

Community' Perspectives and Regulations on Cruise Ship Tourism in the Canadian Arctic:
A Pond Inlet Case Study

by

Fabiola Lopez

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

Master of Science
In
Risk and Community Resilience

Department of Resource Economics and Environmental Sociology
University of Alberta

© Fabiola Lopez, 2017

ABSTRACT

Cruise ship tourism (CST) is an increasing significantly activity in Nunavut and is having many environmental, socio-economic and cultural impacts on Inuit communities, and important marine ecosystems such as Sirmilik National Park and Bylot Island Migratory Bird Sanctuary. This thesis focuses on the knowledge and perspectives of Pond Inlet community members. The principal aims are: 1.- Explore the traditional knowledge (Inuit Qaujimagatuqangit) held by Pond Inlet elders and land user, and 2. – Document which “traditional rules” are considered important by Pond Inlet residents, and identify formal laws, regulations, and guidelines, and how these differ from community “rules”. Both objectives relate to CST and the management of Sirmilik National Park and Bylot Island Migratory Bird Sanctuary. The information presented in this thesis provides the basis for better understanding of Pond Inlet community experiences and observations about CST and its impacts. Addressing these impacts and increasing opportunities for local benefit, will potentially improve attitudes towards tourism while at the same time ensure improvements in ecosystem health, the economy, and the local way of life.

ACKNOWLEDGEMENTS

I would like to express special gratitude to my supervisor Brenda Parlee, who gave me the opportunity to work on a great project, and for her help and guidance. As well, I want to thank to committee members, Elizabeth Halpenny and John Parkins, for their assistance and feedback. Thank to my new friends and colleagues, Neal Spicer, Abby D’Souza, Elaine Maloney, Kristine Wray, Apryl Bersgtrom, Finn, and more, for their help and friendship.

I want to thank my family. My parents Juan Antonio and Ofelia, and my kids, Adrian, Juan Pablo and Alejandra, for their support and sacrifices in this Canadian adventure. Special thank you to Emilio Alonzo.

In addition, special thank you to all the participants, for their time and share their knowledge; and the funders of this project: Social Sciences and Humanities Research Council of Canada (SSHRCC), the Canada Research Chairs Program and the Department of Resource Economics and Environmental Sociology at The University of Alberta.

TABLE of CONTENTS

Abstract	ii
Acknowledgements	iii
List of Figures and Tables	vii
Acronyms	viii
Chapter 1.- Introduction	
1.1 Introduction	1
1.1.1 Outline	3
1.1.2 Background	3
1.1.3 Objectives	4
1.1.4 Significance of the Study	5
1.1.5 Strength & Limitations	6
1.2 Literature Review	6
1.2.1 Human-Environment Relationship	6
1.2.2 Traditional Knowledge	8
1.2.3 Sustainable Development	10
1.2.4 Cruise Ship Tourism	11
1.3 Conclusion	13
Chapter 2.- Methodology	
2.1 Introduction	14
2.2 Methodology	15
2.3 Research	18
2.3.1 Scoping	19
2.3.2 Data Collection	19
2.3.3 Instrument of Data and Recruitment	20
2.3.4 Honoraria	23
2.4 Data	23

2.4.1 Data Analysis	23
2.5 Limitations of the Method	23
2.6 Conclusion	24

Chapter 3.- Community’ Perspectives on Cruise Ship Tourism, Sirmilik National Park and Bylot Island Migratory Bird Sanctuary

3.1 Introduction	26
3.2 Results	28
3.2.1 Economic and Cultural Impacts	28
3.2.2 Adverse Effects on Marine and Terrestrial Ecosystems	36
3.2.3 Disruption of Traditional Livelihood	41
3.2.4 Communication	45
3.2.5 Infrastructure	51
3.2.6 Impact on Well-Being	55
3.3 Conclusion	59

Chapter 4.- Formal and “Traditional Rules” to manage Cruise Ship Tourism in the Canadian Arctic, Sirmilik National Park and Bylot Island Migratory Bird Sanctuary

4.1 Introduction	60
4.2 Methodology	61
4.3 Results	62
4.3.1 International Context	63
4.3.2 Federal and Territorial Legislations and Regulations	64
4.3.3.1 Shipping	66
4.3.3.2 Environment	68
4.3.3.3 Tourism	70
4.3.3.4 Nunavut Land Claims Agreement	71
4.3.3 Community’ Perspectives of “Rules“	79
4.3.3.1 Background	79
4.3.3.2 Traditional Knowledge	80

4.3.3.2.1 “Traditional Rules”	81
4.5 Comparison between Formal and “Traditional Rules”	88
4.6 Discussion	90
4.7 Conclusion	91
Chapter 5.- Conclusions	
5.1 Summary of the Thesis	93
5.2 Recommendations	95
5.3 Further Research	97
References	99
Appendices	
A: Project Proposal Description	107
B: Letter of Introduction	111
C: Community Involvement and Regional Benefits	113
D: Participant Information Sheet	115
E: Participant Consent Form	119

LIST of FIGURES

Fig. 1.1 Pond Inlet Location	1
Fig. 3.1 Sirmilik National Park and Bylot Island Migratory Bird Sanctuary locations	27

LIST of TABLES

Table 1.1 Nunavut Cruise Ship Itinerary 2016	2
Table 1.2 Nunavut Cruise Ship Itineraries 2010-2016	12
Table 4.1 Canadian Legislation Timeline	70
Table 4.2 Formal Rules mentioned by Government Representatives or in Legislation	74
Table 4.3 “Traditional Rules” mentioned by community Members	83

ACRONYMS

BIMBS.....	Bylot Island Migratory Bird Sanctuary
CBPR.....	Community-based participatory research
CST.....	Cruise Ship Tourism
EDTA.....	Economic Development and Transportation Agency
HTO.....	Hunters and Trappers Organization
IUCN.....	International Union for Conservation of Nature
NORDREG.....	Northern Canada Vessel Traffic Services Zone System
NRI.....	Nunavut Research Institute
SNP.....	Sirmilik National Park
TK.....	Traditional Knowledge

Chapter 1

Introduction

1.1 Introduction

Cruise ship tourism (CST) is increasing significantly in Nunavut and is having many environmental, socio-economic and cultural impacts on Inuit communities, including Pond Inlet, and important marine ecosystems including those located in Sirmilik National Park (SNP) and Bylot Island Migratory Bird Sanctuary (BIMBS).

Fig. 1.1 *Pond Inlet location.*



From <http://pond-inlet-cruise-tourism.blogspot.ca/>

The community of Pond Inlet (Nunavut) is an Inuit community in the North of Baffin Island in Nunavut territory (Fig. 1.1). According to Nunavut Government web page, Pond Inlet has a

population of 1300, which is mainly Inuit (95%). It is a community close to SNP and BIMBS. The scenery, the location, and friendly community had made Pond Inlet the most visited community by cruise ships in Nunavut (Fig. 1.2). In addition to these characteristics, there are other factors that have led to an increase of cruise ships and passengers in that region. These included warming temperatures that make an earlier ice break in summer (Maher, 2012; Stewart et al., 2007) and the interest of Nunavut Government of encouraging the marine tourism as part of the sustainable development for the territory. This study aims to provide insight into the cruise ship tourism in Pond Inlet and explore how the community’s traditional ecological knowledge maybe used to advance sustainable CST in Pond Inlet.

Table 1.1 Nunavut Cruise Ship Itinerary 2016

Community	Cruise Ships	Estimated Passengers
Pond Inlet	12	2797
Cambridge Bay	8	1902
Resolute Bay	8	980
Iqaluit	6	767
Pangnirtung	6	678
Gjoa Haven	5	812
Qikiqtarjuaq	5	638
Kugluktuk	4	596
Grise Fiord	3	506
Clyde River	2	383
Carpe Dorset	2	298
Kimmirut	2	298
Arctic Bay	1	198
Igloolik	1	100

Source: <http://www.gov.nu.ca/edt/documents-tourism> (July 1, 2016)

This thesis presents the knowledge and experiences of Pond Inlet community members about the impacts of CST on Sirmilik National Park and Bylot Island Migratory Bird Sanctuary. The research is based on narratives provided by semi-structured interviews with local residents. In addition to providing insights about how CST is impacting the local ecosystems and way of life of residents. The research intention was to document these issues, also focused on documenting

“traditional rules” related to how these impacts could be addressed. These “rules” are unique from the territorial and federal legislation and regulations for the region. Berlinger and Sabau (2016) present the relevance of the rules in a society. These authors emphasized the requirement of rules to guide the human behavior and social relations. The rules are presented in different ways, as regulation and norms as formal rules (Berlinger & Sabau, 2016), and within an Indigenous society, unwritten “rules” (Berkes et al., 2000). Berkes et al. (2000) presented the unwritten rules as “rules-in-use”, as part of the traditional knowledge of Indigenous cultures, concept extended in Traditional knowledge section. The larger intention of the study was to document “traditional rules” to improve the sustainability of cruise tourism, which is increasing in Nunavut and elsewhere in the Arctic (Johnston et al., 2012).

1.1.1 Outline

The thesis is comprised of five chapters. Chapter 1 presents an outline of the thesis, objectives, strength and limitations, and the literature reviewed. The next chapter presents the methodology used to approach the complexity of CST in Pond Inlet. The Chapter 3 presents how the Pond Inlet community encounters this industry and the main themes raised by the community are illustrated using direct quotations. Chapter 4 lists the Canadian legislation and regulations related to the CST in the Canadian Arctic. In addition, traditional conduct “rules” specific to the community of Pond Inlet as related to the CST and traditional livelihood activities are explored in the same chapter. The final chapter includes conclusions, recommendations, and remarks provided by this researcher.

1.1.2 Background

There are significant concerns for sustainable development for Indigenous communities in the world, including the Canadian Arctic. Nunavut is the largest territory of Canada, with an area of 2,093,190 square kilometers situated totally within the Arctic. This territory has a population of 33,330 people, 84% of that is Aboriginal, of ancient Inuit cultures and communities, who have been settled there for thousands of years (Martin & Tyler, 1995). According to Statistics Canada, Indigenous people of the reserves in Yukon, Northwest Territories, and Nunavut have less

favourable outcomes in health conditions, household incomes, housing, and education and these factors are appearing to get worse (Lix et al., 2009). The Pond Inlet community is one of those communities with less favourable outcomes.

A major determining factor to consider in the Nunavut's development is its geographical position. Nunavut includes most of the Canadian Arctic Archipelago. Due to its location and the extensive coastal line, Nunavut's economy and development are linked to marine activities. One of those activities is marine tourism. Peter Taptuna (Nunavut Minister of Economic Development and Transportation) declared that the tourism industry represents an important part of Nunavut's economy, the territory is an excellent tourism destination, and the territorial government is focusing on increasing the marine tourism (Nunavut Report, 2013). In particular, CST is a developing industry in the Arctic region. There are many stakeholders involved in this industry, as it relates to Nunavut. Each has their own perspective of the industry, the legislation, and impacts. Current literature focuses on the development of CST, governance, Indigenous communities, and more topics related to CST and Indigenous communities. This research examines CST related to Pond Inlet in particular. As previously mentioned, the Indigenous communities are considered a disadvantage population in Canada (Lix et al., 2009). As a result, many levels of government (regional, territorial, federal) are creating policies for a sustainable development of these communities. Thorsby and Petetskaya (2016) emphasized that the concept of sustainable development should recognize traditional knowledge, Indigenous rights and environment protection into economic development. This perspective of sustainable development highlights the importance of this study in that it presents the traditional knowledge of the Pond Inlet community related to the CST and environment.

1.1.3 Objectives

The objectives of this study are:

1. – Explore the traditional knowledge (Inuit Qaujimatuganqit) held by Pond Inlet elders and land user about the impacts of CST on the community and the local marine ecosystems, including Sirmilik National Park and Bylot Island Migratory Bird Sanctuary.

2. – Document which “traditional rules” are considered important by Pond Inlet residents for protecting Sirmilik National Park and Bylot Island Migratory Bird Sanctuary. Identify formal laws, regulations, and guidelines related to CST and the management of Sirmilik National Park and Bylot Island Migratory Bird Sanctuary and how these differ from the community “rules”.

The information obtained by the interviews provides the basis for better understanding of the Pond Inlet community experiences and observations about CST and its impacts. It helps to understand more about previous research about Inuit attitudes towards CST, which were reported to be largely, negative, in the community of Pond Inlet (Stewart et al., 2011; Stewart et al., 2012). It is clear that the community does not simply have a “bad attitude” towards tourism; rather they have significant observations and experiences, which point to adverse impacts on local ecosystems and the community’s way of life. Addressing these impacts and increased opportunities for local benefits, will potentially improve attitudes towards tourism while at the same time ensure improvements in ecosystems, the economy and the local way of life.

1.1.4 Significance of the Study

Despite extensive academic literature on the subject matter, combined with abundant legislation, regulations, and guidelines related to CST in the Arctic, there is a gap in the literature and a lack of overarching legislation. The literature gap is the lack of community insights on CST, even though the communities and their participation are often widely mentioned within the articles. This study is important because it focuses on the Pond Inlet community perspectives of CST. Although a small population, Pond Inlet, due to its geographic location, is a crucial component of CST in the Arctic Region. Another important aspect of this research is that the CST is experiencing fast growth, the warming trends are expected to continue increasing the length of the CST season, and the Government plans to encourage the industry. It is important to have the community point of view and knowledge to help determine the aspects that should be included in the decision-making process that would allow sustainable development for the community. Those aspects could also be the basis for other communities’ understanding and development. This study will enable the reader

to understand the complexity of the situation that the Pond Inlet community is facing related to CST and the environment changes that are affecting their traditional life. This research presents a list of legislation and regulations that are related to CST and the community and shows opportunities to include traditional knowledge.

1.1.5 Strength & Limitations

One of the strengths of this study is that I was able to visit the community, walk and talk with community members to have a sense of the activity and the life in one of the most northern communities in Canada. Another strength is that the passengers of two cruise ships landed the days I was there and I was able to identify tourist activities and understand the concerns the community members were talking about in the interviews. Another strength of this study is the potential contribution to the academic literature. This study gives the community a way to voice their concerns while documenting and presenting their traditional knowledge.

One of the limitations was the short time I was able to stay in the community. The winter starts in September and it made a difficult stay in the community. Other limitations were that I had the idea that the tourism is an important economic benefit for the communities and this could be a bias in the study; however, the interaction with the community members presented a new perspective on my own ideas. The sample size may be considered small for some readers. Singleton and Straits (2010) pointed that in terms of study samples a simple selection of the available resources is convenient. In this study, the 23 interviews provided information to analyze and can be a starting point for more studies.

1.2 Literature Review

1.2.1 Human-Environment Relationship

This thesis was developed for a master degree in Risk and Community Resilience, which is predominantly focused on better understanding of human-environment relationships, the

recognition of the relationship between the environment and human social values (Dove, 2006). Cronon (1996) explained that, in the 1950's, the concept of pristine wilderness meant that the environment needed to be left pristine and void of any human contact. The only management policy existing at that time was the thought that to protect nature from humans, humans needed to be removed from the environment, even when they were a part of it. However, the environment cannot be isolated from the communities or from humans (Agrawal & Gibson, 1999; Cronon, 1996). Thomlinson and Crouch (2012) mentioned that this idea of human restriction to protect the environment had been the main ideology applied in North America. Several academics consider this concept as an unsuccessful approach to environment protection and conservation (Agrawal & Gibson, 1999; Spaargaren & Mol, 1992; Thomlinson & Crouch, 2012). Agrawal and Gibson (1999) emphasize that this idea provided the context for state guardianship of the environment, leaving aside the communities.

However, this idea of this Human-Environment relationship has evolved around the world and to other international agencies where the communities are involved in conservation, protection and management of the natural resources (Agrawal & Gibson, 1999; Akani, 2012). Brosius et al. (1998) highlighted the link between the social and environment protection movements. These movements combined the humans and indigenous rights with the activism for environment protection, including justice and equity (Brosius et al., 1998). Spaargaren and Mol (1992) presented this evolution as part of the nature of society, which has a better understanding of the Human-Environment relationship and its characteristics. These authors considered that three main aspects in this relationship needed to be examined, “the complexity of the ecosystems involved, the displacement of effects in time and space, and the rapidly increasing scale of the man-nature interaction” (p. 329)

The new “model” recognizes the relevance of time and place specific knowledge (Agrawal & Gibson, 1999; Brosius et al., 1998), defined by Berkes (2000) as traditional knowledge. Berkes (2009) stated that traditional knowledge provides a better understanding of climate change, in the context of environment and conservation. Borrini et al. (2004) and Reimerson (2013) and other authors have emphasized that the recognition of the unique traditional knowledge (TK) of

Indigenous/aboriginal people embodies the vision of protecting the environment for humans, instead of protecting from humans who inhabit.

1.2.2 Traditional Knowledge

Dove (2006) pointed out that traditional knowledge was first recognized in the Twentieth Century, this also is part of the social movements mentioned as part of the Human-Environment relationship. This recognition emphasized that the Indigenous knowledge is part of the indigeneity concept and “can serve as the basis for more successful development interventions” (p. 195). In addition to their knowledge, the recognition of their skills, and capacity in one-way integration for equity (Borrini et al., 2004).

Indigenous people have inhabited the Arctic for millennia and depended on its living resources for their subsistence (Nuttall et al., 2004), following the patterns of the wildlife to move and settle (CAFF, 2002). The Inuit identity is based on their relationship with the land, and their holistic approach—where everything, material and spiritual, is interconnected with the environment (Thorsby & Petetskaya, 2016; Robbins, 2015). The first idea to be recognized in traditional knowledge is one ecosystem – humans and nature are not separated. The relationship between the environment, land, and social values are all included, as part of one concept (Borrini-Feyerdane et al., 2004). The Inuit do not separate the people from the land, they recognize cultural and spiritual values, and consider the role of indigenous or local communities in biodiversity protection and sustainable use (Borrini-Feyerdane et al., 2004; Nuttall et al., 2004; Turnet et al., 2000). Berkes et al. (2000) defines TK as “a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with the environment” (p. 1252). Other authors, like Turner et al., (2000), also name TK as traditional ecological knowledge and wisdom. For the purpose of this thesis both terms will be used interchangeably.

