Nfld.Lab. □P.E.I. □N. B. □ outside Can	□Yukon □N.S. □Alberta □Quebec	□Lived at the same address as now □Lived at a different address in the same city or town □Lived in a different city or town. Specify the name of it □Lived outside Nunavut: Specify the name of it.	□Lived at the same address as now □Lived at a different address in the same city or town □Lived in a different city or town. Specify the name of it □Lived outside Nunavut: Specify the name of it.
5	□ Nunavut □B. C. □Manitoba □Sask. □Ontario	□N. W. T. □Nfld.Lab. □P.E.I. □N. B. □ outside Can		□Lived at the same address as now □Lived at a different address in the same city or town □Lived in a different city or town. Specify the name of it □Lived outside Nunavut: Specify the name of it.	□Lived at the same address as now □Lived at a different address in the same city or town □Lived in a different city or town. Specify the name of it □Lived outside Nunavut: Specify the name of it.
6	☐ Nunavut ☐B. C. ☐Manitoba ☐Sask. ☐Optario	□N. W. T. □Nfld.Lab. □P.E.I. □N. B.	□Yukon □N.S. □Alberta □Quebec	□Lived at the same address as now □Lived at a different address in the same city or town □Lived in a different city or town. Specify the name of it □Lived outside Nunavut: Specify the name of it.	□Lived at the same address as now □Lived at a different address in the same city or town □Lived in a different city or town. Specify the name of it □Lived outside Nunavut: Specify the name of it.

Language:

Language	<u> </u>				
No.	9. What languages can you speak well enough to conduct a conversation?	10. What other language(s) can this person speak well enough to conduct a conversation?	11. (a) What language does this person speak most often at home?	(b) Does this person speak any other languages on a regular basis at home?	12. What is the language that this person first learned at home in childhood and still understands? If this person no longer understands the first language learned, indicate the second language learned.
1	□English □French □Inuktitut □Inuinaqtun	□Specify other language(s)  OR □None	□English □French □Inuktitut □Inuinaqtun	□No □English □French □Inuktitut □Inuinaqtun	□English □French □Inuktitut □Inuinaqtun
2	□English □French □Inuktitut □Inuinaqtun	□Specify other language(s)  OR □None	□English □French □Inuktitut □Inuinaqtun	□No □English □French □Inuktitut □Inuinaqtun	□English □French □Inuktitut □Inuinaqtun
3	□English □French □Inuktitut □Inuinaqtun	□Specify other language(s)  OR □None	□English □French □Inuktitut □Inuinaqtun	□No □English □French □Inuktitut □Inuinaqtun	□English □French □Inuktitut □Inuinaqtun
4	□English □French □Inuktitut □Inuinaqtun	□Specify other language(s)  OR □None	□English □French □Inuktitut □Inuinaqtun	□No □English □French □Inuktitut □Inuinaqtun	□English □French □Inuktitut □Inuinaqtun
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	□None	□ınuinad	ıtun		

## **Education:**

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4
an 1 year
an 1 year
, ,
1
an 1 year
an 1 year
an 1 year

equivalency certificate	certificate or diploma	☐Yes, certificate or diploma from a program of more than 2 years
□No	□No	│□No

## **Education (Continued):**

No.	16. Has this person completed a university degree, certificate or diploma? Mark X as many circles as applicable.	17. Has this person attended a school, college, CEGEP or university at any time since September 2005? Mark X as many circles as applicable.
1	☐Yes, certificate or diploma below bachelor level ☐Yes, bachelor's degree (including LL.B.) ☐Yes, certificate or diploma above bachelor level ☐Yes, master's degree ☐Yes, degree in medicine, dentistry, veterinary medicine or optometry ☐Yes, earned doctorate ☐No	☐Yes, attended elementary, junior high school or high school ☐Yes, attended trade school, college, CEGEP or other non-university institution ☐Yes, attended university ☐No, did not attend school at any time since September 2005.
2	□Yes, certificate or diploma below bachelor level □Yes, bachelor's degree (including LL.B.) □Yes, certificate or diploma above bachelor level □Yes, master's degree □Yes, degree in medicine, dentistry, veterinary medicine or optometry □Yes, earned doctorate □No	☐Yes, attended elementary, junior high school or high school ☐Yes, attended trade school, college, CEGEP or other non-university institution ☐Yes, attended university ☐No, did not attend school at any time since September 2005.
3	□Yes, certificate or diploma below bachelor level □Yes, bachelor's degree (including LL.B.) □Yes, certificate or diploma above bachelor level □Yes, master's degree □Yes, degree in medicine, dentistry, veterinary medicine or optometry □Yes, earned doctorate □No	☐Yes, attended elementary, junior high school or high school ☐Yes, attended trade school, college, CEGEP or other non-university institution ☐Yes, attended university ☐No, did not attend school at any time since September 2005.
4	□Yes, certificate or diploma below bachelor level □Yes, bachelor's degree (including LL.B.) □Yes, certificate or diploma above bachelor level □Yes, master's degree □Yes, degree in medicine, dentistry, veterinary medicine or optometry □Yes, earned doctorate □No	☐Yes, attended elementary, junior high school or high school ☐Yes, attended trade school, college, CEGEP or other non-university institution ☐Yes, attended university ☐No, did not attend school at any time since September 2005.
5	☐Yes, certificate or diploma below bachelor level ☐Yes, bachelor's degree (including LL.B.) ☐Yes, certificate or diploma above bachelor level	☐Yes, attended elementary, junior high school or high school ☐Yes, attended trade school, college, CEGEP or other non-university institution

	□Yes, master's degree	☐Yes, attended university
	☐Yes, degree in medicine, dentistry, veterinary medicine or optometry	□No, did not attend school at any time since September 2005.
	☐Yes, earned doctorate	
	□No	
	☐Yes, certificate or diploma below bachelor level	☐Yes, attended elementary, junior high school or high school
	☐Yes, bachelor's degree (including LL.B.)	☐Yes, attended trade school, college, CEGEP or other non-
	☐Yes, certificate or diploma above bachelor level	university institution
6	□Yes, master's degree	☐Yes, attended university
	☐Yes, degree in medicine, dentistry, veterinary medicine or optometry	□No, did not attend school at any time since September 2005.
	☐Yes, earned doctorate	
	□No	

## Health:

No.	18. Does this person have any difficulty hearing, seeing, communicating, walking, climbing stairs, bending, learning or doing any similar activities?	19. Does a physical condition or mental condition or health problem reduce the amount or the kind of activity this person can do:  (a) at home?	(b) at work or at school?	(c) in other activities, for example, transportation or leisure?
	☐Yes, sometimes	☐Yes, sometimes	☐Yes, sometimes	☐Yes, sometimes
1	☐Yes, often	☐Yes, often	☐Yes, often	☐Yes, often
	□No	□No	□No	□No
2	☐Yes, sometimes ☐Yes, often	☐Yes, sometimes ☐Yes, often	☐Yes, sometimes ☐Yes, often	☐Yes, sometimes ☐Yes, often
2			No	∏No
	Yes, sometimes	Yes, sometimes	Yes, sometimes	Yes, sometimes
3	☐Yes, often	Yes, often	Yes, often	☐Yes, often
	□No	□No	□No	□No
	Yes, sometimes	☐Yes, sometimes	☐Yes, sometimes	☐Yes, sometimes
4	☐Yes, often	☐Yes, often	☐Yes, often	☐Yes, often
	□No	□No	□No	□No
	☐Yes, sometimes	Yes, sometimes	Yes, sometimes	☐Yes, sometimes
5	☐Yes, often	☐Yes, often	Yes, often	☐Yes, often
	□No	□No	□No	□No
	☐Yes, sometimes	☐Yes, sometimes	☐Yes, sometimes	☐Yes, sometimes
6	☐Yes, often	☐Yes, often	☐Yes, often	☐Yes, often
	□No	□No	□No	□No

<ul> <li>Income:</li> <li>20. For the last 12 months, please think about the total amount you and other members of your household earned from the sales of carvings, skin clothing, furs, crafts, ivory and other similar goods. Please tell me your best estimate for the total amount – say to the nearest \$1,000.</li> <li>(00000)</li> <li>99998. DON'T KNOW</li> <li>999999. NA</li> </ul>
<ul> <li>21. Please think about the total income you and other members of your household earned from self-employment, a small business, and payment as an expert, over the past 12 months. What would you estimate this income to be?</li> <li>(00000)</li></ul>
<ul> <li>22. And for the last 12 months, think about the total you and other members of your household earned from wages before taxes.</li> <li>(00000)</li> <li>□ 99998. DON'T KNOW</li> <li>□ 99999. NA</li> </ul>
<ul> <li>23. And for the last 12 months, think about the total you and other members of your household received from government and other organizations. Please include pensions, dividend checks, public assistance, shareholder dividends, student financial aid, disaster relief. (INTERVIEWER HELP RESPONDENT ADD THESE UP IF NECESSARY).</li> <li>(00000)</li></ul>
<ul> <li>24. And for the last 12 months, please think about the total household income you and all other members of your household earned or received from other sources.</li> <li>(00000)</li> <li>□ 999998. DON'T KNOW</li> <li>□ 999999. NA</li> </ul>

25. Over the same 12 months, what was your own personal income before deductions, from all

sources?

□ 999999. NA

☐ 999998. DON'T KNOW

□ 1. VERY SATISFIED□ 2. SOMEWHAT SATISFIED

☐ 8. DON'T KNOW

□ 4. SOMEWHAT DISSATISFIED□ 5. VERY DISSATISFIED

26. How satisfied are you with your household income?

☐ 3. NEITHER SATISFIED NOR DISSATISFIED

(00000)

□ 9. NA

62

27. And how satisfied are you with your standard of living? I mean goods and services which one can buy like housing, clothing, food, cars, vacation, travel. How satisfied are you, overall, with your standard of living?
□ 1. VERY SATISFIED
□ 2. SOMEWHAT SATISFIED
□ 3. NEITHER SATISFIED NOR DISSATISFIED
☐ 4. SOMEWHAT DISSATISFIED
□ 5. VERY DISSATISFIED
□ 8. DON'T KNOW
□ 9. NA
<ul> <li>28. Is your household able to make ends meet, with great difficulty, some difficulty, fairly easily, or very easily?</li> <li>1. WITH GREAT DIFFICULTY</li> <li>2. SOME DIFFICULTY</li> <li>3. FAIRLY EASILY</li> <li>4. VERY EASILY</li> <li>8. DON'T KNOW</li> </ul>
□ 9. NA

### **Activities:**

29-36. I'd like you to look down each column and tell me who in your household normally has been responsible for each activity during the past 12 months. Of course, more than one person can share a responsibility.

All households don't do all these activities. We'd just like to know how members of your household ages 16 years and older, contribute to day-to-day living.

(CONTINUE WITH COMPLETING CHART, WORKING DOWN THE CHART BY ACTIVITY. TRANSFER ANSWERS TO QUESTIONNAIRE AFTER INTERVIEW.)

WHO IN YOUR HOUSEHOLD NORMALLY DID EACH OF THE FOLLOWING ACTIVITIES IN THE PAST 12 MONTHS?

			THE FOLLOWING ACT		12 11101111101	
No.	29. PREPARED OR PACKED FOR ANY HUNTING, FISHING OR CAMPING TRIPS	30. MADE AND REPAIRED EQUIPMENT OR DID HOUSEHOLD REPAIRS	31. MAINTAINED A HOUSEHOLD CAMP	32. HARVESTED, HUNTED, OR FISHED FOR FOOD FOR YOUR HOUSEHOLD	33. BUTCHERED OR PRESERVED HARVESTED FOOD	34. SOLD FISH OR MEAT OR BERRIES
1	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES
	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA
2	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES
	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA
3	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES
	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA
4	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES
	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA
5	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES
	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA
	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES

| ſ | 2. NO |
|---|-------|-------|-------|-------|-------|-------|
|   | 8. DK |
|   | 9. NA |

No.		S, CRAFTS, IVORY OR ANY OTHER PERSON SIMILAR GOODS
	35. FOR SALE	36. FOR OWN USE
	1. YES	1. YES
1	2. NO	2. NO
1	8. DK	8. DK
	9. NA	9. NA
	1. YES	1. YES
2	2. NO	2. NO
_	8. DK	8. DK
	9. NA	9. NA
	1. YES	1. YES
3	2. NO	2. NO
	8. DK	8. DK
	9. NA	9. NA
	1. YES	1. YES
4	2. NO	2. NO
+	8. DK	8. DK
	9. NA	9. NA
	1. YES	1. YES
5	2. NO	2. NO
5	8. DK	8. DK
	9. NA	9. NA
	1. YES	1. YES
6	2. NO	2. NO
6	8. DK	8. DK
	9. NA	9. NA