From the idea of one ecosystem, natural resources are not only part of the environment but they are also part of security, the good life, health, and freedom, summarizing the human well-being (Noe & Kangalawe, 2015). In the same context, but in particular for the Inuit, Pearce et al. (2011) stated that their TK as part of the Inuit culture makes no difference between “living, learning and education” (p. 271).

This recognition of TK by Western societies has been difficult because of the differences between scientific knowledge and TK (Berkes et al., 2000). Western/scientific knowledge is about concepts generated in a controlled environment, considering the environment as static; it tends to reduce the parts and separate the parts of a whole, generalizing in absolute terms (Pimbert & Pretty, 1995). In contrast, the TK is about living, about an ecosystem changing constantly. Berkes (2009) stated that TK is a process, that “to teach what to look for and how to look for what is important” (p. 153). Underlying that, TK does not distinguish between use and protection, between social, biological, or economic objectives (Borrini-Feyerherne et al., 2004; Berkes, 2008). Furthermore, the indigenous or local communities have their own institutions. Pimbert and Pretty (1995) emphasized that most of the time these institutions are not recognized because they are unwritten and have different kinds of ownership, or are created in a different way than Western institutions. This lack of recognition does not mean they do not exist, though sometimes government intervention neglects and replaces them with bureaucracy (Pimbert & Pretty, 1995). Some authors, like Manseau et al. (2005), focus on the benefits of combining both types of knowledge and institutions.

Dove (2006), among other authors, related the shift of the separation of conservation and human development, to combine both in one goal of sustainable development. This author emphasized that the discourses created a base on the ideas of humans-environment separation, which have been modified gradually in a slow process to accept and include TK. Reimerson (2013) is another author that pointed out the idea to acknowledge indigenous peoples and recognize their traditional ecological knowledge by encouraging their participation in consultation, planning, monitoring and decision-making in conservation areas. Despite this new approach and acknowledgement that indigenous communities are part of the new common sense of nature, they are still often

marginalized (Willems-Braun, 1997). According to Usher (2000), for the past two decades, Canada has been inclusive to the indigenous peoples. Despite this inclusiveness, Willems-Braun (1997) and Usher (2000) agreed that indigenous peoples have not been heard on issues concerning the environment and their lands, despite recognition by the Canadian Acts.

1.2.3 Sustainable Development

During the era of “industrialization”, the development determinants were based on economic aspects (Greenwold & Hold, 2016; Thorsby & Petetskaya, 2016). In the last century, the sustainable development concept was developed, when environmental protection and the recognition of the human rights were introduced as important concepts next to the economic one (Thorsby & Petetskaya, 2016). Brundtland (1987) explained the World Commission on Environment and Development concept of sustainability as the “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (p. 43). Noe and Kangalawe (2015) stated the discussion of traditional ecological knowledge as part of the communities’ development. They examined the links between development and economics values in policies of rural development. In the same context, Stankey et al. (2005) approached this notion in a similar way examining economic values found in water and forests. Domínguez-Torreiro and Soliño (2015) raised another important point concerning the economic values for development, “It is a well-known result in both environmental economics and natural resources management that you will not be able to manage what you are not able to measure” (p. 27), or it will be considered equal to zero. Johnson (2002) also recognized the difficulty of quantify economic value for environmental aspects, not as the economic benefit can be presented. The results would be without any economic policy. Unfortunately, the natural resources in the base of community welfare are without any economic value, until measured by employment and other well-categorized economic activities (Dominguez-Torreiro & Soliño, 2015). The relationship between development and community welfare is particularly important in communities, which depend directly on natural resources and their livelihood (Agrawal & Gibson, 1999). This means that food security depends on the resources extracted directly from either hunting, or fishing, and other activities.

For the purpose of this study, the Arctic Council Working Group defines sustainable tourism as “tourism that minimizes negative impacts and maximizes socio-cultural, environmental and economic benefits for the residents of the Arctic” (PAME, 2014). This organization considers that increasing jobs for residents, increasing income, encouraging local manufacturer of goods, improving living standards, generating local and federal taxes, conserving biodiversity, creating economic values, helping to communicate ecological and cultural values, supporting research and development, are the benefits of a sustainable tourism (International Union for Conservation of Nature [IUCN], 2002). Martin and Tyler (1995) mentioned that these benefits could not be attained without the adequate policies and legislation implementation. These authors also emphasized the importance of regional level policies in the strategy for Arctic marine management. The IUCN mentioned that it required strategies to help to restore and improve communities’ development, by building capacities to preserve and attract tourism, and the interest of the tourism in community traditions offers an opportunity to preserve them. The IUCN (2002) considers two important aspects to monitor. Those aspects are the visitor impact and service quality. The first one includes the social and environmental impacts of tourists; the information from tourists is collected and analyzed over time. The second one is concerned with evaluating the information collected about the services to address the tourists’ expectations. To meet the objective of optimized tourism industry monitoring, some of the data required is concerned with environmental, experiential and psychological, economic, socio-cultural, and infrastructural impacts (IUCN, 2002).

1.2.4 Cruise Ship Tourism

The IUCN (2002) stated that tourism that offers the opportunity to experience the environment and landscapes is increasing. Specifically, the cruise ship tourists in the in Arctic are looking for the first-hand experiences (Johnston, 2015). This includes CST companies landing passengers in the communities and/or protected areas, and interaction with local people, seeking wildlife and landscape (Reynolds, 2016). However, a cruise ship can be particularly problematic, as it can carry many people and can cause environmental damage and social impacts more intensively than other kinds of tourism (IUCN, 2002; Johnson, 2002). It was mentioned in the previous sections that one of the characteristics of sustainable development is the social/cultural aspect. To achieve the goal of respect of social/cultural aspects into economic development, the Association of Arctic

Expedition Cruises Operators (2014) recommended a good relationship with the communities and Aboriginal peoples. All these considerations have to be included in the tourism plans to mitigate the possible negative impacts.

In particular, Canada’s CST Industry is complex. Dawson et al. (2014) mentioned that the CST in the Arctic region takes into account several aspects affecting the enforcement of regulations. Those aspects are, among others, that Canada has the largest coastline in the world, the inaccessibility of some areas, deficiencies of communication and transport infrastructure, and extreme climate conditions (Johnston et al., 2012). The cruise season in Canada runs only from May to October, August being the busiest month. The Nunavut cruise tourism showed an increase in passengers from 550 in 2005 to 17,000 in 2014 (Funston, 2014). Cruise tourism plans project 25 cruise ships per year by 2018. This projection shows the necessity for developing strategies, in terms of jobs and local industry. Looking to achieve the goals of preservation and promotion of Inuit culture for social and economic development. Another important consideration in the Nunavut’s projection is the susceptibility of cruise tourism to climate change. The cruise ship itineraries in the Canadian Arctic have grown considerably because of global warming, which allows access to areas previously considered inaccessible (Johnston, 2015; Dawson et al., 2014). The relationship between climate change, tourism, and communities in Nunavut represents an important issue to be considered in the policies and regulations, and also in developing plans.

Table 1.2 Nunavut Cruise Ship Itineraries 2010-2016

	2010	2011	2012	2013	2014	2015	2016
Vessels/Voyages	20	14	19	29	23	34	36
Estimated Passengers	1398	1353	2153	3289	1905	3364	4758

Adapted from <http://www.rcinet.ca/eye-on-the-arctic/2017/03/28/nunavut-gears-up-for-increase-in-arctic-tourism/>

The Cruise Lines International Association (2016) reported that the worth of cruise tourism has increased 23% from 2004 to 2014, and is growing faster in popularity than land-based tourism. The significant growth of the industry started in 1980, and by 2000 reported an increase of 50%, a

record of the tourism industry (McDougall, 2001). In the last decade, the growth in the Arctic CST has been exponential. Over the years, 2011 and 2012 was a decrease in the numbers for due to the recession. Nevertheless, this sector recovered in 2013 and continued to grow (Johnston, 2015). Now, in the Canadian Arctic, cruise tourism voyager has also increased substantially. From 1970 to 2014, the passenger ships increased 114% and pleasure craft 300%. The first one refers to commercial passenger vessels, and the second one to a private pleasure craft, both to tourism activities (Funston, 2014). To have a better understanding of the numbers of cruise ship and passengers in Nunavut see fig. 1.3.

1.3 Conclusion

This first chapter introduced the thesis and provided a context of the cruise ship tourism and the Pond Inlet community, as well as the theory, objectives, significance of this study, and literature review. The literature reviewed places in the research context, namely Canada and the Canadian Arctic. The Canadian government (federal and territorial) are trying to encourage the tourism industry in appropriate ways for the Nunavut communities. However, CST in Nunavut, specifically in Pond Inlet, to be sustainable a whole set of information has to be considered (Nunavut Tourism Strategy, 2013). Also presented is the importance of the Inuit traditional knowledge as a base for conservation, protection, and use of the natural resources, and to manage the Sirmilik National Parks and Bylot Island Migratory Bird Sanctuary. To avoid possible problems the communities have to be heard and involved in the planning, in the process to receive the tourism, and in monitoring the effects (IUCN, 2002). The separation of human beings from the environment is not possible in the Inuit culture and for this CST industry development. This is an era of the reconciliation process between the ideas of environment and societies for achieving sustainable development, as it is presented in environmental sociology theory (Borrini, 2004; Reimerson, 2013). This is examined through a case of cruise ship tourism industry development in Pond Inlet, presented in the next chapters.

Chapter 2

Methodology

2.1 Introduction

This chapter presents the methodology utilized for this study. This research focused on better understanding community perspectives about the impacts of cruise ship tourism (CST). More specifically, the research addressed two major questions:

- What kind of traditional knowledge or Inuit Qaujimajatuqangit is held by Pond Inlet elders, land users and other communities about the impacts of CST on the community and the local marine ecosystems including, Bylot Island Migratory Bird Sanctuary (BIMBS) and Sirmilik National Park (SNP)?
- What kinds of “traditional rules” are considered important by Pond Inlet residents for protecting BIMBS and SNP and how do these differ from the rules and regulations that are in place and enforced the federal and territorial governments?

These questions were developed after an initial scoping interview with staff from the government of Nunavut (spring, 2016) and based on a review of the literature related to CST in Nunavut and in other locations.

To address these questions, the research involved fieldwork in the community of Pond Inlet including community-based semi-structured interviews with community members and different representatives of the territorial and federal governments.

2.2 Methodology

Research in the North is characterized by distinct stages. This process in the Canadian north is strongly influenced by histories of research in which Inuit peoples were considered subjects of research rather than partners or collaborators in the research process. Although past research was considered of limited benefit to northerners, today many processes in place protect and empower Inuit communities to ensure research is of benefit. For example, the research licensing process that is managed by the Nunavut Research Institute (NRI) insures community permission.

As I was planning to conduct research in Nunavut, I required a Nunavut Research License from the NRI, as stipulated in Nunavut's Scientists Act. The NRI "provides mentorship, guidance and support to scientist working in the territory" and "ensures that the communities in Nunavut are consulted and engaged in the research" (for more information visit the web page). That a collaboration between academia and communities are well done, and settle the conditions for a better understanding of the traditional knowledge. The Institute is located in Iqaluit, Nunavut. The research documents: summary, proposal, questionnaires, consent forms where sent for review in May 2016. The documents were in English and Inuktitut. License No. 01 035 16N-M was granted for research in Iqaluit and Pond Inlet through August to December 2016. The license for the project was listed under the name *Sustainable Development in Nunavut*. The license granted was to do research in Iqaluit and Pond Inlet. Moreover, the local Mittimatalik Hunters and Trappers Organization (HTO) and Pond Inlet Hamlet agreed with this study and objectives.

In addition, I needed an ethics approval by the University of Alberta. The ethics guidelines to work with Canadian aboriginal people integrates different aspects. Those aspects are a holistic point of view; integration of the community in a co-learning process; and, the respect of mutual interests (Bull, 2010). The ethics approval was granted by the Faculty of Agriculture, Life, and Environmental Sciences and Home Economics Human Research Ethics Board of University of Alberta, ID Pro00064822, on July 2016.

However, even when there is a license granted, the researcher must be aware of the social context and various environmental issues. In Pond Inlet, one of the key issues of context that influenced the researcher was the suggestion of tourism's economic benefit for the communities. Moreover, this project was set in a context of ongoing industry development in the region. An industry that started two decades ago, but exponential growth began in 2006 (Johnston et al., 2012). This study could be helpful for many different stakeholders; however, it was done to strengthen Pond Inlet sustainable development.

This study followed a community-based collaborative research approach. The research was community-based in the sense that the community had active participation, for the goal of social action (Minkler, 2005). It was collaborative in nature by virtue that CST was defined early on as a problem of concern to the community; the role of the researcher was thus to assist in investigating the problem and assist the community in voicing its knowledge and concerns about the impacts and their insights about the rules needed to better protect BIMBS and SNP. Collaborative research approaches come in many forms but are strongly influenced by the literature and practices of participatory research; it has an important history globally as well as in Canada (Kellert et al., 2000; Stronghill et al., 2015).

This approach is also recognized by the Royal Society of Canada that defined the Community-based participatory research as “systematic investigation with the participation of those affected by an issue for purposes of education and action or affecting for social change” (Minkler, 2005, p. ii3). Numerous scholars now write about participatory action research in many disciplines including environmental sociology (Berkes et al., 2000; Stronghill et al., 2015). Among the fundamental principles of the community-based participatory research is the “building cross-cultural collaborations” (Chavez et al., 2004, p. 395). In the context of this research, it is also a means to better understand Inuit knowledge (of Pond Inlet) about the effects of the CST industry and how it might be better managed. The project was designed to ensure community members were active participants in the research to provide the information to be analyzed (Laidler, 2006).

The research was largely qualitative in nature; narratives were documented using semi-structured interviews guided by questions defined and adapted to plain language. The questionnaire for the community members interviews also were translated into the local Inuit language dialect (North Baffin dialect of Inuktitut).

Qualitative methods are widely used in the social sciences including environmental sociology (Singleton & Straits, 2010). This research project used semi-structured interviews to elicit qualitative information about the effects of CST on the community and the local and regional ecosystems. This qualitative information included historical and contemporary descriptions of the areas, observed changes associated with CST, interpretations of the significance and implications of observed changes based on local values and beliefs as well as recommendations about rules that should be in place to address historic and emerging social and environmental issues.

A major advantage of the semi-structured interview is that it is flexible enough to allow for changes and open conversation. There are many different texts, which highlight techniques to be used. The *Negotiating Research Relationships with Inuit Communities* (ITAK & NRI, 2006) is a compilation of best research practice to work with communities in the Canadian North, to have a better understanding and relationship with the communities. These guidelines aim not only to provide a better understanding of the Inuit beliefs, practices and knowledge, they also created an opportunity for successful research by providing the communities with access to research conducted in the region.

In addition to the broad and multi-disciplinary literature on qualitative research, the methodology for this project necessarily considered best practices for methods of TK research. A subset of this research deals with methods for documenting Inuit Qaujimagituganqit.

Huntington (2000) suggests there are four main methods for TK research: semi-directive interview, collaborative fieldwork, questionnaire, and analytical workshops. The semi-directive interview

was used in this study. It is defined by Huntington (2000) as the method where the “participants are guided in the discussions by the interviewer, but the direction and scope of the interview are allowed to follow the participants’ train of thought” (p. 1271). This method is particularly useful in studies where there could be issues of language. This method provides participants the opportunity to bring information to the table, information that the researcher was unaware of. A map of the Canadian Archipelago region was part in the interviews to help participant’s memories. The interviews were audio recorded.

The funding for this project was obtained from Social Sciences and Humanities Research Council of Canada, the Canada Research Chairs Program and the Department of Resource Economics and Environmental Sociology at the University of Alberta.

2.3 Research

The first step in this research was a literature review of four main areas of theory and case studies. The research problem, which was defined through scoping conversations with staff of the Government of Nunavut in early 2016, challenges the conventional notion of the benefits of tourism. It is often taken for granted that tourism benefits local communities (Brida et al., 2015). This assumption was questioned based on the diversity of communities, and heterogeneous perspectives of what sustainable development means for each tourism stakeholder. Pond Inlet is a small community and tourism is a small-scale industry, but even its small scale generates impacts.

Prior to commencing the research activities, two guiding questions set were created for each group of people to be interviewed –community members and government representatives:

- What kind of traditional knowledge or Inuit Qaujimagatunqangit is held by Pond Inlet elders, land users and other communities about the impacts of cruise ship tourism on the community and the local marine ecosystems including, BIMBS and SNP?

- What kinds of “traditional rules” are considered important by Pond Inlet residents for protecting BIMBS and SNP and how do these differ from the rules and regulations that are in place and enforced by the federal and territorial governments?

The description of the research activities are divided into scoping activities and data collection. Furthermore, the research activities for the data collection phase were in two parts: research with local residents of Pond Inlet and research with government representatives.

2.3.1 Scoping

The scoping phase involved exploring my research ideas by talking with people that have knowledge or have worked in the Nunavut, and with the tourism industry, and representatives of the Nunavut Government (anonymous). In particular, Professor Mark Nuttall presented a lecture of the Arctic communities talking about tourism, marine ecosystems, protected areas and international organizations, that confirmed my research ideas were relevant. In addition, I reviewed the news looking for communities perspectives related to the cruise ship tourism. The news related to these themes was focused on the “new great Crystal Serenity cruise ship” going to Cambridge Bay and Pond Inlet for first time in the summer 2016.