### WHO IN YOUR HOUSEHOLD NORMALLY DID EACH OF THE FOLLOWING ACTIVITIES IN THE PAST 12 MONTHS?

VVIIOII	TOOKTIOOOLIIOLD	NORWALL FOID EAC	I OI THE TOLLOW	INO ACTIVITIES	IN THE LAST 12 MON	1110:	1
No.	37. WORKED IN A FULL TIME JOB FOR PAY	38. WORKED IN A PART TIME JOB FOR PAY	39. COOKED	40. CLEANED	41. KEPT TRACK OF HOUSEHOLD FINANCES	42. SEWED	43. DID THE LAUNDRY
1	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES
	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA
2	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES
	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA
3	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES
	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA
4	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES
	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA
5	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES
	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA
6	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES	1. YES
	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA	9. NA

		IF THERE ARE CHILDR	EN	IF THERE IS A PERSON WHO NEEDS HELP IN DOING DAILY PERSON ACTIVITIES
No.	44. SUPERVISED THE CHILDREN	45. TOOK CARE OF THE CHILDREN'S PERSONAL HYGENE	46. TAUGHT THE CHILDREN INUIT STORIES & SKILLS	47. ASSISTED IN DOING DAILY ACTIVITIES
	1. YES	1. YES	1. YES	1. YES
1	2. NO	2. NO	2. NO	2. NO
'	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA
	1. YES	1. YES	1. YES	1. YES
2	2. NO	2. NO	2. NO	2. NO
-	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA
	1. YES	1. YES	1. YES	1. YES
3	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA
	1. YES	1. YES	1. YES	1. YES
4	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA
	1. YES	1. YES	1. YES	1. YES
5	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA
	1. YES	1. YES	1. YES	1. YES
6	2. NO	2. NO	2. NO	2. NO
	8. DK	8. DK	8. DK	8. DK
	9. NA	9. NA	9. NA	9. NA

48. Would you call yourself a hunter?  □ 1. YES □ 2. NO □ 8. DON'T KNOW □ 9. NA
49. How often do you go hunting?
□ 98. DON'T KNOW □ 99. NA □ 00. INAP
50. What do you tend to hunt?
□ 98. DON'T KNOW □ 99. NA □ 00. INAP
51. Do you leave the community?  □ 1. YES □ 2. NO □ 8. DON'T KNOW □ 9. NA
52. Have you ever seen a polar bear?  ☐ 1. YES  ☐ 2. NO  ☐ 8. DON'T KNOW  ☐ 9. NA
53. Have you ever harvested a polar bear?  □ 1. YES
54. When you go polar bear hunting, when do you tend to go polar bear hunting?
□ 98. DON'T KNOW □ 99. NA □ 00. INAP
55. Has your home/campsite ever been approached by a bear?  □ 1. YES □ 2. NO □ 8. DON'T KNOW □ 9. NA

56. I'd like to ask you about your hunting, fishing, trapping, herding and gathering activities in the past 12 months. Please tell me the activities you did in the last 12 months:

pact	12 111011111	o. 1 10000	ton mo the t	detition you did in the last 12 months.
1. YES	2. NO	9. NA	0. INAP	
				a. SKINNED AND BUTCHERED A CARIBOU?
				b. SEW SKINS, MAKE PARKAS AND KAMIKS?
				c. MAKE SLEDS OR BOATS?
				d. HUNT CARIBOU?
				e. HUNT RING SEAL OR BEARDED SEAL?
				f. HUNT WALRUS?
				g. HUNT WATERFOWL?
				h. GATHER EGGS?
				i. FISH?
				j. GATHER GREENS, ROOTS, OR OTHER PLANTS
				k. PRESERVE MEAT OR FISH?
				I. TRAP?
				m. PICK BERRIES?
				n. MAKE NATIVE HANDICRAFTS?

				11. IVI/ (I \L	14/ (11 / 🗠 11/ )	J :	
herdi	ng or prod RKING ON VESTING H	essing yo N A WAGE G, HERDIN	ur own food E JOB	d, or both?	orefer: work	ge job, or harve	esting,
house	ehold. Thi	is may or		e paid work		t way you help do, what is the	
□ 98. DO □ 99. NA	N'T KNO\	W					

59. Which items did you or other members of your household use in the past 12 months for harvesting or gathering food,	2. NO	1. YES	yo		ntione	d doe	e items s your	ite dic pu	ms yo	ur hou your e in	any, usehold hou the pa	owns sehold
gathering firewood or for unpaid											_	
household			1.	2.	8.	9.	0.	1.	2.	8.	9.	0.
work? A. SNOWMOBI			YES	NO	DK	NA	INAP	YES	NO	DK	NA	INAP
LE?												
B. TRUCK?												
C. 4- WHEELER OR ATV?												
D. DOG TEAM USED FOR HUNTING & TRAPPING?												
E. SLED or SLED MATERIAL?												
F. CANOE OR KAYAK?												
G. OTHER BOAT?												
H. OUTBOARD MOTOR?												
I. GPS, VHF, OR CB?												
J. FISHNETS?												
K. RIFLE OR SHOTGUN?												
L. GENERATO R?												
M. FREEZER?												
N. FLOAT (SURVIVAL) SUIT?												
O. SEWING MACHINE?												
P. ICE AUGER?												
Q. CAMPING TENT?												
R. PERSONAL COMPUTER												

62. Which of these activities did you do in the past 12 months?

1. YES	2. NO	9. NA	
			A. PLAY BINGO?
			B. TAKE PART IN A NATIVE FESTIVAL?
			C. READ BOOKS OR MAGAZINES?
			D. LISTEN TO THE RADIO OR STEREO?
			E. VISIT NEIGHBORS, FRIENDS OR FAMILY?
			F. LISTEN TO OR TELL A NATIVE STORY?
			G. GO TO SPORTS EVENTS?
			H. PARTICIPATE IN SPORTS?
			I. TAKE PART IN A NATIVE DANCE?
			J. TAKE PART IN NATIVE TRADITIONAL GAMES?
			K. GO SNOWMOBILING OR DOG SLEDDING?
			L. HIKE, RUN, JOG, OR WALK?
			M. BOAT OR KAYAK?
			N. BE OUT IN THE COUNTRY?