2.3.2 Data Collection

The data collection phase was carried out from August 2nd to September 1st of 2016. The participants were recruited with help from the NRI, local Mittimatalik HTO, and through word of mouth, snowball sampling. Participants were compensated with an honorarium and thanked for their time and knowledge shared.

The research activities in Iqaluit and Pond Inlet were conducted in August 2016. The time I spent in the communities allowed me to meet people and build relationships with community members, government (federal/territorial), and different stakeholders. I was also able to gain first hand

insights of communities' life. In Iqaluit, I explored the importance of CST in the region and determinate the relevance of the topic to the Nunavut Government, through interviews with the Economic Development and Transportation Agency (EDTA) representatives. At this point, the study was not focused on Pond Inlet yet. I had a meeting with the Iqaluit HTO Board to present the project, the HTO commissioned a one board member to translate to Inuktitut, as most of the board members do not speak English. In that meeting, the board members expressed that the CST is not a concern for the Iqaluit community and I should consider going to Pond Inlet. EDTA representatives also recommended this study focus on Pond Inlet, since Pond Inlet is the most visited community in the region by cruise ships. As a result of the new information shared in these conversations, Dr. Brenda Parlee (Supervisor) and I decided to focus on Pond Inlet. I requested the extension of the Research License; it was obtained two days later. I talked to the Pond Inlet HTO to explain the research and agreed to have a meeting. I arrived in Pond Inlet on August 25th, and the first meeting I had was with the HTO Board. In that meeting, I presented the study, goals, topics, interviews questions, and consent forms. The documents were in English and Inuktitut. I did the presentation in English and I was assisted by an interpreter to translate to Inuktitut (Philip Paneak). All the members expressed the interest and importance of the CST for Pond Inlet, and their willingness to participate in the project. A board representative was commissioned to give me a list of community members recommended to participate in the project. The list included elders, youth, females and males, people affiliated to the HTO and other Pond Inlet organizations. During the next days, the interviews were conducted with people from the list, and others who were mentioned by people already interviewed. During this time, in Iqaluit and Pond Inlet, personal and a group interviews were held.

2.3.3 Instruments of Data and Recruitment

The instrument for data collection was the interview guide for the semi-structure interviews, which included 10 questions (See Appendix section). The questions were, general and designed to be flexible. They were also designed to encourage participants to describe their experience or observations rather than simply saying yes or no (Singleton & Straits, 2010). The guiding questions were designed for both face-to-face interviews, and email. Two questionnaires were created; one for community members and another for informants knowledgeable about territorial and federal

legislation and regulations. In addition, a youth group of the Pond Inlet Arctic College participated in a collective interview. This group was integrated for Inuit youth interested in entrepreneurs' activities relating to CST.

In Iqaluit, most of the interviews were conducted at Nunavut Arctic College. In Pond Inlet, interviews were conducted mostly in a lounge at the Sauniq Hotel and in local homes. For the interviewees with elders and some community members an Inuktitut interpreter worked with me; he translated questions and responses into Inuktitut. The interpreter is registered as interpreter at the community and in the Legislature in Iqaluit. Most interviews were in English and notes and audio recordings were made. Interviews length ranged from one to two hours, approximately. All the interviewees were encourage to talk about their own beliefs, knowledge, observations and experience related to the impacts of CST and how it should managed to address their concerns or identified impacts on the community and the marine ecosystem.

The semi-structured questions were the best approach to conduct the research as it allowed the participants raise topics I was not aware of including links to the CST, biodiversity conservation or the community. The review of the content of each interview gave an opportunity to include new topics to the subsequent interviews. This allowed to increase the quality of the information for the analysis. The data were recorded on a digital audio recorder. The interviews were transcribed using a voice-recognize software. The software process the audio files into word document, the word document was reviewed listening the audios and verifying the documents were correct and according to each interview. I hand-wrote notes during four interviews that did not consent the audio recording.

An interview with a youth group in the Arctic College (Pond Inlet) was held in August 30th. A professor of this group contacted me and suggested that the activity would be interesting for the group. The participants of this group were attracted to entrepreneur activities, including activities related to tourism. The discussion was guided by the questionnaire created for the interviews with community members. The interview with the group took two hours, the group did not consent to

the audio recording and notes were taken. The group signed the consent form as group. The professor was part of the group and encouraged the participation of all the students.

Criteria for selecting the community members' participation included residency of longer than 10 years, previous interaction with tourists or CST, and consent to be interviewed. An effort was made to ensure balance in gender, socio-economic status (employed, not employed) as well as degree of benefit from the CST industry. A meeting with the Local HTO to introduce the project was a critical first step in identifying both a translator and interviewees. An introduction to the project was given to potential participants by a phone call or face-to-face visit. In the first approach, the purpose of the research was explained and if the person agreed to participate, an interview was scheduled. In an attempt to make each interviewee feel as comfortable as possible, the first questions were about general background, and interaction with tourists the participant has experienced.

At the start of each interview, an introduction of the project was read and consent was sought in writing. After the introduction, and if the participant agreed to participate, the consent form was reviewed and signed. The purpose of the research was clearly explained, including their right to quit or finish the interview at any moment the person wanted to. In addition, specifications about the data collection procedures and storage of all the files were included in the introduction (See Appendix). These activities were conducted in English and Inuktitut, according to the participant's language of preference.

The interviews with government representatives had questions related to the participant role, activity in the job, previous experience with cruise ship tourism, and knowledge about legislation, regulations, and rules related to CST, and SNP and BIMBS. The interviews occurred in interviews offices or by email. The participants were selected by the relationship of each agency to CST or the community. A special consideration was made to include agencies representatives that had experience with shipping by itself. A first contact by phone or email, and follow-up emails during the scoping and research activities were conducted. The questionnaire was adjusted to each

participant, accordingly to the government agency activities (See Appendix). The email interviews considered the reply answers/comments replayed an implicit consent.

2.3.4 Honoraria

The community members were presented with a \$100.00 honorarium for participating. These honoraria were provided in a grocery store gift card at the close of each interview.

2.4 Data

A digital voice recorder was used to record the interviews. The audio files were stored on my laptop while in the communities, and a backup in General Service Building office at the University of Alberta with hard copies of the interview transcripts, and consent forms. Transcriptions were conducted by me during September 2016. When the thesis is completed, all the documents and files will remain in the office for five years, as was approved by NRI and the ethic board.

2.4.1 Data Analysis

A diversity of data was collected from the interviews from both Pond Inlet and government. All the data was qualitative and narrative in nature and therefor required a thematic narrative analysis to identify key themes and sub-themes in the responses to each of the questions (Federay & Muir-Cochrane, 2006). These themes and sub-themes became categories by which all qualitative data was organized for the thesis results (See Chapter 3 and 4 results sections).

2.5 Limitations of the Method

One of the limitations of this study is language. Inuktitut is the traditional, common language of Pond Inlet community. Searles (2008) conducted a research in the Baffin Island (Nunavut) and highlighted the relevance of the language in the Inuit culture. The language underpins Inuit identity. The importance of the language the Inuit culture raised my concerns about how well I could understand their traditional knowledge and “rules” without speaking the language myself. I

therefore depended strongly on the local interpreter. The translation was sometimes difficult. For example, the interpreter mentioned few times that there was no easy translation for some Inuktitut words. It was also sometimes difficult for me to encourage the respondents to explain their ideas or knowledge extensively as I did not speak Inuktitut.

Another limitation was the time in the communities. The field trip was done in summer season; it is also the time when community members go outside in the land or summer camps. This made difficult to do more interviews, and meet important community members. Another limitation related to the time I was there, is that it is also the cruise ship season. This meant the people who work with the tourists were getting ready to receive the tourists or were with the tourists and made difficult the time to do more interviews.

The amount of information gathered by the semi-structured questions could be considered a problem or limitation. The responses relating to economic benefit were subjective and were therefore susceptible to misunderstanding. The community members who work with tourist directly, talked about the economic benefit; but the rest of the community did not even mention benefits. These opposing perspectives can be interpreted as a bias of the respondents due to employment.

2.6 Conclusion

The qualitative research methods utilized to understand the perspective of Pond Inlet community of cruise ship tourism were presented in this chapter. The research employed community-based collaborative methods in order to address two key questions:

- What kind of traditional knowledge or Inuit Qaujimagatunangit is held by Pond Inlet elders, land users and other communities about the impacts of cruise ship tourism on the community and the local marine ecosystems including, Bylot Island Migratory Bird Sanctuary and Sirmilik National Park?

- What kinds of “traditional rules” are considered important by Pond Inlet residents for protecting Bylot Island Migratory Bird Sanctuary and Sirmilik National Park and how to these differ from the rules and regulations that are in place and enforced the federal and territorial governments?

The best data collection method for addressing these thesis questions was the semi-structure interviews. Given CST is increasing in Nunavut and the impacts on communities and ecosystems are becoming more problematic, the research was of tremendous importance and urgency to local residents. Given that there is little published related to traditional knowledge about CST including “traditional rules” for protecting BIMBS and SNP, the research is also of academic significance.

Chapter 3

Community' Perspectives on Cruise Ship Tourism, Sirmilik National Park and Bylot Island Migratory Bird Sanctuary

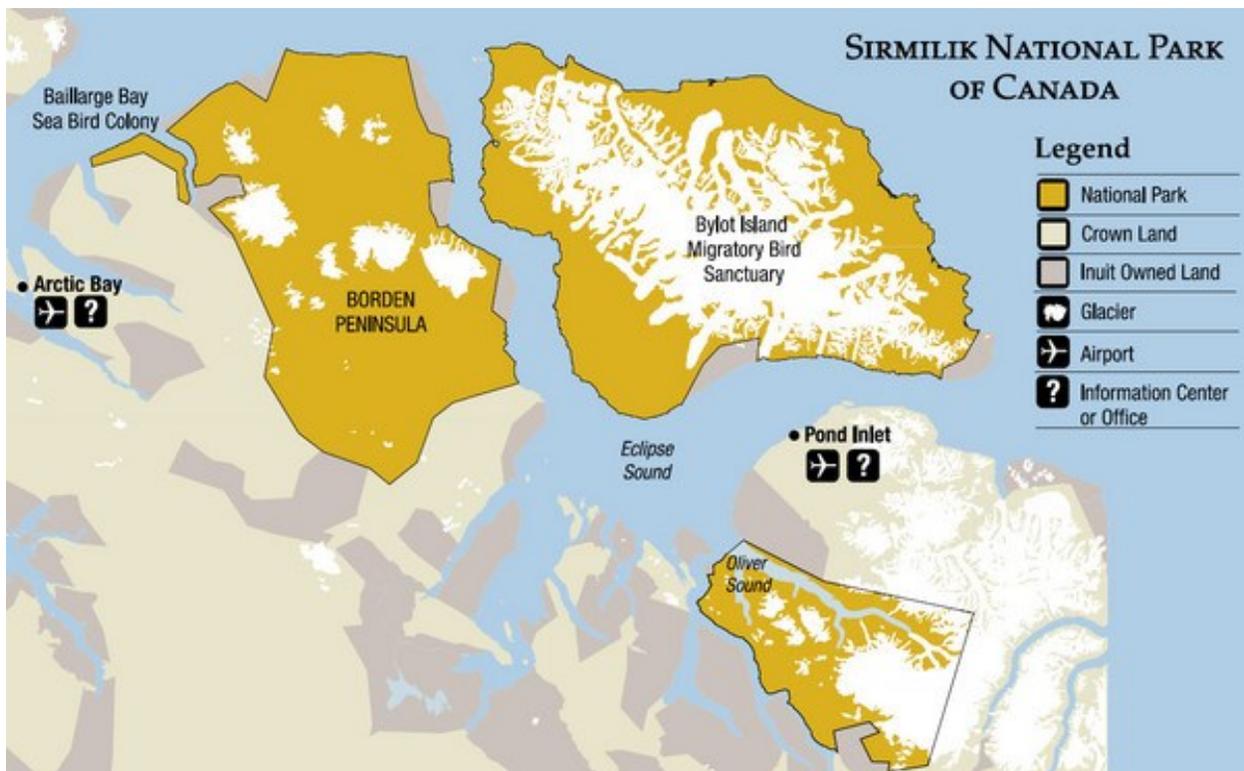
3.1 Introduction

Cruise ship tourism (CST) has been increasing dramatically in the high arctic as a result of warming temperatures and a growing global fascination with arctic peoples and ecosystems (Johnston et al., 2012). The spike in the number and size of ships passing through sensitive habitats such as Bylot Island Migratory Bird Sanctuary (BIMBS) and Sirmilik National Park (SNP) and in their communities are of concern of local Inuit peoples including those from Pond Inlet. Previous research on the tourism-climate interface have led to various conclusions about the costs and benefits to communities and the environment. Of greatest concern and value are the perspective of local communities who are most directly impacted by tourism activity. Early work suggests that local attitudes towards cruise ship tourism are largely favourable in areas such as Cambridge Bay. However, there have always been more significant concerns in Pond Inlet, which is one of the more visited areas of Nunavut (Stewart et al., 2012).

Relatively little research has focused on the traditional ecological knowledge of Inuit Qaujimagatuqangit or Inuit communities that underpin negative or resistant attitudes. To address this gap, community-based research was carried out in the community of Pond Inlet in August 2016. Guided by the local Mittimatalik Hunters & Trappers Organization, the research (lead author) carried out 15 interviews with elders and land users to learn more about local observations and experiences of cruise ship tourism and its impacts on the community and the BIMBS and SNP. A second set of questions aimed to elicit interviewer belief and principles or “traditional rules” based on Inuit Qaujimagatuqangit that should be in place to protect these areas and the community (chapter 4). Interviews were carried out with the assistance of a local translator (Philip Paneak) and were audio recorded and transcribed. A qualitative analysis involving coding of key themes and sub-themes was carried out in order to identify common issues and concerns among interviews. The most significant of these themes (6) are presented in the results section: economic

and cultural impacts, adverse effects on marine and terrestrial ecosystems, disruption of traditional livelihoods, communication, infrastructure, and impact on well-being. I encouraged the community members to express their concerns in complete freedom. The CST industry has multiple stakeholders, like community members, cruise ship operators, federal and territorial governments. This situation makes different perspectives into consideration (Dawson et al., 2014) that challenge the right approach for a sustainable industry. This section shows the community's perspective of CST in their community, and the relationship with other stakeholders. This could help to understand the Inuit culture and to identify what is required to support Pond Inlet sustainable development.

Fig. 3.1 Sirmilik National Park and Bylot Island Migratory Bird Sanctuary locations



From <http://libguides.gwumc.edu/c.php?g=27779&p=170351>

3.2 Results

3.2.1 Economic and Cultural Impacts

Economic issues were a major theme discussed by interviewees from Pond Inlet. The majority of those interviewed (86% or 15 people) suggested there were no economic benefits, or insufficient benefits that offset their concerns about the CST related environmental issues and impacts on traditional economies.

“I haven’t seen any economic benefit from cruise ships, I think maybe there is more selling of art or carvings, but I haven’t notice it” (Elijah Panikpekochoo)

“The economic benefit of cruise ships shouldn’t be taken for granted at all. The economic benefits of cruise ships are really quite small in the territory and concentrated in a certain portion of the population” (031102)

For two residents (14% of those interviewed), CST presents significant economic benefits; these individuals represent the cultural performance group and the Visitor’s Centre in Pond Inlet.

“The money from the cruise ships goes to the visitor center, for the cultural performance only” (Samuel Arrenk)

“The group for the cultural performance are very good; they get well paid, so they benefit” (Philippa Ootoowak)

Some cruise ship companies arrange cultural performances or activities months before going to the community.

“We [the hamlet] have the ability to negotiate with cruise ships months in advance, sort a proactive, make sure that works for cruise ship industry and create a revenue and benefits locally, at the community level” (Samuel Arrenk)

A related concern is the uncertainty or understanding of what actual economic benefits are being achieved; there is no formal measures or monitoring of the revenues of CST in Nunavut, including those achieved in Pond Inlet.

“There might be sentiment in the community [that] there’s not enough economic impacts by cruise ships, I have to say there is always room for more. The thing is that we don’t have [know] how to measure the economic impact (NG) yet” (020101).

There is also the problem of the short time period in which economic opportunities from CST can be south. The length of the cruise ship season was only 50 days in the summer of 2016.

“We receive the cruise ships in the whole month of August and the first week of September, so five weeks is the cruise ship season, when the area here is free from ice” (Samuel Arrenk)

Concerns about the short season of CST are compounded by the fact that it falls within an important seasonal harvesting period for seals and narwhals.

“It’s very chaotic! We’re trying to do our best, because the cruise ship season is the hunting and camping season too” (Samuel Arrenk)

Many people also pointed out that the CST season is at the same time as “family season” which creates a situation of having to choose between economic opportunities and their families.

“Having seen the growth of cruise ships, it is pretty overwhelmed by the time we get 10 to 11 cruise ships, they tend to come in weekend, and the weekends are the only chance we get out with our families before it gets too cold” (Philippa Ootoowak)

Another person commented that someone found a picture of herself and her son on the internet – but she had not given consent for the photo to be taken.

“Once I found a picture of me carrying my baby on the internet, no one asked for my permission. I didn’t know what to do, be proud or angry” (010702)

Although there was extreme opposition by several interviewees, that majority expressed moderate views but were still opposed to CST.

“I’m an ordinary citizen who grew up in this land and I had never had any economic benefit from the cruise ships. I prefer not to have the cruise ships or the tourists walking around in our community” (Gmailie Kilukishal)

According to the interviewees, the community only receives an economic benefit from CST when the cruise ship company and community agree on the cultural performances or activities.