63. The next questions are about your personal use of electronic equipment. Which if any have you used in the past 12 months?

	<del>000                                  </del>	past 12 II	nontrio:
1. YES	2. NO	9. NA	
			A. A TELEPHONE?
			B. A CELLULAR (WIRELESS) TELEPHONE?
			C. VHF, CB, OR RADIO TELEPHONE?
			D. CABLE OR SATELLITE TELEVISION?
			E. AN AUTOMATIC BANK TELLER MACHINE (ATM)?
			F. A FAX MACHINE?
			G. VCR (VIDEOTAPE RECORDER) OR DVD?
			H. GPS UNIT?
			I. A COMPUTER?
			J. THE INTERNET?
			K. DEBIT CARD?

64. I'd like to learn about your involvement in public affairs. Which of the following last elections did you vote in:

1. YES	2. NO	9. NA	
			a. City/Hamlet?
			b. Qikiqtani Inuit Association?
			c. Nunavut Tunngavik Incorporated
			e. Nunavut Government
			f. Canadian Government

65. Are you a member of a board, council, or committee?
□ 1. YES Question 86
□ 2. NO Skip to Question 87
□ 9. NA
66. On what boards, councils, or committees are you a member?

□ 99. NA □ 00. INAP

67. How knowledgeable would you say you are about politics in general?  ☐ 1. VERY KNOWLEDGEABLE  ☐ 2. SOMEWHAT KNOWLEDGEABLE  ☐ 3. NOT VERY KNOWLEDGEABLE  ☐ 4. NOT AT ALL KNOWLEDGEABLE  ☐ 8. DON'T KNOW  ☐ 9. N A
68. How important to your life are political decisions made by government?  1. VERY IMPORTANT 2. IMPORTANT 3. NOT VERY IMPORTANT 4. NOT AT ALL IMPORTANT 8. DON'T KNOW 9. N A
69. How do you get your information regarding environmental issues?
<ul><li>□ 98. DON'T KNOW</li><li>□ 99. NA</li><li>□ 00. INAP</li></ul>

## **Environmental Concerns/Management/Awareness:**

70. How satisfied are you with the degree of influence that Inuit people have on the management of natural resources like fish and caribou.						
☐ 2. SON☐ 3. NEI☐ 4. SON☐ 5. VEF	THER SA	SATISFIED TISFIED DISSATIS TISFIED	NOR DIS	SSATISFIED		
you 0 □ 1. YES □ 2. NO	do?		nd wildlife	e officers have the same idea of what is right and wrong that		
of na □ 1. VEF □ 2. SON □ 3. NEI □ 4. SON □ 5. VEF	itural reso RY SATIS MEWHAT THER SA	urces like FIED SATISFIE TISFIED DISSATI TISFIED	e oil, gas, ED NOR DIS	egree of influence that Inuit people have on the management and minerals.  SSATISFIED		
•	•	n, which c	of the follo	owing environmental problems, if any, exist in your region or		
comr	munity?		•	owing environmental problems, if any, exist in your region or		
•	•	8. DK	9. NA			
comr	munity?		•	A. POLLUTION OF LOCAL LAKES AND STREAMS? B. POLLUTION FROM INDUSTRIAL DEVELOPMENT		
comr	munity?		•	A. POLLUTION OF LOCAL LAKES AND STREAMS?  B. POLLUTION FROM INDUSTRIAL DEVELOPMENT IN THIS REGION?		
comr	munity?		•	A. POLLUTION OF LOCAL LAKES AND STREAMS?     B. POLLUTION FROM INDUSTRIAL DEVELOPMENT IN THIS REGION?     C. POLLUTION FROM OTHER COUNTRIES?		
comr	munity?		•	A. POLLUTION OF LOCAL LAKES AND STREAMS?  B. POLLUTION FROM INDUSTRIAL DEVELOPMENT IN THIS REGION?		
comr	munity?		•	A. POLLUTION OF LOCAL LAKES AND STREAMS?     B. POLLUTION FROM INDUSTRIAL DEVELOPMENT IN THIS REGION?     C. POLLUTION FROM OTHER COUNTRIES?     D. FISH OR ANIMALS THAT MAY BE UNSAFE TO EAT?     E. EROSION OF COASTAL AREAS OR		
comr	munity?		•	A. POLLUTION OF LOCAL LAKES AND STREAMS?  B. POLLUTION FROM INDUSTRIAL DEVELOPMENT IN THIS REGION?  C. POLLUTION FROM OTHER COUNTRIES?  D. FISH OR ANIMALS THAT MAY BE UNSAFE TO EAT?  E. EROSION OF COASTAL AREAS OR RIVERBANKS?		
comr	munity?		•	A. POLLUTION OF LOCAL LAKES AND STREAMS?     B. POLLUTION FROM INDUSTRIAL DEVELOPMENT IN THIS REGION?     C. POLLUTION FROM OTHER COUNTRIES?     D. FISH OR ANIMALS THAT MAY BE UNSAFE TO EAT?     E. EROSION OF COASTAL AREAS OR RIVERBANKS?		
74. Are t  1. YES  74. Are t  2. NO  8. DON  9. NA  75. What	nunity?  2. NO  here othe	8. DK	9. NA	A. POLLUTION OF LOCAL LAKES AND STREAMS?  B. POLLUTION FROM INDUSTRIAL DEVELOPMENT IN THIS REGION?  C. POLLUTION FROM OTHER COUNTRIES?  D. FISH OR ANIMALS THAT MAY BE UNSAFE TO EAT?  E. EROSION OF COASTAL AREAS OR RIVERBANKS?  F. LOCAL CONTAMINATED SITES?		