“We have a couple of French ships, luxury type; they don’t want cultural performance usually, been offered but never wanted, we feel like they just stop to say they being here and then move on” (Philippa Ootoowak)

Those cultural performances mean employment for the artistic group. According to some interviewees, it is always that same small group of people hired for the cultural performances so the economic benefits are not equal in the community

“We have a lot of good comments over the years about cultural performance, because they are a very good group doing it over the last 20 years, very professional” (Philippa Ootoowak)

The sale of arts and crafts could be seen as an economic benefit for the community according to some interviewees. Some artists however are not able to capitalize on the opportunity to sell their artistic work as they lack resources to purchase materials and tags (that outline what material the artistic work is made from, price, artist’s name) in advance and/or lack time to produce the appropriate work.

“We also have, sometimes, workshops about money management, because if they [artists] sell they have a lot of money and the rest of the year they don’t sell to survive, but we don’t have the facilities to teach all that kind of things up here” (Samuel Arrenk)

They have to create a stock during the year to sell in the summer. However, this situation is nearly impossible.

“Just a few artists have material and stock to sell before the cruise ship season” (Samuel Arrenk)

Taking into account money and time, if the artist spends the rest of the year creating stock for the cruise ship season there is not enough time for the artist to work to have incomes for daily life expenses.

“Inventory is an issue, if they [artists] can build up an inventory at the visitor center ahead of time, but they want money now, they have to put food on the table” (Philippa Ootoowak)

Moreover, some countries have bans regarding some of the materials the artists use (e.g. seal skin and ivory) and they do not have access to other materials.

“A friend always give me advice on the kind of things [art pieces] and try to get people here understand this, they [tourist] just can’t take heavy things, some cases cannot take seal skins and ivory” (Philippa Ootoowak)

Although some tourists will buy arts and crafts, the majority of tourist just walk around, admire the community and the scenery, and offer no economic benefit.

“I haven’t seen any economic benefit; I think they are here because the scenery, that’s all they do, look the scenery” (Paniloo Sangoya)

“Most of the tourist don’t buy anything; I think they can’t take that home” (Gmailie Kilukishal)

However, reactions and opinions represent feedback regarding visitation to Pond Inlet; an entirely different situation is documented for CST that does not bring their passengers ashore in Pond Inlet, but rather visit the surrounding region.

“If a cruise ship [passengers] never step foot on or around the community itself, that means there’s no economic benefit for the community but still [they are] able to visit our sites or land” (010301)

“If they go without landing they don’t need any license in particular, technically, nothing” (021102)

Some participants were very concerned that they have no control over licensing and permissions of which ships arrive in the region. Cruise ship companies can acquire licenses or permission from federal agencies such as Parks Canada and Canada’s Ministry of Environment and Climate Change or the Government of Nunavut to land passengers in a national or territorial park.

“We [territorial parks of the government of Nunavut] as parks organization, only issue permits to cruise ships when they’re visiting a territorial park or what we call special places, that are under our management” (020301)

The lack of control over access to the region is particularly problematic in when tourists and ships travel to sensitive or sacred places.

“If they [cruise ships passengers] were going to visit one area that’s nowhere near an archeological site and come back and they don’t want to go there that ok, but if all of a sudden decided want to go [on] this hike, visiting this sensitive area that’s a completely different, different trip, is different potential impact, that would require plans amendment, process again” (030101)

Pond Inlet does not receive any economic benefit, even when federal and territorial agencies recognize the importance of those places for the Inuit community and are collecting licensing fees.

“They [cruise ship operators] have to get their permits and pay their fees to Parks Canada for Sirmilik, and for Bylot Island they [cruise ship operators] they would also need a permit from the Canadian Wildlife Service” (010301)

“From Parks Canada a license would be required if they wanted to land in the park” (030101)

Part of the issue is the lack of power associated with the co-management boards of the BIMBS and SNP. These boards are comprised of representatives of the communities affected by these protected areas and related government agencies (e.g. Parks Canada). Although the co-management boards are consulted and make recommendations to the federal and territorial government (licensing agencies), it is not clear that these recommendations are considered and enforced.

“Our [Parks Canada’s] mandate is conservation and visitation, so if the community of the co-management committee provided advice against the cruise ships or visitation to the park or close an area, we would consider it, but only for discussion” (030101)

“We have an area of co-management committee for Bylot Island Migratory Bird Sanctuary, this was established under the Inuit Impact and Benefit Agreement, there is shipping in that area, and we get a lot of ships to see the birds. We have co-management committees of each of those communities; the reason is to protect the rights of Inuit. They’re [committees] responsible for advising the minister, they might make comments on [projects], they are an advice group, is not a decision making group, they cannot say ‘NO, we don’t want’... well, they can say it, but it’s not up to them” (031203)

The economic opportunities are precarious in many cases due to changing weather patterns. Poor weather often disrupts the ability of passengers to disembark into the community. These interviews

stated concerns that often, the community has prepared to receive the passengers but events and activities had to be cancelled resulting in economic and other opportunity losses for the community.

“We [Nunavut Tourism] know about the weather or ice conditions that dictate where the ship will go, if the community is making plans for a thousand passengers and the weather conditions don’t let the ship go to the community, the community lost the benefits” (021102)

“A lot of times what happens is that they are coming to the community, we’re coming, we’re coming, we’re coming... and a day before they’re supposed to come they are not coming, it could be for many reasons, but what happen with the community? The community might be preparing for weeks for receive them” (010301)

Currently there is no insurance of procedure to apply in these cases, so that the community could receive financial compensation.

“There should be a thousand dollars cancellation fee or, I don’t know this is coming from an individual who doesn’t know the industry could be well-received, maybe it’s not well received, There is no fines for cruise ship operator if he decides not to going to a community, I think that happens where a community is waiting and expecting the arrival of the boat and all sudden is not coming for whatever the reason may be” (010301)

Another major concern among interviewees was the inequity in the economic opportunities and benefits. People stated that the benefits should be distributed in different ways through the community.

“I’m not against tourism, but it’s how it benefits the community, something has to be done to spread the economic benefit to the community” (Jayko Aooloo)

Some of the people in the community who receive direct gains are the people who do cultural performances, some artists who have the capacity to create a stock, the tour guides or outfitters. Nevertheless, the livelihood disruption is for the entire community.

“We have three outfitters who take the tourists to the attractions” (Samuel Arrenk)

“For example, in the community are 100 people, but only 3 or 4 receive an economic benefit, but the rest of the people no, and the disturbing the hunting practices of 97 people, we depend on the hunting to have our food” (Jayko Aooloo)

Some interviewees pointed that it is shipping in general, not just cruise ships that are the problem. All shipping can disrupt the Inuit way of life, traditions, and wildlife.

“The ships usually come in the same period and it causes a lot of traffic” (Samuel Arrenk)

In the cases of supply ships and mining related shipping, interviewees pointed to the clear economic need and compensations. However, there is no meaningful value of compensation for cruise ship.

“The mining company has a compensation program, if their ships scared the narwhals they pay the hunter who was hunting a compensation, but for the cruise ship companies don't have that” (Jayko Aooloo)

In those circumstances, it could be considered that not only cruise ships affect the livelihood of the community. This consideration is also about mining ships. Near to Pond Inlet is an active mine, and mining ships also have a route within an area considered part of the community. The mining company has an agreement with the community and the HTO to give economic compensation to hunters negatively affected by one of the ships. That agreement specifies a shipping route, which is determined by various organizations involved. The agreement also provides economic compensation to a person who is hunting whales and a ship disturbed the whales preventing the activity. The hunters affected apply for the compensation from the company through the HTO.

This could be considered that there is no economic benefit, but the negative effects are compensated. This type of agreement does not exist with the cruise ship companies and too many points of contact to conduct effective negotiation. Another reason is that there is a large number of cruise ship companies. Another reason is the short cruise ship season. The community is concerned about the affectation of the cruise ships, but they do not have someone to talk about compensation or an agreement to control the routes or ship traffic. The community feels defenseless.

3.2.2 Adverse effects on Marine and Terrestrial Ecosystems

The adverse effects of CST on marine and terrestrial ecosystems was a second theme discussed in the interviewees by participants. All 15 people interviewed, were very concerned about the short term and long-term implications on habitat, migration and movements, health as well as access for traditional harvesters. The greatest level of concern was expressed about narwhal movement and habitat.

“The shipping traffic is changing the migration route of the whales, now there are places where they have narwhals where never used to be, are moving to different areas already” (Elijah Panikpekochoo)

“This summer [2016] I only seen once narwhals, once in our area, the narwhals used to migrate through the edge of the Bylot Island, the hunters are noticing changes in the behavior of narwhals or their routes” (Samuel Arrenk)

The observations and experiences of some harvesters interviewed suggest that CST is leading to a decrease in the number of narwhals in the region. They see a pattern between the increased number of ships and reduced observations of narwhal.

“The community is concerned because the cruise ships are coming to the inlet in the narwhals’ migration route” (031203)

“I started to see changes in the animals in the last two or three years, with more cruise ships” (Gmailie Kilukishal)

“I’m part of a marine research [initiative] and we see the narwhals are affected, at least in the last three years” (Jayko Aooloo)

A respondent received a comment from a Clyde River resident stating they had narwhals in front of that community, which is a new area for these animals.

“The ship traffic is changing the migration route of whales, now there are places where narwhals never used to be, they are moving to different areas already” (Gmailie Kilukishal)

“I got a message from a friend in Clyde River thanking us because they have narwhals, where they didn’t have before” (Samuel Arrenk)

The concerns about the current impact on narwhals are informed by previous observations and experiences. Interviewees reported seen the same pattern between increased shipping and lower narwhal’s numbers 20 years ago when shipping occurred from new mining company started in Resolute Bay. They suggested that the narwhals do not come back to the area for a long time after the areas are disturbed – it was fifteen years after the shipping traffic ended, that the narwhals came back to that area.

“The animals don’t go back after 15 years” (Gmailie Kilukishal)

The community concerns are compounded with CST, as the impacts are much closer to the community; ships are arriving very close to Pond Inlet itself and traveling through nearby hunting and fishing areas. Harvesters interviewed reported very few narwhals appearing in Pond Inlet this year (2016). According to SH, this was the first year that this has happened.

“This year [2016] I didn’t see any narwhals in our area, and this year the traffic of ships it’s been the busiest, unfortunately is the shipping area too” (Samuel Arrenk)

During the previous 3 years, the community of Pond Inlet has witnessed cruise ships chasing narwhals to take pictures. The TK from the Inuit of Pond Inlet says that the disruption to the whales will take three years to show changes in the migration route.

“When it was only the supply ship there was no changes in the animals, but when the boats with high power motors the animals started changing, I have seen it takes 3 years for the animals to show the effects, after 3 years there is no more animals in some areas. I think the same thing will happen with the ships, every time will be less seals and narwhals”
(Paniloo Sangoya)

In another example, there is a “beautiful area” close to Pond Inlet with three fiords, where the narwhals used to go to have their babies that is being affected.

“There’s only a few places the narwhals go, some fiords where they go to have their babies, but only one fiord is close to ships, but in the others are ship traffic, so the narwhals are not going to those fiords” (Samuel Arrenk)

Only one of the fiords is closed to shipping. Because of their natural beauty, cruise ships commonly go to the other two fiords even those they are not allowed to do so. This year, the number of narwhals at the two fiords that are open to ship traffic was less than usual.

“They [the cruise ships] do things they are not suppose doing, like going in land, fishing and chasing animals. There are fiords where the narwhals used to go to have their babies, but only one is close to ships, so the narwhals are not going to those fiords anymore”
(Paniloo Sangoya)

Unlike the supply ships or mining ships who do not have a specific route. Narwhals go deeper when a mining ship comes along; they are already used to those ships. After the ships pass by, the narwhals go back to the surface. When cruise ships go through the area, they do not follow a fixed route. The ships can follow the narwhals without letting them feel safe about when to return to the surface.

“They [the cruise ships] try to take pictures of the wildlife, they chase the animals, they scare them” (Samuel Arrenk)

“The narwhals’ behavior it’s very different depending if it’s mining ship the whales go under the water until the ships passes, because they follow a strict route, but a cruise ships is passing, they don’t follow a route, they chase the narwhals tacking pictures, the narwhals disappear” (Jayko Aooloo)

“It’s the cruise ships that I’m worried about, because they chase and scare the animals” (Paniloo Sangoya)

There are also concerns about changes in the behavior of seals and polar bears. Seals are no longer in some of the areas that they used to be in according to some interviewees. Seals require quiet places, but with the increase in shipping traffic in these areas, the seals moved to different areas. The number of seals has been decreasing alarmingly through the years. This decrease in the seal population has been mainly observed in the last three years.

“The seals are very intelligent, they like to be in quite places, when a cruise ship comes them go somewhere else, there are a lot less seals now” (Jayko Aooloo)

Due to the seals’ relationship with other animals, changes in their populations also affect other animals. For example, seals are food for polar bears, so when seals move to other places, polar bears have to look for them in other places. The impact of those changes is in the land, water, and other animals. The members of the community observe particularly behavior changes of narwhals and seals in the area close to Pond Inlet easily.

“With more polar bears [because restrictions in polar bear hunting] the seal population drops, that is affecting food gathering for us” (Jayko Aooloo)

The Arctic Ocean was considered a remote and dangerous place to be explored, and even more for recreation or luxury vacations (Stewart et al., 2012). Climate change is altering the conditions of

the land and ocean and it is opening the door for a new cruise ship tourism industry (Johnston et al., 2012). Even though cruise ships have been visiting this area for the last two decades, what can be considered a boom started in 2006 (Johnston et al., 2012). Because this is just the initial phase of the cruise ship industry, there are no reports of the industry's impacts on the environment and animals. Although, the impacts of these ships could be comparable to those of mining ship, or even worse. Now, after the arrival of the large capacity Crystal Serenity cruise ship the door is open to this huge industry, which may result in bigger ships, as well as ships that visit more frequently.

“I think if the Crystal Serenity, or ships that size come on year, should take a year after off, to see in the communities how what was, because once its open the door is going to be more than Crystal Serenity, maybe it won't be environmental friendly, I think that could be out of control before they [Government] know” (Philippa Ootoowak)

“If everything goes successful with it [Crystal Serenity], is going to open up a huge market for the territory, for much larger ships coming through in the future” (021102)

The absence of regulation related to the impact of CST on marine ecosystems was a major frustration for interviewees. Whereas, mining related shipping and supply shipping activities are subject to regulation and environmental assessment, there is no such impact assessment associated with CST.

“There are [environmental assessment] reports done on the impacts of the shipping industry on marine mammals, but not specifically the cruise ship industry, like bowhead or narwhals” (010301)

Some interviewees were concerned that the problem of cruise ship tourism in the area will only worsen in the future due to the increasing number of areas becoming ice-free.

“Even when the cruise ships pass through it impacts the marine animals, now certain areas becoming ice free for longer periods, so I guarantee more ships will come along water.” (021102)

3.2.3 Disruption of traditional livelihood

The livelihood of Pond Inlet community members is highly dependent on the sustainability of local marine ecosystems including those disturbed by CST. Hunting of narwhals, seals and whales is a year around practice but the most intensive time is in the short summer months when the local area is ice-free. Summer is also an important season for family activities, including family camping or picking berries together.

“The cruise ships negative impacts some hunters or Inuit living on the beach, the ships affects the family functions or how we plan camping or hunting, they usually come in the same period, the beach become off-limits because of passengers” (Samuel Arrenk)

The Inuit traditional life depends in many ways on the wildlife, the land, traditions, food, and health are related to the environment.

“They [the cruise ships] have a huge impact in the water in front our community; we have a connection with it” (010301)

“Cruise ships coming along here impacts the marine life, these are very sensitive areas and wildlife, Inuit need that wildlife to survive” (021102)

The cruise ship goes close to the animals that the Inuit hunt so that passengers can see and take pictures of them. These practices make the cruise ships come close to land or to areas where the Inuit are hunting. The ships scare the animals and make them go to different places. This means that the activities of cruise ships affect the animals’ behavior.

“My grandson was hunting in certain area and a cruise ship came to close to the land, we don’t like that, the hunters don’t like that” (Gmailie Kilukishal)

Cruise ships also disrupt traditional livelihoods even when people do not land in the community, by landing passengers and crew in a park or sensitive area, or by just passing through. Livelihood

disruptions could result from disruption to the wildlife or impacts on places considered sacred or important in Inuit culture.

“Cruise ships going through to birdwatch or see polar bears, they impact the Inuit life, even if they don’t land” (010301)

The disruption of harvesting has significant implications for food security in the community. The environment is the traditional/country foods including narwhals, beluga, seal, fish and other animals.

“We need the food; we go out hunting getting food” (Jayko Alooos)

The impacts of CST compound the vulnerabilities already created by climate change. Due to warming temperatures, hunters have to travel further to find food for the families than they did in the past. This also means that they spend longer periods of time out of the home.

“We didn’t have troubles to hunt beluga and narwhals, now we have to go longer distances to hunt whales” (Gamilie Kilukishal)

Food sharing and the process of hunting are affected by decreased animal numbers. These essential aspects of the Inuit social life and identity are under stress, as local people fear not having enough food for close family members.

“I subsist mainly by food from the land, my grandson provides me with the food, He’s a hunter. We usually go or my grandson goes hunting every 2 days, but our food is shared, we go or someone of the family goes hunting every day, the seal hunting is every day” (Paniloo Sangoya)

During summer months, local residents place a great deal of emphasis on the value of family time...

“We always had a fishing camping or vacations were we used to go every summer, now we don’t go anymore” (Jayko Aooloo)

“In the summer my parents took me camping in traditional family areas since I was born, 39 years ago” (Samuel Arrenk)

Changes in the community due to the hunting activities alterations are being affected dramatically.