76. For each of the next set of items, please tell me how satisfied you are with:

76. For each of the next set of items, please	tell me now sa	atisfied you are v	vith:				
	1	2	3 NEITHER	4	5		
	VERY	SOMEWHAT	SATISFIED	SOMEWHAT	VERY	8	9
	SATISFIED	SATISFIED	NOR	DISSATISFIED	DISSATISFIED	DK	NA
	O/ (TIO) IED	O/ (TIOI IEB	DISSATISFIED	DIGO, THOI IED	Bioo, thoi ieb		
A. The influence your people have to			B100/1110112B				
reduce environmental problems in your							
area.							
B. The health of the environment in							
your area.							
C. How well the national government							
is dealing with needs in your community?							
D. Job opportunities in your							
community?							
E. Opportunities to hunt and fish?							
F. The amount of fish and game							
available locally?							
G. The quality of education in your							
community?  H. The quality of health services in							
11.1.7							
your community?  I. The recreational facilities in your							
community?							
J. The cost of living in your							
community?							
K. The availability of goods in local							
stores?							
L. Transportation to and from your							
community?							
M. The quality of life in this							
community?							
N. Your life as a whole?							

77. What is your attitude in regards to global warming?
<ul> <li>□ 98. DON'T KNOW</li> <li>□ 99. NA</li> <li>□ 00. INAP</li> <li>78. What is your attitude about the U.S. listing of the polar bear as a threatened species?</li> </ul>
□ 98. DON'T KNOW □ 99. NA □ 00. INAP

<ul> <li>Use:</li> <li>79. Think about all the meat and fish your household ate in the past 12 months. How much of this meat and fish was traditional food?</li> <li>1. NONE</li> <li>2. LESS THAN HALF</li> <li>3. ABOUT HALF</li> <li>4. MORE THAN HALF</li> <li>8. DON'T KNOW</li> <li>9. NA</li> </ul>
<ul> <li>80. Still thinking about all the meat and fish your household ate in the past 12 months, how much did members of your household harvest?</li> <li>1. NONE</li> <li>2. LESS THAN HALF</li> <li>3. ABOUT HALF</li> <li>4. MORE THAN HALF</li> <li>8. DON'T KNOW</li> <li>9. NA</li> <li>0. INAP</li> </ul>
<ul> <li>81. This next question still concerns the traditional foods consumed by your household over the past 12 months. Did your household receive traditional food from others?</li> <li>1 YES</li> <li>2 NO</li> <li>8. DON'T KNOW</li> <li>9 NA</li> <li>0 INAP</li> </ul>
82. Did your household share traditional food by sending it to households in other places?  1 YES 2 NO 8 DON'T KNOW 9 NA 0 INAP
83. Did your household pay for any of the traditional food your household ate in the past 12 months?  □ 1 YES □ 2 NO □ 8 DON'T KNOW □ 9 NA □ 0 INAP

## Nanuit:

84.	Currently, how abundant are bears?	
	Polar bear abundance	Currently, it's like this
1	There are no polar bears.	-
2	There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears	
3	There are some polar bears. They are seen occasionally by	
	communities. Dogs and meat caches are occasionally	
	approached by polar bears.	
4	There are many polar bears. Polar bears are often seen by	
	communities. Dogs and meat caches are approached by polar	
	bears.	
5	There are the most polar bears. They are often seen in the area.	
	Dogs and meat caches are often approached by polar bears.	
85.	Which is your preference?	
	Polar bear abundance	My preference is
1	There are no polar bears.	
2	There are few polar bears. They are seen occasionally. Dogs and	
L_	meat caches are not often approached by polar bears	
3	There are some polar bears. They are seen occasionally by	
	communities. Dogs and meat caches are occasionally	
_	approached by polar bears.	
4	There are many polar bears. Polar bears are often seen by	
	communities. Dogs and meat caches are approached by polar	
-	bears.	
5	There are the most polar bears. They are often seen in the area. Dogs and meat caches are often approached by polar bears.	
	Dogs and meat caches are often approached by polar bears.	
86	Which is fewest you want?	
86.	Which is fewest you want? Polar bear abundance	The fewest I want is
	Polar bear abundance	The fewest I want is
1	Polar bear abundance There are no polar bears.	The fewest I want is
	Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and	The fewest I want is
1	Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears	The fewest I want is
1 2	Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and	The fewest I want is
1 2	Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears There are some polar bears. They are seen occasionally by	The fewest I want is
1 2	Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears There are some polar bears. They are seen occasionally by communities. Dogs and meat caches are occasionally approached by polar bears. There are many polar bears. Polar bears are often seen by	The fewest I want is
1 2 3	Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears There are some polar bears. They are seen occasionally by communities. Dogs and meat caches are occasionally approached by polar bears. There are many polar bears. Polar bears are often seen by communities. Dogs and meat caches are approached by polar	The fewest I want is
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1 2 3	Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears There are some polar bears. They are seen occasionally by communities. Dogs and meat caches are occasionally approached by polar bears. There are many polar bears. Polar bears are often seen by communities. Dogs and meat caches are approached by polar bears. There are the most polar bears. They are often seen in the area.	The fewest I want is
3 4	Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears There are some polar bears. They are seen occasionally by communities. Dogs and meat caches are occasionally approached by polar bears. There are many polar bears. Polar bears are often seen by communities. Dogs and meat caches are approached by polar bears. There are the most polar bears. They are often seen in the area. Dogs and meat caches are often approached by polar bears.	The fewest I want is
3 4	Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears There are some polar bears. They are seen occasionally by communities. Dogs and meat caches are occasionally approached by polar bears. There are many polar bears. Polar bears are often seen by communities. Dogs and meat caches are approached by polar bears. There are the most polar bears. They are often seen in the area. Dogs and meat caches are often approached by polar bears. Which is the most you want?	
1 2 3 4 5 87.	Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears There are some polar bears. They are seen occasionally by communities. Dogs and meat caches are occasionally approached by polar bears. There are many polar bears. Polar bears are often seen by communities. Dogs and meat caches are approached by polar bears. There are the most polar bears. They are often seen in the area. Dogs and meat caches are often approached by polar bears. Which is the most you want? Polar bear abundance	The fewest I want is  The most I want is
1 2 3 4 5 87.	Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears There are some polar bears. They are seen occasionally by communities. Dogs and meat caches are occasionally approached by polar bears. There are many polar bears. Polar bears are often seen by communities. Dogs and meat caches are approached by polar bears. There are the most polar bears. They are often seen in the area. Dogs and meat caches are often approached by polar bears. Which is the most you want? Polar bear abundance There are no polar bears.	
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1 2 3 4 5 87.	Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears There are some polar bears. They are seen occasionally by communities. Dogs and meat caches are occasionally approached by polar bears. There are many polar bears. Polar bears are often seen by communities. Dogs and meat caches are approached by polar bears. There are the most polar bears. They are often seen in the area. Dogs and meat caches are often approached by polar bears. Which is the most you want? Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears There are some polar bears. They are seen occasionally by communities. Dogs and meat caches are occasionally	
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1 2 3 4 5 87. 1 2	Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears There are some polar bears. They are seen occasionally by communities. Dogs and meat caches are occasionally approached by polar bears. There are many polar bears. Polar bears are often seen by communities. Dogs and meat caches are approached by polar bears. There are the most polar bears. They are often seen in the area. Dogs and meat caches are often approached by polar bears. Which is the most you want? Polar bear abundance There are no polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears There are some polar bears. They are seen occasionally by communities. Dogs and meat caches are occasionally approached by polar bears. There are many polar bears. Polar bears are often seen by communities. Dogs and meat caches are approached by polar bears.	
3 4 5 87. 1 2 3	Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears There are some polar bears. They are seen occasionally by communities. Dogs and meat caches are occasionally approached by polar bears. There are many polar bears. Polar bears are often seen by communities. Dogs and meat caches are approached by polar bears. There are the most polar bears. They are often seen in the area. Dogs and meat caches are often approached by polar bears. Which is the most you want? Polar bear abundance There are no polar bears. There are few polar bears. They are seen occasionally. Dogs and meat caches are not often approached by polar bears There are some polar bears. They are seen occasionally by communities. Dogs and meat caches are occasionally approached by polar bears. There are many polar bears. Polar bears are often seen by communities. Dogs and meat caches are approached by polar	