“I think the hunters feel threatened because the narwhals are not coming now because of the traffic, even when it’s only the cruise ships” (Philippa Ootoowak)

Fishing has also changed because of the cruise ships. Fishing is one of the activities most requested by tourists. This represents a level of exploitation that is different from if only the Inuit fish.

“The people [tourists] are doing things that affect our life, like fishing and chasing the animals” (Paniloo Sangoya)

The implications of such ecological disturbance is measurable in terms of its impact on food security.

“I subsist mainly by food from the land; I don’t like the food from the store as much I like the food from the land” (Paniloo Sangoya)

The challenge in accessing country food increases the necessity to buy food at the grocery store. The price of food in the community store, the difficulty of transporting the food to the community, the one time of the year of the supplier ships, and the availability of different types of food make changes in the people’s diet. Those dietary changes lead to other family aspects related to outdoor activities and are new problems for the community.

“There are 2 groceries stores in the community, there are business too, so they have to make money, if a hunter is out in the land trying to get food and they run out of money the stores won’t help them because they have to make their own money to” (Jayko Aooloo)

The disruption in the hunting patterns affects the supply of material for commercial purposes. Some parts of the animal are for purposes other than food in Inuit life, like the sealskin that is used for clothing, or the narwhal bones that are used for carving. The artists get those parts from hunters. The changes in the hunter patterns make hunting more expensive, because the hunters need more food, gasoline, and time to hunt the same number of animals. The increase in the cost of hunting also increases the price of the art materials for the artists. An anonymous artist commented that the hunters are her suppliers for her artwork; a piece can take her a week depending in the size and the specific work. Her husband is an artist too, specialized in stone carvings.

All those changes have negative effects on other life activities, including family activities, like camping, time together, and other recreational activities. The changes in the animals’ behavior patterns affect the places to go for hunting and where the families used to go to wait for the hunters.

“Sometimes the passengers from the cruise ships go to where we are hunting. Once one asked me what I was doing, I said looking for rabbits, we don’t like them to know” (Jayko Aooloo)

In addition, the increased number of cruise ships going to areas where the families used to spend the summer make the families not want to stay there and be observed. The location of some places has to be hidden in order to be preserved for the Inuit life.

“We used to go to that area, just to enjoy the land, the animals, on vacations, now we can’t go there” (Jayko Aooloo)

The daily activities like carrying babies with the traditional cloth represent a risk when the people from the cruise ships are walking around in the community.

“I think the cruise ships negative impact hunter and Inuit living in a dramatic level. The cruise ships affect family functions, just our daily life” (Samuel Arrenk)

It is also common that tourists take pictures of the dogs. The dogs trained to be part of the dogsleds have a particular dietary and training. People taking pictures of them could disturb them. These impacts are not only measurable in terms of their impacts on the local harvest and economy; impacts on Inuit traditional livelihood also have implications for individual and community well-being.

3.2.4 Communication

The changes in the increased number of ships and passengers over the last few years have exposed serious communication gaps especially between stakeholders.

“I find that there’s still a lot of gaps in the communications between the government and industry, and the industry and the government, or the industry and the communities with which they’re visiting. I find that a lot of times it’s still disorganized process” (010301)

“I think we don’t need for biding regulations, I think what is required is more coordination of the different regulations” (030101)

“I’m part of one agency, I feel we’re at point right now where everybody is scrambling towards the same goal but they not always talking to each other, so that’s a challenge” (031102)

The communication process has been evolving over time. Even though some agencies are working on the communication between government agencies, there is still so much work to do. There are seven territorials and five federal agencies involved in cruise ship transit in front of Pond Inlet.

“In general, territorial alone, 7 territorial agencies are involved in cruise ships, federally there would be 5 more, so what happen with the whole system that the cruise ship companies have to go through a lot of paperwork” (021102)

This circumstance makes the communication between the cruise ship operators and government agencies more difficult. Each agency is responsible for a specific regulation of a specific aspect of the cruise ship industry. The process of keeping the information from all agencies accurate, complete and current, and communicating this information to the other agencies requires special effort.

“Unfortunately, some agencies are working in silos, which may not necessarily communicate to us or to somebody in other territorial agencies as well” (021102)

“With regards to cruise ship tourism I know Transport Canada is also involved, but we don’t work closely with them” (031203)

“Each individual or jurisdiction or responsible organization involved all have their permit, their processes and specifics in regulations” (030101)

Due to the lack of communication and training, some territorial agencies are working on their own self-training. This kind of training can be incomplete or limited in several areas of knowledge.

“There is no training programs for our staff. There is no” (010301)

“There is nothing mandatory for training, to the operators to take. We [Nunavut Tourism] generally try to make sure we train our staff; it is very difficult, just basically, it is on the job” (021102)

Some respondents stated that the communication between government agencies and the cruise ships operators is a challenge.

“It’s difficult because we send communications to all the cruise ship companies, all the companies we think of, but there’s always new ones that we miss, and for personal vessels it is more difficult” (031203)

The particular weather conditions of the area challenge co-operation between all the stakeholders.

“Sometimes what happens, is that because of ice conditions the ship goes to another community, as backup plan, but not always necessarily that is communicated to the communities” (021102)

The short season is also unfavorable for communication. The remoteness of the community and the difficulty in accessing the community once winter starts in September make flights restricted and uncertain.

“The headquarters of the [federal] government offices are in Iqaluit. The people of the border agency depends on the weather to fly where the ships are entering Canadian waters, if the weather allows” (010301)

The communication between the government agencies and the community is also difficult. Flights are the only way to link Pond Inlet to Iqaluit or other communities. The government agency that does not have an office in Pond Inlet sends their representatives in the summer, but summer is a good season for the residents of Pond Inlet to do outdoor activities. This means that an important percentage of residents is not available for consultations in that time.

“The consultations are a problem, because they come in summer and we are out hunting or camping” (Elijah Panikpekochoo)

“I haven’t heard any consultation about cruise ships” (Gmailie Kilukishal)

“I’m part of the Hunters and Trappers Organization board, and there is not real dialogue between us and the government, we haven’t been part of any consultation” (Jayko Aooloo)

“If I heard about cruise ships consultation I would participate, this is the first time someone is here to ask about cruise ships” (Paniloo Sangoya)

A question was formulated about the Marine Tourism Management Plan released by the Economic Development and Transportation of the Government of Nunavut. This plan focuses in encouraging the marine tourism including cruise ship tourism in the Region and it said was formulated based on extensive communities’ consultations.

“I now something is going on about cruise ships, but I haven’t received any information” (Samuel Arrenk)

Other respondents also expressed the concerns about the communication between the cruise ship operators and the community.

“The communication [with the communities] has been little bit more complicated, in terms of headquarters to doesn’t know who to contact in the community. They [cruise ships] don’t need permission to land in a community, we suggest and encourage the communities to do it, especially when they cancel or change the route” (020101)

“Sometimes we know if a cruise ship is coming on June, just a few days in advance of the arriving, it doesn’t give us much time to prepare” (Samuel Arrenk)

“There is no dialogue between us [community] and the cruise ships companies. We haven’t found how to deal with them” (Jayko Aooloo)

For the companies to be approved, they are required to have a backup plan. These plans have to include the changes in the route in case of weather contingencies. Sometimes those plans include landing in different communities than the one that was planned. Those communities are not informed of the plans because the plans are not certain. In case changes have to be made, the cruise ship might show up in a community that is not expecting to receive it. This community would not

be ready to receive passengers into their daily lives. This take us to the lack of communication between communities, government agencies and cruise ship companies.

“It is still happening today, in 2016, that communities that only have one visiting year by cruise ships and they don’t know the boat is coming, this impacts negatively in the community” (010301)

It may seem obvious to state that the communication within a small community like Pond Inlet is easy. The community is composed of several generations with very different characteristics from each other that make communication a challenge.

“Here in the community we have issues to communicate things. We have different age people groups” (Philippa Ootoowak)

The group of Inuit that speaks Inuktitut requires an interpreter, and their “rules” are based on the traditional knowledge. This characteristic could be out of the mind of people from the south because they do not know the “traditional rules”. The generation that was exposed to the “white people”, as they call them, speak English and are familiar with their behavior. The youth are educated in English-based schools, they are growing up with these regulations, and they are completely used to “white people” and “western societies”. These characteristics are reflected in the way they communicate or how they are required to be informed of consultations or activities among the community. Some residents require people going to their homes and talk to them in Inuktitut, and they do not feel comfortable speaking in meetings with “white people”. Other people go to meetings regularly; those are the least or have a particular interest to discuss in the meeting. Other generation knows about consultation or news by Facebook only.

“I know what it’s going on only by Facebook” (010103)

“For some of us we would read something, others would listen to radio, we have a local radio station, some people love meetings, especially those with refreshments and stuff” (Philippa Ootoowak)

All these aspects, the time for consultation, and people's lack of availability during the summer should be taken into account when planning consultations or communications with the community. Communication with the community should be redefined to encourage residents' participation, so they can voice their concerns.

"It's difficult to reach all the groups in the community, if you want to communicate to all you have to do in several ways" (Philippa Ootoowak)

The communication between the territorial agencies and the Pond Inlet hamlet is an obstacle to be overcome by all the stakeholders. The cruise ship companies have to go through an approval process to go through the Northwest Passage and land in the communities. This process is through the Nunavut Impact Review Board, and it could take a year or two. This was the length of time it took for Crystal Serenity to receive approval. The consultation process in Pond Inlet took two years before the cruise ship actually arrived. During this time, many things in the community can happen. The population of Pond Inlet did not know, or had already forgotten that the consultation occurred.

"For the marine tourism management plan the communities were consulted over 2 or 3 years ago" (020101)

"I was part of cruise ship consultation two years ago" (Samuel Arrenk)

At the same time, the international affairs of the Northwest Passage also have implications that need to be taken into account. These include international organizations and relationships of Canada. There are challenges with sharing updated information about protected areas and Canadian regulations with those international agencies.

"For long time our protected areas were not in the map, the maps for sea travel, we are working on updating the charts" (031203)

3.2.5 Infrastructure

The remoteness and the weather of this area of Canada are major obstacles to developing the infrastructure that is required to meet the needs of the community and for the cruise ship industry.

“The arctic is very difficult for the Canadian government to do something” (021102)

The industry have indicated an interest in a dock for the cruise ships and an area to disembark the passengers. The community and the agencies in place also do not have the resources, equipment or infrastructure required in case a cruise ship needs to be rescued.

“It’s a big thing going through Northwest Passage, but often people need to be rescued because the ice closes” (031203)

Another important consideration is that Pond Inlet is the community most visited by cruise ships, but the community does not have a tourism committee.

“Some of those communities [north of Nunavut] don’t have a Tourism Committee” (031203)

All the communication is with the economic development department of Pond Inlet, but the increased number of cruise ships and passengers is now a challenge for the department.

“We [the Hamlet] are already short of staff and we don’t get many benefits from government. The cruise ship industry is pretty new for us. Receiving a cruise ship passenger means a lot of logistical work for the hamlet, challenges to get them here, if it’s in school day, the traffic, kids going in and out, workers would be late for work, work will slow down” (Samuel Arrenk)

Community members receive training from Parks Canada to be tour guides and polar bear guards. This training is intended to be yearly, but it is not. The lack of people certified to work in those

areas limits the possibility of the community to be ready for the cruise ship season and receive an economic benefit. The training was not available this year (2016) because of the ongoing lack of staff.

“The workshops for the people are once a year, and some years we don’t have, like this year [2016] is no workshops. The workshops have limit of participants, we can’t have in all the people interested. Also the training for tour guides, Parks Canada, is every year, but unfortunately this year [2016] we didn’t have either” (Samuel Arrenk)

In addition, the lack of staff in Parks Canada was mentioned that makes monitoring impossible in some parks areas. If the community wants to close an area entirely because it is sensitive to the Inuit culture, Parks Canada needs to have staff in place to make sure people are not going in.

“We can’t guarantee that the cruise ships are not disembarking and going to places in the park that are sensitive. When we close an area because there is an archeological site that are very important, it requires a park staff to be present when the cruise ship goes there, most of the cruise ships come in summer time when my staff is away” (030101)

The Parks Canada office in Pond Inlet does not have a boat to guarantee that the cruise ships are not disembarking in sensitive areas, or in areas where they do not have permission. This is in cruise ship cases, but small vessels have to be monitored, too. The number of small vessels or yachts are increasing substantially. This activity is not monitored regularly.

“The PC office in Pond doesn’t have a boat, is difficult for us reach a cruise ship going through and they haven’t made a request to us, we might reach them, and the monitoring is much harder with small vessels” (030101)

The people of the community are concerned with the activity and number of small vessels, and they do not know if someone is monitoring or doing anything about it. Moreover, the community does not know what the people of those vessels are doing or if they are landing in sensitive or

closed areas. Moreover, the staff, those resources also include the technologies to monitor the areas.

“It’s impossible to know every ship or vessel in our waters, we don’t have satellite, it’s difficult to have the best technology” (020101)

“Also the sail vessels is an issue, it’s growing rapidly, but there is no one monitoring them” (Philippa Ootoowak)

“The challenge is that we don’t have good numbers for sailboats, because there’s not really nobody responsible for tracking them” (031102)

“This season [2016] there was one ship which didn’t want to pay the landing fee, but they landed any way in the area of the narwhals, we couldn’t do anything” (Samuel Arrenk)

Another challenge is the lack of staff in the visitor center, which is responsible for the activities and the welcoming of cruise ship tourists. The visitor center and the library have only three full-time employees, which is insufficient for the continuity of the programs. The training required for this staff is also not available, which is an obstacle for continuity and communication. Even when it is considered the tourist, cruise ship tourist, a tool for the communities’ development, it is difficult to achieve it without the resources required for it.

“We [the visitor center] don’t have enough staff to work full-time with the planning and organization for the cruise ships, at least full-time in the summer and have continuity and learning from previous experiences. We need to pass the information to different people because they don’t stay for more than one time or they leave when they find a job with benefits and full-time” (Philippa Ootoowak)

The federal and territorial agencies in place, which have the mandate to encourage the visitation to the areas and the economic development of Pond Inlet, do not have the resources and equipment to monitor whether or not the visitation is being optimized and negative impacts are minimized.

“At first, the Sirmilik National Park was created because the Inuit wanted to protect the marine resources also, but we didn’t have the mechanism” (031102)

The hamlet and visitor center are able to handle 250 to 300 tourists at a time. The increase of people landing in Pond Inlet, from 450 to 3,000 in 2016 summer time, had revealed the lack of infrastructure to handle the increase in cruise ship tourism activity.

“I can handle 250 or 300 passengers, with the Crystal [Serenity] bringing more than 1000 passengers, we are trying to handle them in shifts of 250 every 2 hrs.” (Samuel Arrenk)

As mentioned, training is an important issue to be addressed. Even when some people in the community are not against the cruise ships, the consideration to be addressed is whether or not the community is ready to receive the cruise ships. For the community to be able to offer what the cruise ships need be an economic benefit in the best way, the community should have licensed businesses, licensed to satisfy those needs. The community also requires the opportunity to have those businesses.

“I think there’s a lot of potential for economic benefit, such as rental services, provide water to the ships, kayaking or school bus, other services, but the people don’t have the businesses licenses for that” (Samuel Arrenk)

Another thing required by the community or the hamlet is the training to apply for government grants to improve businesses or be ready for the cruise ship season. The differences between the seasons and the grants schedule make it more difficult for the community to apply and to have the time to be ready by June. If the community applies to a grant, the grant reports become a challenge for them, the finances and procedures knowledge is an important issue.

“The rules for government grants and funding are difficult, are very strict, the reports and times to apply, when the money is available are not applicable for our seasons, are not according to our seasons.” (Samuel Arrenk)

3.2.6 Impact on well-being

Almost all the interview respondents mentioned concerns about the level of stress in their lives, and they related this to CST.

“Years ago, the ships wasn’t something to think about it. Everything effects the Inuit way of life, I feel invaded or effected by the people walking in our community, or in our land, they are bothering” (Gmailie Kilukishal)

“I think that surely communities are coming to a realization that cruise ship is here, is not going anywhere and that they should embrace it” (021102)

The ongoing concern about suicides in the community makes all the members of the community consider well-being an important issue to address.

“We’re trying to avoid the community in shock with so many people landing in our community” (Samuel Arrenk)

The increase in the number of ships and the number of people coming to the community in those ships make the community rethink the impacts to the environment, traditional livelihood, and possible economic benefits, and how all these things affect well-being in Pond Inlet.

“It’s only be recently that they’ve [communities members] started to understand that they need to do more and figure it out how to best take advantage of these cruise ship passengers” (021102)

“May be the same ships, but more trips of those ships, because the season is getting bigger. I guess that it pertains to the subsistence of lifestyle, many ships are coming close to the community” (020101)

Negative impacts on the environment modify Inuit life in every aspect. The shipping traffic in the area has already increased, and the impacts of this traffic on the wildlife and the land are an ongoing concern in the community.

“It’s just that for thousand person vessel we may have different mitigations, because that many more people could have much more impact” (030101)

The decrease in the number of narwhals and seals observed by the members of the community make them think that the consequences might get worse every year.

“If everything goes successfully with the Crystal [Serenity cruise ship], is going to open up a huge market for the territory, as far as much larger ships coming through in the future” (021102)

“Having seen the growth of cruise ships, it is pretty overwhelming and it’s going to be worse if we let them. I think that could be out of control before they know it” (Philippa Ootoowak)

The scale of impact of having to deal with thousands of passengers in the same year instead a few hundred is a big issue.

“This summer we had an increase from 350 passengers to 4,500” (020101)

“The people coming in the cruise ships is much more now, the interaction with them in our community is difficult” (Jayko Alooooloo)

The country food that the community relies on is being changed because of the shipping traffic. The stress because of the possibility of not having enough food to hunt and provide to their families is becoming a huge concern for hunters. The possibility of not having the food provided by the environment leads people to have another concern, which is having pay for expensive store bought food. That is difficult for community members to afford.

“I have seal meat because my grandson, He’s a hunter” (Paniloo Sangoya)

Another consideration for stress in the community is the pressure to be nice, presentable or attractive for tourists. The CST could be an economic benefit if the community is attractive to tourists, then positive word of mouth promotion could make more people visit Pond Inlet.

“The whole aspect of cruise ship coming into the community is sometimes stressful on the community because there is a responsibility to put their best effort forward to make sure that the community is presentable, both in aesthetically and as Inuit” (010301)

“We are doing all without funding; we didn’t receive any money for the preparation for Crystal [Serenity]” (Samuel Arrenk)

The ideas of people living in igloos, the savage people, or people who still hunt and kill the animals are perspectives the community would like to change.

“Some people don’t feel that the real sense of the community or culture that we want the visitor to learn about is being learned; there is a feeling of emptiness in the community” (010301)

All the nasty comments from people, who do not understand the Inuit traditional livelihood or the traditional hunting practices, make it necessary to present the community as they are and their values. It is important to give that presentation in a way to avoid misunderstandings.

“Once I posted a picture of narwhals tusk and I received a lot of nasty comments calling us murders, criminals... and why? We have a quota. It’s our food, its part of our traditional lifestyle; we hunt and trap instead of buying food” (Samuel Arrenk)

“The community is quite sensitive to people seem them hunting” (031102)

Because of this, when people land from a cruise ship, the community needs to be prepared. Members of the community change their daily activities, like cleaning or hanging sealskins in front of the house or no feeding the dogs.

“Some individual may change their daily routine because they don’t want to be photographed, like in the morning we clean skins in front of the house, but not the days we know a cruise ship is coming” (010103)

In cases where a cruise ship changes its plans and does not come to the community, or it comes on a different day, the community requires being warned of those plans.

“With the cruise ships the things can change at the last minute, the day, the time, the budgets, everything is different” (Samuel Arrenk)

The hunters feel threatened because cruise ships and tourists disrupt their traditional places or activities. Hunters and their families are affected by these disruptions. The longer time out of home and the further distance that they have to go to get the proper amount of food for their families is an ongoing concern and gives people a feeling of uncertainty.

“I have to say that I’m not in favor of cruise ships, but I think they are coming any way, I don’t think we have a way to say we don’t want them” (Philippa Ootoowak)

In addition, the fall in the hunters’ productive activity represents negative effects in the food supply. For the families experiencing this, it became a conflict between the interest of showing the culture and the uncertainty in the hunter’s safety.

“I don’t know what to say, because they [the tourists] see we don’t live in igloos, that we are normal, but at the same time I worry when my father [hunter] has to stay longer out of my house [to hunt]” (010103)

3.3 Conclusion

Pond Inlet community is facing challenges related to cruise ship tourism (CST) in their community and in their environment. The increases of CST in the arctic has benefited from climate change related early ice-break up and the arctic ecosystems attraction resulting in increased passenger numbers and cruise ships. It is presented in this chapter, the greatest concerns of the Pond Inlet community members related to the increase of cruise ships passengers in their community and in their sensitive habitats such as Sirmilik National Park and Bylot Island Migratory Bird Sanctuary. This research focused on the traditional ecological knowledge of the Inuit community of Pond Inlet to achieve a better understanding of recognized resistant attitudes to CST in their surrounding environment. Six key themes: economic and cultural impacts, adverse effects on marine and terrestrial ecosystems, disruption of traditional livelihood, communication, infrastructure, and impact on well-being. As it was presented in the first chapter, the relationship between the Inuit and the environment represents the new “model” developed in the last decades. The “model” that the humans are part of the environment, as one ecosystem. Their daily activities are interconnected with the environment, according to the seasons, and the wildlife, priority aspects of the traditional livelihood, as the food security and family bonds are found in the extracts of the interviews presented in these themes.

The community’s perspectives and concerns were presented in this chapter to point out the priority issues, which require attention to achieve sustainable development related to CST in this region. In the sustainable development theory (chapter 1) is recognized the importance of the traditional knowledge to create the policies according to each community and the aspects relevant for their particular surroundings and culture. For the Inuit, their traditional ecological knowledge is expressed in their perspectives of the environment and traditional activities. To preserve their culture and the environment their observations are important in order to manage the natural resources and environment protection. An industry, as cruise ship tourism, can be developed according to their traditional knowledge to bring economic benefits without compromising their surviving and having less negative impacts in the environment, a real sustainable development.

Chapter 4

Formal and “Traditional Rules” to manage Cruise Ship Tourism in the Canadian Arctic, Sirmilik National Park and Bylot Island Migratory Bird Sanctuary

4.1 Introduction

The opening up of the Canadian arctic due to warming temperature and the melting of multiyear ice, has led to many kinds of opportunities and challenges for northern communities. The regulations and laws governing use of these areas have not necessarily kept pace with these changes. The pressures of climate change including increased cruise ship tourism (CST) affect northern communities, such as Pond Inlet, in diverse ways. Those who have long-term observations and experiences of ecosystems have unique insights about the “rules” needed for management of tourism in the region. How different are these “rules” from those of the territorial and federal government? That is the focus of this chapter.

Specifically, the chapter presents “traditional rules” related to the governance of cruise ship tourism and its impacts on Bylot Island Migratory Bird Sanctuary (BIMBS) and Sirmilik National Park (SNP) and the community of Pond Inlet. The first set of rules is based on an investigation of federal and territorial regulations that address unique arctic marine ecosystems. We compare similarities and differences between these rules and suggest how traditional knowledge (Inuit Qaujimagatuqangit) might be better recognized and respected. Given the sensitivity of BIMBS and SNP, and the unique relationship of local Inuit of Pond Inlet to these regions, the chapter aims to make practical recommendations for policy makers and managers as well as contribute to the literature on the role of traditional knowledge in the governance of arctic ecosystems. The research also aims to build on previous research on the management of CST in Nunavut (Dawson et al., 2014; Johnston, 2012) to contribute to the literature in environmental sociology and native studies (Huntington, 2000; Ellis, 2004).

4.2 Methodology

The research that informs this chapter was carried out in two parts.

Part I. Research on Inuit “traditional rules” for managing CST: Community-based research was carried out in the community of Pond Inlet in August 2016. Guided by the local Mittimatalik Hunters & Trappers Organization, the researcher (lead author) carried out 15 interviews with elders and land users to learn more about local observations and experiences of CST and its impacts on the community and the BIMBS and SNP. A second set of questions aimed to elicit interviewer belief and principles or “rules” based on Inuit Qaujimagatuqangit that should be in place to protect these areas and the community (Chapter 4). Interviews were carried out with the assistance of a local translator (Philip Paneak) and were audio recorded and transcribed. A qualitative analysis involving coding of key these and sub-themes was carried out in order to identify common issues and concerns among interviews. The most significant of these themes (6) are presented in the Chapter 3. The “traditional rules” presented within this paper are based on information collected in Pond Inlet though the interviews conducted in August 2016. The qualitative method utilized in this research (semi-structured interviews) gave a wide range of information to analyze and extract the “traditional rules” (Fereday, 2006). Using inductive methods, specific proper-conduct “rules” from the community’s point of view were obtained from the description of daily traditional activities derived from the interviews that were conducted (Singleton & Straits, 2010).

Part II. Research on Territorial and Federal Government regulations pertaining to Cruise Ship Tourism in the Arctic: To learn more about the conventional regulations governing cruise ship tourism in Nunavut, a literature review was carried out in 2016 and 2017.

Interviews were also carried out with community members from Pond Inlet and Iqaluit, and key informants from the Government of Nunavut, Parks Canada and the Department of Fisheries and Oceans in 2016 and 2017. A total of 15 interviews were done with community members and 9

interviews carried out with informants knowledgeable about territorial and federal legislation and regulations.

All the interviews provided insights that allowed modifying and bringing topics to the next interviews. In addition, all the questions were open-ended, so the interviewee could talk about their knowledge or concerns about the CST, the community, regulations or “rules” related to each other. Their responses gave a wide range of information to analyze and allowed for a better understanding of the perspectives of each group.

4.3 Results

Community members provided information about how Inuit live, traditional lifestyle, activities, and concerns, among others topic. Elders emphasized the difference between their traditional life and the life of the youth today. Government representatives explained their role related to CST and their interaction with people from other government agencies. However, as one respondent mentioned, the CST is now in Pond Inlet, the community is encountering this developing industry and must figure out how to minimize the negative effects and have a better understanding on how to deal with it. This chapter is developed from the interviews; it outlines the community’ perspectives and devise a list of regulations, guidelines, and “rules” related to CST and Pond Inlet community from various regulatory perspectives.

The results are divided into four main sections. The first one is an overview of the international aspect of Northwest Passage. The second section of this paper focuses on federal laws and regulations of BIMBS and SNP and the CST industry within the Canadian Arctic Ocean. There are many complex and overlapping regulatory arrangements that stem from Canada’s Shipping Act of the Department of Transport, Parks Canada as well as more specific requirements that are defined through the Nunavut Comprehensive Land Claim Agreement and the present day territorial government. Co-management boards have been created to ensure community involvement in the management of BIMBS and SNP. These include: Sirmilik National Park Joint

Committee and Asungasungaaq co-management board have a mandate to review the applications for cruise ships projects, and the management plan for the area. To date however, there has been limited integration and consideration of traditional knowledge (Inuit Qaujimagatuqangit). As discussed in Chapter 3, there is significant concern that the community is not adequately consulted and included in decision-making.

In section three, we outline “rules” drawn from interviews with the Inuit of Pond Inlet, which includes “traditional rules” about the relationship with water, marine wildlife, and CST to different aspects of the traditional livelihood. In the Discussion is the analysis on how all these regulations, guidelines and “rules” are sometimes combined sometimes excluded.

4.3.1 International Context

CST in the Arctic has an international context that involves several International organizations, working groups, and conventions. Lalonde (2014) claimed that there are complex relationships between the numerous international stakeholders within the topic of this research. If only CST and Arctic international stakeholders were considered there would be a long list; however, if indigenous rights and protected areas were included, the list would be considerably longer. The complex situation of multiple international stakeholders means that a vast number of guidelines are required to be considered within this subject of concern. This wide range of regulations and guidelines make it difficult for each stakeholder to know all of them, thus making it a challenge to follow all of required guidelines and regulations.

In Pond Inlet, community members are exposed to international affairs interacting with tourist and crewmembers from different parts of the world. Some comments as an example of how community members view the international issues.

“The people [cruise ships tourists] are doing things that affect our life [fishing or chasing the animals], I think most of those [cruise] ships come outside of Canada, I think they are not familiar with laws of Canada” (Paniloo Sangoya).

“We cannot stick to exactly plan... they [cruise ships] are all different; some are international, American, Canadian.... We don’t really do anything when they [cruise ships] pass in front of Pond Inlet because of its international waters, they have free access to that... But that is cultural sensitive area... cause narwhals and polar bears are over there...” (Samuel Arrenk)

Other comments reflect the reality that the territorial government representatives do not have much information about international regulations, and guidelines.

“I am not aware of international treaties that apply [in Nunavut]” (010301).

“...part of it is international waters, so that part becomes very difficult for the Canadian government...” (021102).

Comments from federal government representatives:

“I am not familiar with any stuff of international treaties or agreements...” (031203)

4.3.2 Federal and Territorial Legislations

This section introduces the Canadian legislation governing the Canadian Arctic CST industry, in Nunavut, by listing the regulations, guidelines, and rules for cruise ships in Canada. In addition to the list, there is a short description of the Acts and regulations. Since 1985, the opportunity to travel cross-continent by the Northwest Passage instead of the Panama Canal has been increasingly been considered (Lalonde, 2004). The Northwest Passage is considered cheaper and shorter to cross the American continent. In addition, the consequences of climate change on the ice conditions have created the ideal circumstances that have increased the number of ships in this area and has allowed for larger sized ships as well (Johnston et al., 2012). Consequently, this amplified traffic has increased risk of pollution, tragic accidents, negative effects on marine ecosystems, and illegal activities (Lalonde, 2004; Dawson, 2014; Reynold, 2016). All these issues require a full range of legislation and guidelines to address them.

The mentioned changes related to CST in the Canadian Arctic goes from one year to another after the economic recession on 2009, according to Johnston et al. (2012). It is projected that the shipping traffic in the passage, including CST, will continue to increase in the future years. This is not only because of the impacts of climate change will continue up more of the passage, but also because what of the Nunavut Government (NG) plans to do in the future. In 2013, NG released the Marine Tourism Management Plan 2016-2019, with the intended goal of increasing marine tourism in the territory. The NG considers tourism as a main tool for economic development for their communities. Due to the implementation of this plan, the shipping projects presented to Nunavut Impact Review Board (NIRB) have increased from previous years. For example, the NIRB received three projects in January 2017 alone (more information in NIRB web page). This was in addition to the projects already granted in previous years. An example of the projects already approved is the *Crystal Serenity*, which is the most luxurious and largest cruise ship that has ever sailed around Nunavut; it was approved for the 2016 and 2017 seasons.

Despite the increase in the CST in the Canadian Arctic, the Canada Federal Government does not have specific regulations or guidelines for this industry (Johnston et al., 2012). The following is a compilation of Acts and regulations that were mentioned to be applicable to the CST by the government representatives who were interviewed, additional ones mentioned in the literature reviewed, and regulations related to CST federal stakeholders in the Canadian Arctic that were found to be applicable through the process of conducting this research.

Lalonde (2004) mentioned Canadian Armed Forces, the Coast Guard, and Royal Canadian Mountain Police as federal stakeholders who have interests within this region. Johnston et al. (2012) listed more federal stakeholders: Transport Canada, Parks Canada, Environment Canada – now Environment and Climate Change Canada-, Canadian Northern Economic Development Agency, and Canadian Border Services Agency. All these stakeholders have various regulations designed to control the shipping activities in the Canadian Arctic waters. However, during the process of this research, from interviews with various individuals from Parks Canada,

Environment and Climate Change Canada, Fisheries and Ocean Canada, Transport Canada, and NG it became apparent the respondents were not fully aware of all the applicable regulations to the CST but more what was pertinent to their own jurisdiction. It is impossible, for this study, to review all the Canadian legislation to find all applicable legislation. However, the results of the literature reviewed and the government representative's interviews did provide an extensive list of legislation to examine. A person from Transport Canada (TC) wrote in a personal communication:

“You may surf the <http://www.tc.gc/eng/marinesafety/menu.htm> website to get various information's.” (N. Godin, personal communication, February 21, 2017).

As an example of the vast legislation, TC has a list of twenty-seven Marine Transportation Acts in its web page. Although it is a long list, some of them are not related to the cruise ship or the Arctic region of Pond Inlet. Next is a short description of some of the Acts and regulations that are important for this study to show the idea of CST complexity in this region. Each Act has a vast regulation framework to be considered for a deeper understanding. However, it is impossible to review and include all the Acts and Regulations and for the purpose of this study, it is only a list of legislations related to the topics included in this research. The results are presented in three main sections: *shipping, environment, and tourism*.

4.3.2.1 Shipping

Territorial Sea and Fishing Zones Act (1964). This Act stated the territorial sea of 3 miles of the territorial sea of Canada and around the islands of the Canadian Arctic archipelago (Lalonde, 2004). This was increased to twelve miles (in 1964) and to two hundred miles (in 1977). Territorial Sea Geographical Coordinates Order states Canada's position with respect for the sovereignty of Arctic Ocean around the Arctic Archipelago, becoming Canadian internal waters (Lalonde, 2004).

Arctic Water Pollution Prevention Act (1970) considered 100-mile pollution prevention zone around Canada Arctic coasts (Lalonde, 2004). This legislation emphasized the importance of the

Arctic waters to Canada and its population, looking for preventing any damage to the ecosystems. This act was taken to the international level in 1982 by the UNCLOS article 234 (Lalonde, 2004).

The Arctic Shipping Pollution Prevention Act (1985) and its regulations were made under the AWPP Act. This legislation provided the framework for the Canada Shipping Act (2001), Northern Canada Vessel Traffic Services Zones Regulations (2010), and the Guidelines for the Operation of Passenger Vessels in Canadian Arctic Waters (GOPVCAW) and Guidelines for Seabird Colony Viewing by Cruise Ships (Johnston et al., 2012). Any of the respondents mentioned those guidelines. TC elaborated the GOPVCAW in 2005, this document provides the most extensive instructions for the cruise ships in the Canadian Arctic, it mentions the multi-stakeholders and the importance of themes mentioned during this study by government representatives and community members. It is to inform and orient to cruise ship operators and express the challenges they are going to face. This is an important source and should be part of the references for the government stakeholders, including tourism agencies and all the agencies part of the permission process.

Navigable Waters Protection Act (1985), in 2010 became mandatory in that the ships report to NORDREG, the Arctic Canada Vessel Traffic System (Johnston et al., 2012; for more information <http://laws-lois.justice.gc.ca/eng/regulations/SOR-2010-127/FullText.html>). In 2012 changed the name to Navigation Protection Act, the right of navigation in navigable waters is explained in this Act, and added a list of Scheduled Water.

Canada Marine Act (1998). According to the description provided by TC, this Act was created to ensure Canadian ports are competitive, efficient and commercial in the marine trades and transport (for more information www.tc.gc.ca/eng/acts-regulations/acts-1998c10.htm).

4.3.2.2 *Environment*

Some of the Acts mentioned in *Shipping* could be considered part of this section too. Most of the regulations under those acts provide a framework, which applies for *Environment* protection, listed in this section.