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88. Can you tell me about your thoughts of polar bears?
□ 98. DON'T KNOW □ 99. NA □ 00. INAP
89. Do you plan to/want to harvest a polar bear?
□ 98. DON'T KNOW □ 99. NA □ 00. INAP
90. Regarding polar bears that have been immobilized, when is it possible to consume them again?
□ 98. DON'T KNOW □ 99. NA □ 00. INAP
91. If a bear approaches homes, what should happen to the bear?
□ 98. DON'T KNOW □ 99. NA □ 00. INAP
92. What are your thoughts on the fact that Nunavut has bears?
□ 98. DON'T KNOW □ 99. NA □ 00. INAP

# Inuit Qaujimajangit/Beliefs: 93. What does Inuit Qaujimajangit mean for you?

<ul><li>□ 98. DON'T KNOW</li><li>□ 99. NA</li><li>□ 00. INAP</li></ul>
94. How should Inuit Qaujimajangit be used in environmental management?
<ul><li>□ 98. DON'T KNOW</li><li>□ 99. NA</li><li>□ 00. INAP</li></ul>
95. How should Inuit Qaujimajangit be used in dealing with wildlife?
<ul><li>□ 98. DON'T KNOW</li><li>□ 99. NA</li><li>□ 00. INAP</li></ul>
96. How should Inuit Qaujimajangit be used in environmental protection?
<ul><li>□ 98. DON'T KNOW</li><li>□ 99. NA</li><li>□ 00. INAP</li></ul>
97. How should Inuit Qaujimajangit be used in dealing with parks?
□ 98. DON'T KNOW □ 99. NA □ 00. INAP
98. How should Inuit Qaujimajangit be used in dealing with environmental change?
<ul><li>□ 98. DON'T KNOW</li><li>□ 99. NA</li><li>□ 00. INAP</li></ul>

#### FOR INUIT:

literature I read?

M. My religious and spiritual

N. The way I view Nature?
O. How I try to meet the

and Inuit friends?

expectations of my family

practices?

In this section, we return to talking about your traditional values.

99. I'd like to read a list of activities and customs that may be important to maintaining your lnuk identity. For each one, please tell me the importance of each activity.

3. NOT 1. VERY 4. NOT AT ALL **VERY IMPORTANT IMPORTANT IMPORTANT IMPORTANT** A. The Inuit food I eat? B. The hunting and fishing I do? C. Naming kinship relationships D. The harvesting of wild berries and plants I do? E. My occupation or profession? F. The preserving of Inuit foods I do? G. My use of the Inuit language? H. Participating in traditional cultural events? My childhood upbringing? J. The clothes I wear? K. The personal contacts I have with other Inuit? L. The Inuit poetry and

Conclusion:  100. That's all my questions. Have I missed anything in this interview that is important to you?
□ 98. DON'T KNOW □ 99. NA
End Time:

# Appendix II Additional Responses

Table 19: Respondents' information sources about environmental issues.

respondents information	Inuit	Non-Inuit	Total
Radio	19	1	20
News	5	6	11
TV	8	2	10
Newspaper	6	3	9
Internet	4	5	9
Work	5	4	9
Word of Mouth	2	3	5
Meetings	3	1	4
Nunatsiaq News	3	0	3
Elders	3	0	3
Don't Know	2	0	2
Board Members	2	0	2
CBC Radio	2	0	2
CBC TV	2	0	2
School	1	1	2
Magazines	0	2	2
Public Notices	0	1	1
Personal Observations	1	0	1
Mail	1	0	1
Book	0	1	1
Research	0	1	1
Political Leaders	1	0	1
News North	1	0	1
Inuit	1	0	1

Table 20: Harvesting activities engaged in over the past 12 months.

Tubic 20. That vesting delivines engaged		the past 12 i	
	Inuit	Non-Inuit	Total
Picking berries	24	10	34
Fishing	27	6	33
Preservation of meat or fish	22	6	28
Ringed or bearded seal hunting	22	3	25
Caribou hunting	22	1	23
Gathering of greens, roots, or other plants	17	6	23
Waterfowl hunting	20	0	20
Skinning and butchering a caribou	18	0	18
Gathering of eggs	14	0	14
Make sleds or boats	10	1	11
Make native handicrafts	9	2	11
Sew skins, make parkas and kamiks	7	3	10
Hunt walrus	5	0	5
Trap	2	0	2

Table 21: Activities participated in over the past 12 months.

Interview	Inuit	Non-Inuit	Total
Listen to the radio or stereo	31	9	40
Visit neighbors, friends or family	29	10	39
Read books or magazines	28	10	38
Be out in the country	27	10	37
Listen to or tell a native story	26	10	36
Hike, run, jog or walk	26	10	36
Boat or Kayak	26	6	32
Take part in a native festival	23	7	30
Go snowmobiling or dog sledding	23	7	30
Go to sports events	14	7	21
Take part in native traditional games	18	3	21
Participate in sports	7	6	13
Take part in a native dance	11	2	13
Play bingo	3	2	5

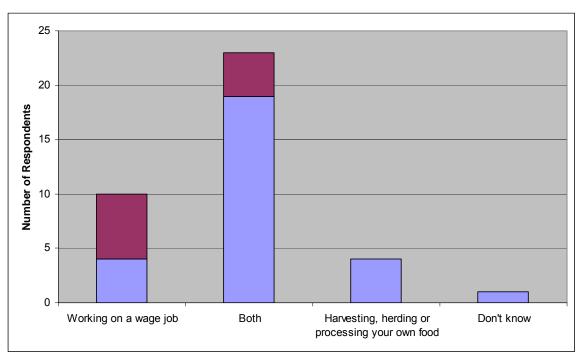


Figure 12: The preferred lifestyle of Inuit (light blue) and non-Inuit (dark purple) respondents.

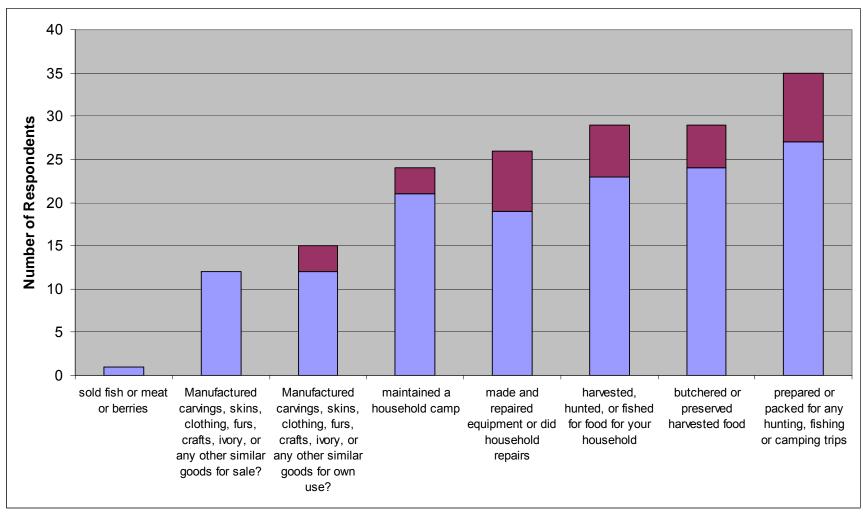
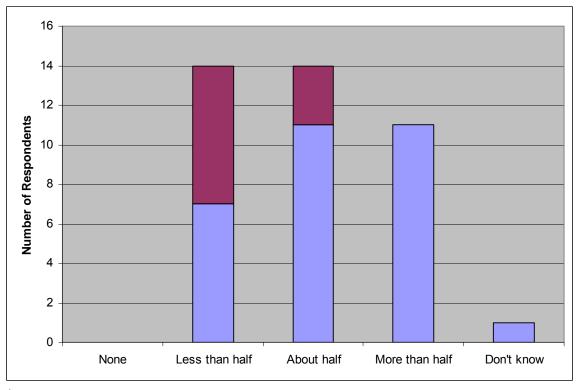


Figure 13: The reported participation of Inuit (light blue) and non-Inuit (dark purple) respondents in various harvest-related activities during the preceding 12 months.

Table 22: Coded responses about the ways that respondents helped their household.

	Inuit	Non-Inuit	Total
Providing food	13	2	15
Hunting	10	0	10
Providing money	5	3	8
Cleaning	5	1	6
Doing chores	3	1	4
Providing clothing	3	0	3
Providing a home	3	0	3
Being a good parent	2	1	3
Household head/foundation	2	0	2
Loving	2	0	2
Helping	2	0	2
Everything	1	1	2
Don't know	1	0	1
Warmth	1	0	1
Respect	1	0	1
Teaching values	0	1	1
Nothing	0	1	1