Fisheries Act (1985). VanderZwaag (1993) review this Act and emphasized the conflict of jurisdiction presented by the federal government. While the federal government holds legislative power in this area, the provinces are the ones who actually monitor and enforce marine fisheries. This author also raised the concerns about over-harvest, over process, seasonality, quality, and marketing. Subsequently and to further expand on the Fisheries Act' more acts were legislated including the Coastal Fisheries Protection Act, the Fisheries Development Act, the Fisheries Improvement Loans Act, the Fisheries Prices Support Act, the Salt fish Act, and more (VanderZwaag, 1993).

Canadian Laws Offshore Application Act (1990). This Act increased the federal and provincial jurisdiction of Canada over the natural resources and seabed adjacent to the continent. This legislation was a result of the coastal state right defended in the international agencies and treaties already mentioned. At first, this legislation was mainly focused on the oil and gas industry and fishing activities; however, recently it has been applied to wider array of concerns (Hornby, 1991).

Canadian Environmental Assessment Act (1992). In the preamble of this legislation, the relevance of the goal of sustainable development is mentioned as an important matter for Canada. Additionally, it strives to develop proper exploitation and use of the environment while promoting conservation and the protection of it.

Marine Mammal Regulations (1993), under the Fisheries Act. Reynolds (2016) comments about this regulation that provides protection for disturbance, without defining the term, for commercial or private vessels' inappropriate approach to marine mammals. This regulation does not specify

the definition of concepts, nor considers the distance in meters for a practical purpose, speed determinate, leaving the consideration to court cases. As an example, a DFO guideline -“Be Whale Wise”- considers a no-go zone within 100 m laterally and 400m ahead, but this is non-binding.

Canadian Environmental Protection Act (1999) considers under protection the air, land and water, all layers of the atmosphere, all organic and inorganic matter and living organism, and the ecosystems including the elements already mentioned.

Species at Risk Act (2002) was created after Canada signed the UN Convention on Biological Diversity. It provides protection for wildlife species from human activities, emphasizing aquatic environments (Reynolds, 2016). It is designed to protect wildlife listed as Species at Risk, but the last revision of the list was in 2005. This act includes harassment, mentioned in this section because several community members expressed the idea of harassment to the animals by the cruise ships. Unfortunately, this refers only to animals on the list of Species at Risk and Reynolds (2016) described the process to include an animal on the list as long and difficult.

One of the main concerns of the community members is that the cruise ships are observed chasing the whales to allow tourists onboard to take pictures. These activities could be considered as disturbing or harassment, but neither the Species at Risk Act or Marine Mammal Regulations define those concepts as such. This has caused some community members to raise concerns on these topics:

“They [cruise ships] try to take pictures of the wildlife, they chase the animals, they scare them” (Samuel Arrenk).

“The narwhals’ behavior it’s very different depending if its mining ships or cruise ships passing, they [cruise ships] don’t follow a route, they chase the narwhals taking pictures, the narwhals disappear” (Jayko Aooloo)

4.3.2.4 Nunavut Land Claims Agreement (NLCA)

Although the Canadian oceans are a federal jurisdiction, it is important to include the NLCA (1993) in this study. This inclusion is important because the Inuit rights and benefits, over the natural resources -land and water-, is embodied in this agreement. This Agreement became an Act in 1999. In this legislation, the Nunavut Settlement Area was created, it recognizes the Inuit rights for harvesting (fish, hunt, trap, and more), even outside of this area (Arts. 41 and 42). Article Five establishes that the Inuit must be part of all the decisions that includes wildlife; this article sets the Inuit rights to and benefits from wildlife. Article Six mentions the compensation to Inuit for a development that harms Inuit fishing or hunting, and this exists with the mining company settled in the region, but not with cruise ships companies. The Guide of NLCA explains that compensation is what a company must pay to make up for damaging or using, something is owned or used by someone else, in this case, the damage of the Inuit traditional life or rights for harvesting. The HTO of Pond Inlet mentioned that this been unable to contact all the operators of this industry in the region.

“One big difference between mining ships and cruise ships is the mining company has a program that when we are hunting narwhals and the ships pass, if they scare the narwhals the mining company has a program in what the hunter can apply for a compensation through the Hunters and Trappers Organization, and the cruise companies don’t have that, even if they chase the narwhals or seal we are hunting there is nothing we can do. There is no real dialogue between cruise companies and us, because... like the mining company is one company and we can deal with them, but all the cruise ships are independent companies, we haven’t found a way to deal with that” (010204, HTO Board member)

Furthermore, Article Eight of the NLCA explains the Inuit participation in the creation and running the National Parks, including SNP. Whereas the Inuit rights for harvesting inside the Parks are protected. These rights also include economic and social benefits from the parks, even mentioning jobs and contracts. In addition to the parks, Article Nine talks about conservation areas, which are not classified as parks, but are especially important for the Inuit because their protection of wildlife, heritage or rivers.

This Agreement mentions several times an important concept: consultation. This term is explained as the opportunity for the Inuit to indicate what they think is important or what affects them and that they are to be given the opportunity to be heard by the decision-making people who will hopefully use that information to make effective decisions. All the management plans designed for appropriate use, conservation, and hunting are created with the information provided by consultations with the communities. This is extremely important because most of the community members expressed their interest in talking about the cruise ship industry and the impacts on the Inuit traditional life and environment.

“There is not been real dialogue or consultation between the government and the HTO about cruise ships... I would like to participate if I heard about any consultation, but right now you’re the only person who have asked about it” (Jayko Aooloo)

“I know the Hamlet and the Economic Development Department (NG) sometimes consult, but I haven’t heard nothing about cruise ship consultations, not even some of my family” (Paniloo Sangoya)

The Inuit right to use and benefit from the ocean around the settlement area is outlined in Article Fifteen. This emphasizes the knowledge of the water and the right to be part of what happens in there. In addition, it establishes the process for marine areas in be included in the Nunavut Settlement Area. Article Sixteen preserves the Inuit right for harvesting on the ice beyond Canada’s marine management jurisdiction; there is a map that shows the ice zones. All the rights and benefits mentioned are management and protected by Inuit organizations and institutions created by the Agreement. Several Inuit organizations and institutions work for specific purposes. It is unnecessary to mention all of them for this study.

In addition to these rights, the Agreement mentions in the Art. Four the creation of the Nunavut Territory and Government. The NG is an important part of this study because in 2013 it released the Marine Tourism Management Plan 2016-2019 (MTMP, for more information

<http://www.gov.nu.ca/programs/edt>), with the interest to promote the Marine Tourism in the territory. This plan encourages tourism, including cruise ship tourism, as a representative of the NG said:

“I mean we have to be ready for the doubling of the ships, if the Economic Development and Transportation of Nunavut encourage to the double of ships” (010301)

Community members mentioned the encouragement of CST:

“We have to think if we really want it or not [cruise ship], because once it’s open the door, is going to be more than Crystal Serenity... maybe won’t be environmentally friendly, I think that could be out of control before they know it” (Philippa Ootoowak)

“I don’t know if that would be good to encourage more cruise ships because I don’t think we are ready to provide services they need, the only way we can provide services is the local people who have a license, those are just a few” (Samuel Arrenk)

The following Table presents the main formal rules for CST and Pond Inlet community; these rules are extracted from the literature reviewed and interviews were done in the research activities. The information extracted from the interviews with government representatives, of different levels, provided a basis for determining what Acts to examine and formal rules included in this table. The impossibility to review all the formal regulations related to these topics left open the door to include only some of the rules identified which were then compared to the “traditional rules” outlined in the next section. The following rules should be considered as a presentation of examples of formal rules and can be a starting point for further research.

Table 4.2.- Formal Rules mentioned by Government Representatives or in Legislation

Do not disturb mammals and do not harass Species at Risk wildlife
Permission required if the cruise ship is landing passenger
No requirement to notify the community if the cruise ship is only passing though the bay
No requirement to notify authorities if it is a personal vessel
Requirement to inform Canadian Custom when a foreign ship is entering Canadian waters
Community consultation is required for every cruise ship project that is landing people in the community
Every conservation or protected area requires a co-management committee
Encourage park visitation and environment protection
Requirement for update parks and protected areas information
All ships must be reported to NORDREG

Do not disturb mammals and do not harass Species at Risk wildlife

None of the government representatives interviewed mentioned these rules. However, those rules are so important for the community members that I considered it important to include them as a common point between legislation and “traditional rules”. An important consideration about these rules is that the definition of someone disturbing or harassing of animals is left for a judge’s decision. The harassment is expressed only for the animals in the Species at Risk list, this means that the list is updated or the community members should review the list before complaining. Reynolds (2016) explained the difficulties and bureaucracy of this procedure. In the literature reviewed are court cases; one example is about whales in British Columbia coast disturbed by whale catching operators.

Permission required if the cruise ship is landing passengers

During their interviews, the various Parks Canada and Nunavut Park's interviewees all discussed the licensing procedures. All of them (five in total) considered the process as a long and complicated process for the cruise ship operators. Some of the comments expressed by various government officials concerning the complexity of the current process include: *"the only places they [cruise ships] would be able to go is into a park, then they would need a park permission"* (010301). Another source claimed: *"The permission is a very complex process; I can give you a list of almost 50 different permitting requirements"* (020101). Another source stated: *"At the moment that the [cruise] ship decides to come ashore, they have to fill the proper licenses"* (021102). Another interviewee voiced the concerns of the complexity of the situation by saying: *"The permission is according which area they want to visit, if it is Sirmilik then it requires Park's permission, if it is Bylot then it requires Environment permission"* (030101). Despite these considerations, all the cruise ships companies have to apply for the permission or license if they want to land their passengers in those areas. However, according to one anonymous government source, the NG is working on a one-stop shop method whereby they would only be required to fill out all the appropriate documentation at one-government office verses several.

No requirement to notify the community if the cruise ship is only passing through the bay

The regulations point to the requirement to notify TC agency. However, the communication with the communities is not mandatory, even though the possible negative effects to marine ecosystems and traditional livelihood of Inuit is still a concern. The communication process is one of the concerns most mentioned by all the participants. A participant commented: *"If the cruise ship goes to a Park and no passengers step foot in the community itself they do not have to notify the community, but they are still able to visit a site that maybe on the other side of the river or the other side of the bay from the community, and they [the community] don't get an economic benefit"* (010301).

No requirement to notify if it is a personal vessel

The difference between cruise ship companies and personal vessels (non-profit travel) became a relevant matter for different legislations and regulations. Despite the increase in the number of these private ships, there is no regulation in place for them for going through the Northwest Passage or landing in the communities. A territorial government representative stated: *“If you’re in your own pleasure craft, there’s no fee, I mean if there no paying passengers on board; you won’t have to apply for permits to land”* (020101). A federal government representative commented about this topic: *“Certainly the number of [personal] vessels, I mean I’ve seen reports which have shown increases regularly and talking to others more, both cruise ships and smaller yachts, It doesn’t necessarily mean more licenses or permits from Parks Canada”* (030101).

Requirement to inform Canadian Customs when a foreign ship is entering Canadian waters

The bay close to Pond Inlet is the best point to enter to Canadian waters. This means a revision by Canadian Customs. Unfortunately, sometimes the weather conditions are not good for customs people to travel from Iqaluit to Pond Inlet and procedure to the revision. The disturbance in the procedures can make the cruise ships change their route or plans, leaving the communities waiting for the passengers and losing the possible economic benefit. Interviewees expressed: *“When a boat came from Greenland, because is a cruise ship from international waters, into Canadian waters, Canadian border services agency, so customs needs to go on the boat because these are technically all international travelers coming to Canada”* (010301). *“The community is across to Greenland, good place to stop coming across, we’re right on the corner that people can stop most easily”* (Philippa Ootoowak)

Community consultation is required for every shipping project

The Nunavut Impact Review Board is in charge when reviewing the projects and conducting the community consultations. The procedure can take years, including community consultations. A representative of this organization mentioned: *“We gather all the information and if the cruise*

ship is going to a community then we do a consultation, if the cruise ship is going through the waters we don't have to make a consultation" (021103).

Every conservation or protected area requires a co-management committee

Under the Inuit Impact and Benefit Agreement, every protected area or conservation area requires the establishment of a co-management committee to discuss and create the management plan for the area. Members of the community adjacent to the area and government representatives integrate the committees. The government agencies represented could be Climate Change and Environment Canada, Parks Canada, Nunavut Parks, according to the agency responsible for the area. Unfortunately, the committees can only express concerns; they do not have the power to enforce their decision. Respondents discussed this topic: *"We have an area of co-management committee for Bylot Island Migratory Bird Sanctuary; this area of co-management committee was established under the Inuit Impact and Benefit Agreement. They [co-management committee] are responsible for advising the minister on all management activities, they say what they like or what they don't like and they make recommendations, they are an advice group, is not a decision-making group, they cannot say we don't want, well they can say it, but is not up to them" (031203).*

Encourage parks visitation and environment protection

One of Parks Canada's mandates is to encourage visitation to the parks, this visitation has to be considered at the same time to the other mandates, conservation the park's natural heritage. The successful integration of both mandates are imperative to both, Parks Canada and the communities. Those areas protected are important not only for the federal government, but also for the local communities in that their special or archeological sites are often inside the parks. Representatives of PC mentioned that *"We want to encourage visitation and so that is easy for operators to know how they to behave when they visit those sites" (031102).* *"The mitigation is different according to the number of people visiting, more people, much more impact. If there's increasing in cruise ship tourism, were are in empowered by legislation to make decisions about how they... how that impacts parks and how we allow visitation to minimize damage to the parks. Our mandate [Parks Canada] is to encourage people to visit the parks, and the conservation of the parks, there will be*

a discussion around why that is important, how we would deal with cruise ships because we don't have jurisdiction on waters, and it would be to discuss for a management plan for Sirmilik National Park, the plan is near to finish" (030101).

Requirement for updated parks and protected areas information

An updated information is a key issue in the cruise ship industry. Every time that there is a new protected area, the government agency involved has to update the marine charts. In addition, Climate Change and Environment Canada sends a letter to cruise ship companies giving proper notice of protected areas. This procedure is difficult to follow for the great number of companies and personal vessels. They notify the companies and people in their contact list. *"For us [Parks Canada] updating our notice to Mariners and that kind of thing which is very operational, it's making sure that the people are given the information about the national parks" (030101). "For personal vessels is more difficult, because how do I know who has a personal vessel to send this letter" (031203).*

All ships must be reported to NORDREG

This rule mentioned in the Navigable Waters Protection Act, and became mandatory in 2010, is an example of modifications required for a developing industry such as CST. In 1985, when the rule was not mandatory, this industry was in its beginning. Moreover, the registration step could be the proper communication process between of the stakeholders of CST in the Canadian Arctic. Some of the comments related to a proper communication: *"the government is not doing the best of jobs at relaying that information to the communities. I find that there's still a lot of gaps in the communication, between the government and industry, government and communities, and industry and communities" (010301). "They don't [CS operators] have to share too much information with the communities, because it could create too much confusion sometimes to share too much" (021102).*

4.4 Community' Perspectives on "Rules"

4.4.1 Background

Several institutions remarked on the importance of the aboriginal cultures, as identified in the UN Declaration on the Rights of Indigenous People. In the Canadian arctic, the Inuit are a large percent (85%) of the overall population (O'Leary, 2012), including the community of Pond Inlet. The traditional knowledge (TK) of this population been promoted as a resource of knowledge that is important and reliable in many aspects (Huntington, 2000). In addition, traditional ecological knowledge offers a source of knowledge about natural resources, how it is managed and monitored (Berkes et al., 2000). Unfortunately, most regional TK is still unwritten and undocumented and it is not often considered in natural resource regulations (Huntington, 2000; Huntington & Watson, 2012). Many authors agree in the importance to document the traditional ecological knowledge, as Huntington (2000), and Berkes et al. (2000) outline. A participant commented about the "traditional rules":

"We had unwritten laws that we have to follow... we have certain rules for narwhals, there are different rules for narwhals, and different rules for caribou, all unwritten rules"
(Gamailie Kilukishal)

The Inuit TK relies on the relationship with the environment in different ways (Searles, 2008). This relationship includes animals, land, and water in a holistic (Berkes et al., 2000), spiritual and ethical way (Huntington & Watson, 2012).

"...our traditional, officially Inuit, to see lifestyle rules.... Is not about hunting and camping, is about the way we see the land, the water, is different than you do" (Samuel Arrenk)

The Inuit life runs accordingly to the seasons (Murray, 2006), and the seasons are changing. Now the winter is 8 months long –September to April- in Pond Inlet, and the spring and summer bring

opportunities for activities impossible in the cold winter and ice. This season also brings activity in the ocean no longer cover by ice, which start when the ice cracks. A respondent commented:

“... from May to September, spring and summer, we are out enjoying the summer” (Jayko Aloo)

The hunting and fishing activities of traditional Inuit life depends on the wildlife and their knowledge of animal's patterns, migration, habits (Warner et al., 2014). This knowledge is constructed through years and passed generation to generation (Berkes et al., 2000). Even though various technologies were introduced years ago, such as boats and snowmobiles, some community members still utilize snowshoes and dog teams (Murray, 2006). Part of the Inuit identify is the transmission of the values, storytellers (Searles, 2008). This is a traditional way that parents and elders teach the youth.

The community considers that the increase in shipping traffic in summers is affecting the activities like hunting and fishing. These activities are fundamental to the Inuit life; Warner et al. (2014) considers the indigenous jurisdiction over their surrounding waters to be similar or equivalent to that of federal and territorial governments. Searles (2008) emphasized in his paper *Inuit Identity*, how this inclusion of Inuit traditional ecological knowledge and their way of life was a focus in the creation of the NLCA. The Inuit knowledge is a vast knowledge and should be part of the regular decision-making process for public policies, in particular, the frameworks for the territory.