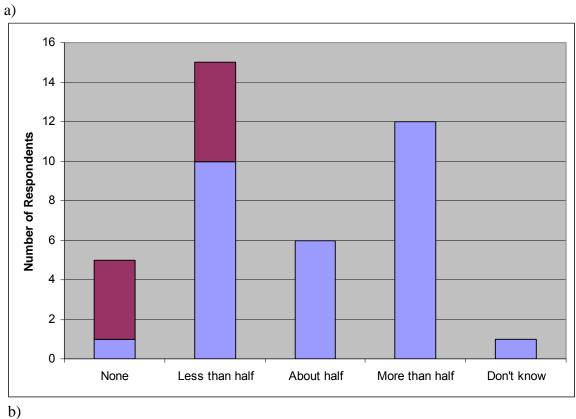
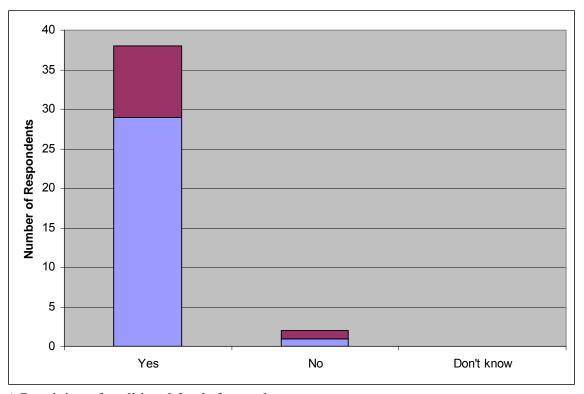
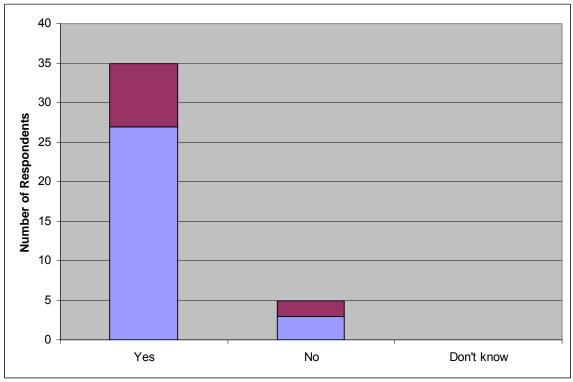


Figure 14: The (a) consumption and (b) harvesting of traditional foods compared to all the meat and fish the household eat for Inuit (light blue) and non-Inuit (dark purple).



a) Receiving of traditional foods from others.



b) Giving of traditional foods to others.

Figure 15: The indicated (a) receipt and (b) giving of traditional foods amongst Inuit (light blue) and non-Inuit (dark purple) respondents.

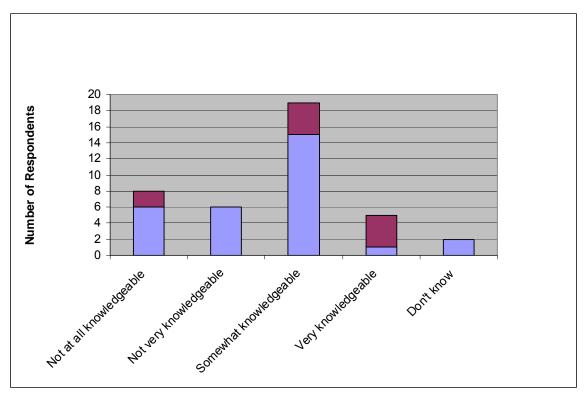


Figure 16: General knowledge of politics amongst Inuit (light blue) and non-Inuit (dark purple).

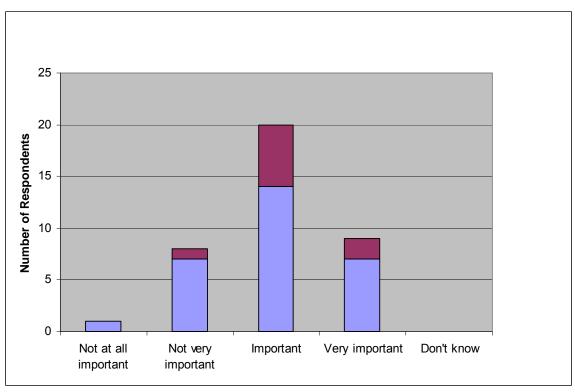


Figure 17: Importance of political decisions made by government for Inuit (light blue) and non-Inuit (dark purple) respondents.

Table 23: Membership on boards (e.g. Co-op, District education authority, Hamlet) of the respondents.

	Inuit	Non-Inuit	Total
Board member	8	3	11
Non-board member	23	7	30

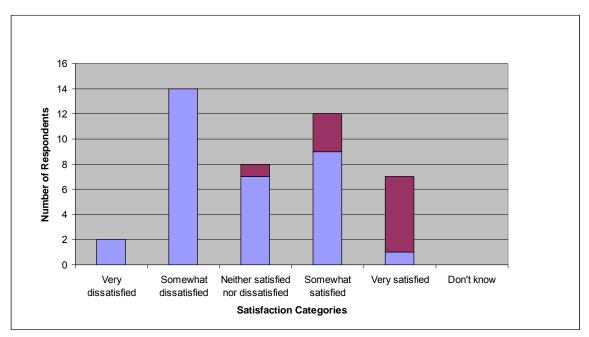


Figure 18: The income satisfaction of Inuit (light blue) and non-Inuit (dark purple) respondents.

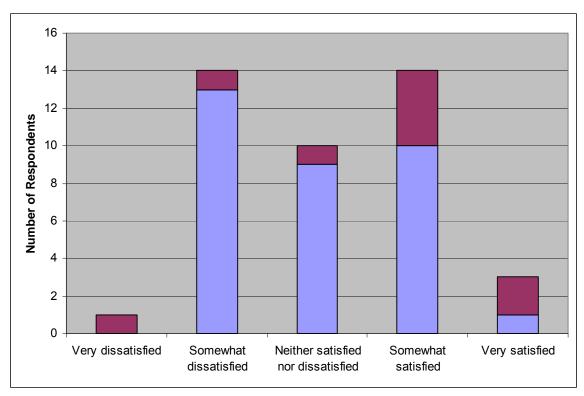


Figure 19: The standard of living satisfaction of Inuit (light blue) and non-Inuit (dark purple) respondents.

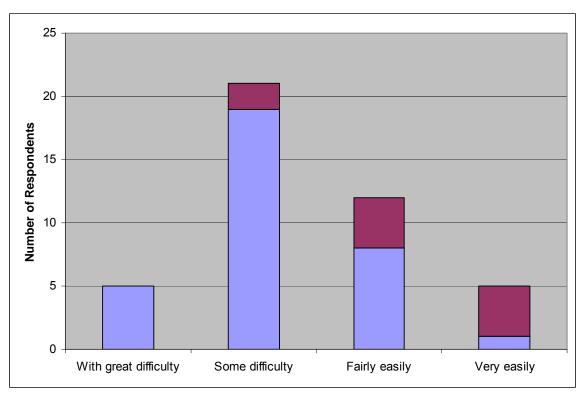


Figure 20: The difficulty of making ends meet level of Inuit (light blue) and non-Inuit (dark purple) respondents.