4.4.2 Traditional Knowledge

A better understanding of the “traditional rules” is provided by the source of the knowledge. Berkes et al. (2000) define TK as “a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment” (p. 1252). This definition provides two important aspects, the local observation and how is transferred in the community and through the generations. Those aspects are remarked in the Inuit traditional

knowledge. Searles (2008) emphasized that the Inuit TK comes from observations outpost, out in land and ice, and that knowledge is transmitted to the community members by oral tradition, living in a group, communicating the “traditional rules” to each other. A community member participant in this study commented about their observations:

“Back in the 80s, we used to go to a place to enjoy ourselves, enjoy the sea and hunt if we needed... hunting narwhals and others caribou, but not anymore... the narwhals don’t go to that area and the caribou is not good for clothing” (Jayko Aloo)

Manseau, Parlee, and Ayles (2005) presented an example about beluga in the Alaska region; the uncertainty of this marine mammal population was obtained by both methods, traditional ecological knowledge and scientific knowledge. The information based on scientific method mentioned a quantity of beluga based on aerial technology and the traditional ecological knowledge of the community, based on the hunter’s observations, and after corroborating both information, the conclusion was that the TK was more accurate than the scientific number. Huntington and Watson (2012) and Manseau, Parlee, and Ayles (2005) concluded with the idea of combining both into one knowledge body, complementing one to another for a better understanding.

4.4.2.1 “Traditional rules”

This section documents some of the Inuit “traditional rules” that were extracted from the interviews with the community members of Pond Inlet. Moreover, changes are on an on-going basis and explore community observations about those changes and practices related to regional wildlife and cruise ship tourism. In addition, it is also presented as a comparison between formal regulations and “traditional rules”. There are common rules such as not disturbing the wildlife and areas of differences such as places the cruise ships are allowed to go. The disagreement of the fiords being open to cruise ships is analyzed in more detail for their importance to the Inuit traditional livelihood and the marine ecosystem.

We have to remember that the Inuit lifestyle is interrelated between all the aspects. Their life and elements are combined in a holistic perspective, as Berkes et al. (2000) expressed. From this idea, you cannot separate the wildlife from the Inuit, the housing from the well-being, and go on. A respondent said:

“... now they need written laws to make them follow the rules, that is a different understand[ing]. There are totally different rules, a lot different from our rules, the rules we had before. One good example is the idea of well-being, the socially living together because when I was growing up there were all-encompassing rules that cover life, from the moment we born, from the waking in the morning to the moment to go to bed... so, with everything tied together and total living in a different system... like jails, there are jails now... like women shelters... we didn't need those before because the social way of life was tied to hunting and to working, everything tied together..” (Gamailie Kilukishal)

The participants in this study were asked about their activities in the water, hunting and fishing, places where they used to go and places they go, their interaction with cruise ship tourists and their observation through the years in changes in shipping traffic and observations in wildlife. All the interviews were conducted in Pond Inlet in August 2016. The questionnaires were open-ended questions in a qualitative method research. Each interview took approximately 2 hours and became a conversation/discussion about interesting topics to allow the respondents to talk openly about their activities and concerns related to cruise ships and traditional livelihood. The respondents were people from Pond Inlet community. The inclusion characteristics were living in Pond Inlet over 10 years, considered by themselves as community members, considered themselves as Inuit, have specific interested in cruise ship tourism, willing to raise their voice and participate in the research. There was no exclusion based on age or gender, but most of the participants were male and elders from the community.

The next Table presents the responses of 15 community members interviewed. The information extracted from the interviews was extensive and substantial and was summarized into simple

“rules” for the ease of analysis. The following statements present perspectives on how each community member do things and can serve as a reference point for further research.

Table 4.3.- “Traditional Rules” mentioned by community members

Do not share location of special places for hunting or fishing to strange people
Tell the whole community when a ship is coming, in advance, even if their people are not landing in the community
Do not take pictures of the narwhals
Do not disturb the whales in the nesting areas (fiords)
Hunt for food, share the food
When they are hunting, the other boats do not get close
Do not make noise when you are in the water or in-land
Do not take rocks or minerals from the land
Do not disturb the dogs when they are eating
Ships should not go into shallow water, the noise of the ships also disturb the animals on land
Do not chase the narwhals
The passengers should not land in places other than the community

Do not share location of special places for hunting or fishing to strange people

Some members of the community feel that their special places, to hunt or camp, are threaten if they share the location with people other than the community. The scenery and wildlife could be disturbed if the places become public information. The tourists would visit and spread the word. If this occurs then there would be more tourists and more cruise ships in a short season increasing

the shipping traffic. An example is shown by one interview who claimed *“We have a special area, it’s where the narwhals go, shallow water area... its only for Inuit, no one is able to go, its where the hunters go... the most beautiful, I wish I can share to the world, but I can’t... there is an area, shallow water area, where the narwhals go it should be only for Inuit”* (Samuel Arrenk). *“There are heritage sites that are special places that are very linked to the community that might not be in the municipal boundary”* (010301).

Tell the whole community when a ship is coming, in advance, even if their people are not landing in the community

The community feels that the cruise ships affect the whole community, even when most of the population do not interact with the tourists. However, the ships going along the bay, chasing the animals, or just unintentionally scaring both the land and aquatic animals, affects all community activities. In order to be ready to modify their activities according to the shipping traffic, some of the respondents commented they want to know when the ships are coming to the community or in front of the community. *“The question is if the cruise ship giving proper notice to the community that they’re going to visit, or if the cruise ship giving notice to the government of which communities they intend visiting, and if the government is not doing the best of jobs at relaying that information to the community. To ensure that a communication in order to visit a community, to make sure that the visitor, or the cruise ship company, takes an extra step to let the community they are going”*. *“I believe if any kind of ship is coming to a community they should be contacting the hunters and trappers organization before they go”* (010301). *“They [cruise ships] don’t need to get a permission to pass by the community”*. *“If the cruise ship goes through without landing they don’t need any license in particular”* (030101). *“Sometimes I hear on the radio they say there is a cruise ship coming, but normally I know about the cruise ships when I see the tourist walking in the community”* (Elijah Panikpechoo).

Do not take pictures of the narwhals, dogs and community people

The idea of people taking pictures of the narwhals, dogs and community members is disturbing for some community members. Several participants’ commented about this topic in different ways. A

disturbing comment: *“Once I found on the internet a picture of myself carrying my baby in our traditional cloth... no one asked me to take that picture, I didn’t know what to do” (010702). “I don’t think the boat should be able to dock in waters in front of the community, for tourists to stand on the edge of the boat and take pictures of the community without coming to the community, experience me and my culture, the cruise ship visitor managed to take a picture of me or my community, these people on the boat have these beautiful cameras that can zoom right on my face and my kid face, they manage to take a piece of me... I just have issues with that” (010301). “In Devon Island, there are fiords, but they [cruise ships] try to take pictures of the wildlife, they scare the animals” (Samuel Arrenk). “We [visitor center] receive a lot of comments that the tourist [cruise ships] just land on the shore and walk around, take photographs, that kind of thing” (Philippa Ootoowak).*

Do not disturb the whales in the nesting areas (fiords)

Close to Pond Inlet are three fiords, which are used by the narwhals to have their babies and take care of them for a while before they go open waters. One of those fiords is closed for ships, but the rest are not. The community observations say the number of narwhals going to those fiords is decreasing, and they are afraid the narwhals will stop going there eventually. This situation could affect the migration route and the rest of wildlife. *“The animals are like people, we don’t like to be disturbed when we are relaxing at home, the animals are the same way if the ships bother them they will go somewhere else where they can be peace and quiet” (Gmailie Kilukishal). “Even when they [cruise ships] don’t go to the community, there is an impact to the community because in the water, in the water is where the mammals are, we have a connection with it, to the sea” (010301) “There are only a few places the narwhals go, some fiords where they go to have their babies, but only one fiord is close to ships, so the narwhals are not going to those fiords” (Paniloo Sangoya).*

Hunt for food, share the food

It was a common comment among the community members, that they have food because of the hunting activities. It is an important matter for the community or family members to share what a

hunter catches. The places the hunters go and the time spend out of home hunting, is a view that influences all aspects of Inuit culture. A part of the culture is the respect to the land and wildlife and they fact that they hunt and fish to satisfy the essential necessity of food and others aspects as the animal skin for clothing or bones for carving. *“Right now I subsist mainly on food from the land, the animals; I don’t like the food from the store as much I like the food from the land. I used to be a hunter full time but not anymore, I’m getting older, today I have seal meat because my great grandson went hunting yesterday, he provides me with the food, He’s a hunter... our food is to share” (Paniloo Sangoya). “We don’t have any farms or we don’t growth food in the community, so all the food we get is from the environment, we need the food” (Jayko Aooloo).*

When they are hunting, the ships do not get close

The common idea among the community members is that the wildlife requires a quiet and peaceful environment. This also applies for the time the community members are harvesting, especially hunting and fishing. The noise produced by boats and ships scare the animals and makes them run away making the hunting impossible. *“One of my grandchildren was hunting whales in a certain place we go for narwhales, and my grandchildren saw a cruise ship in that area and came too close to the land and we don’t like that, the hunters don’t like that, that the cruise ships go where we go hunting” (Gmailie Kilukishal) “I see many ships going to the places we are hunting, they scare the animals, they are bothering” (Elijah Panikpekochoo). “Seals are very smart because they live in a quiet place, so when cruise ships and other machines start making noise they go somewhere else where is quite” (Jayko Aooloo).* This “rule” is related to the next one too.

Do not make noise when you are in the water or inland

The noise produced by the ships disturb the marine and terrestrial wildlife. In order to preserve the migration routes and the wildlife population is necessary to continue with a quite environment. Unfortunately, not only do the cruise ships produce this contamination, the supply ships are necessary to continue the housing and other supplies from the south. However, the cruise ships are not considered necessary for the Pond Inlet surviving or its development. Important comments about this included: *“We have more ships, the community has growth” (Philippa Ootoowak).*

“When we used to travel by kayaks or dogsled we didn’t have problems to hunt beluga whales or narwhals, but the shipping traffic is changing the migration route of the whales” (Gmailie Kilukishal). “The cruise ships go to shallow waters, and the noises go faster there, I’m not a scientist, but there incidents when they do” (Samuel Arrenk).

Do not take rocks or minerals from the land

For the Inuit, the environment refers to living and non-living parts of the land and waters. The land they consider a part of their life in every way, they use the rocks and minerals to significant special places or symbolic areas, spiritually or to their traditional life, like places to hunt, trap or pick berries, whatever the reason is why that place is important. A respondent expressed these concerns: *“to be honest, there are places where everyone can stop there, no one is monitoring, but you know 150 people in a cruise ships landing in a place year after year, hiking to the site and back again have to have an effect on that site, they took rocks, like or not... my son went and took photos, and there have been changes from when my husband been there previously years ago because people are going up there, maybe they are not meaning to do any damage, but pick up things here and there, that can make a difference” (Philippa Ootoowak). “I have seen people from boats going inland and collect rocks or mineral out there, [they] are bothering us, I feel invaded” (Paniloo Sangoya).*

Do not disturb the dogs (for dog sleds)

The dogs are an important part of the Inuit traditional livelihood. The dogs have a special training for the dog sled and a particular food for the Arctic weather conditions. The training is a matter of survival for the time when the hunters and the dogs are out. *“The tourist take pictures of our houses or dogs, once one was taking pictures of the dog and the puppy at the beach and the person wasn’t invited to do so” (Samuel Arrenk)*

Ships do not go to shallow water, the noise of the ships also disturb the animals in land

It is easy to consider the effects of ships could have in marine ecosystems. Furthermore, it is for consideration that the ships getting close to shore can also affect in terrestrial ecosystems. The noise is easily spread in shallow waters, and the animals in the land are scared at the time ships gets closer to them. *“You know, the visitor should go within a kilometer or other certain areas during certain periods of the year are close to visitation because of caribou harvesting or that type of things” (Elijah Panikpekochoo). “There are largely marine areas and we get a lot of ships and come to those areas to see the whales, or the birds, there are colonies that we’ve to protect” (031203).*

Do not chase the narwhals

All the respondents expressed concerns about the disruption of marine wildlife, its migration routes and nesting areas. Those negative effects could remain for several years and the community members feel it is imperative to find a way to protect the animals. *“We have reports that the cruise ships go into the fiords and start chasing the wildlife; I think something has to be done about that... I’m not worried about the mining ships, because they have very strict routes to follow, and they don’t bother the wildlife, it’s the cruise ships that I’m worried about because they chase and scare the animals” (Paniloo Sangoya). “Even if they [cruise ships] chase the narwhals or seals we are hunting there is nothing we can do” (Jayko Aooloo).*

The passengers should not land places other than the community

The community members understand that the CST is happening, their concerns around to wildlife make them think that could be better if the cruise ship land the passengers in the community rather than in other parts of the land, so they will not disturb the ecosystems. In addition, if the CST land their passengers in the community and pay the fees to the hamlet, it could provide an economic benefit for the community. *“It is ok for us [the hunters] if the cruise ships just pass and don’t stop in anywhere in the land, but they don’t seem care of any about that. Also, the small ships affect the*

local life, because it's outside the community where they are doing things, like going inland or fishing, chasing animals, those activities affect our life" (Jayko Aooloo).

4.5 Comparison between formal and "traditional rules"

Unfortunately, the formal rules are difficult to address. It is impossible to review all the Acts and regulations related to CST and the Canadian Arctic, and the government representatives interviewed did not provide many rules to compare. The rules extracted from government representatives that pointed to particular regulations, and the main ideas of specific rules extracted from the literature reviewed of Acts, are the rules used for this exercise. The formal rules identified are compared to the "traditional rules" provided by the community members interviewed. See the table.

There are major areas of the rules that overlap. As an example, do not disturb or harass the animals. This is one of the most mentioned concerns by all the respondents, community members, but all government representatives mentioned the regulations about it. All the government representatives did mention the possible negative impacts on marine ecosystems by CST. The fact that it is mentioned in the Canadian Legislation is an important consideration that it is already a concern for the Canada's Government, federal and territorial. Whereas, the "traditional rule" that considers a specific route for CST could be comparable to the regulation for mining ships that determine a route for those ships. The importance of community member's observations of the patterns of narwhals when each ship goes bay are a traditional ecological knowledge that should be part of the decision-making for the approval for CST projects. Both groups of respondents mentioned communication or consultation with the communities, but an analysis highlighted that it has to be improved in many ways. Although the community consultation is a requirement for CST projects, the process to do it is not a common point between both groups of participants in the interviews.

A conflicting rule the encouragement of marine tourism to the parks, which at the same time it does not mean any benefit to the community. Specifically, the fees for parks visitation are not for

the community and the visitation could mean negative effects for the community without any economic benefit. The community member respondents expressed as a “rule” that the CST should land in the community, which could decrease the possible negative impacts on the terrestrial environment and bring an economic benefit for the community. Related to these issues, is the “rule” of not taking rock or minerals from the land. This could be seen as obvious, but it was mentioned several times as something already happening.

4.6 Discussion

At this point, the discussion goes to an important issue to consider, the “traditional rules” that are included in legislation and regulations and the mechanisms to enforce that legislation. The gaps where the “traditional rules” are not included in the legislation and the importance of the community member’s observations to be taken into the decision-making process as a source of knowledge. It is imperative to work out ways to enforce the legislation, regulation, and rules. Informal or traditional rules”, such as do not disturb the mammals or harass wildlife, despite actually being forbidden by legislation is still happening.

As indicated, there are a wide array of regulations and guidelines, but a common perception is that the stakeholders are still working individually. It is noted that there is a lack of communication between federal and territorial agencies based on jurisdiction issues. One of the conclusions of Johnston et al. (2012) is that some of the federal stakeholders may not be ready for the changes in the CST in the Canadian Arctic. This research would appear to support that claim in that for several years is not a relevant adjustment in regulations for the openness in the Canadian Arctic, which includes Nunavut. The CST stakeholders are still perceived as working individually as they have been over the last ten years. Some territorial and federal government representatives pointed out that their goal is to work with other agencies, that appear to still only as a goal, it is not in place yet.

At the same time, the residents told in the interviews, how changes traditional life will increase with CST interactions. The traditional hunting and fishing practices are considered cruel or murder by some “south people”, and sometimes as the reason for Species at Risk. The regulations and quotes in animals hunted restrict these practices. The increase in shipping traffic could make these practices even harder for the community members. Not only the increase in CST, but also the increase in personal vessels. Although there are many concerns pointed by government representatives and community members about the increase of personal vessels, there are no regulations about private vessels, as Reynolds (2016) pointed it. A common theme between all the respondents focuses on the changes to come in the next years. The changes related to climate change and the increases in ship numbers and passengers are a popular topic in conversations and news.

However, despite the vast legislation and regulations related to CST in the Canadian Arctic it does not mean they are followed. There is no guarantee of the capability to enforce them, whereas because of the weather, technologies, and access to the Arctic Ocean (Lalonde, 2004). There still room to include the community and their traditional ecological knowledge in the legislation or in the activities to guarantee that CST follows the legislation. This could be achieved as many authors have already pointed, as Ellis (2004), by empowering the Aboriginal groups, build communities capacities for governance and monitoring the activities around their land and environment.

Different stakeholders the considerations that have to be taken into account for the next years observe it. Following the Crystal Serenity’s first visit in the 2016 summer, it is required for federal and territorial agencies to reconsider the possible negative impacts. Although the Crystal Serenity is already approved for the 2017 summer, it might require a new review after the 2016 voyage.

Any of the shipping activities are going to disappear, contrary the information point to the increase of all those activities, including CST. Until this day, the attempt was to consider case by case, giving a sense of delay in the consultation process, proper legislation and implementation mechanisms to ensure adherence to the regulations, all these to environment protection and the

Pond Inlet community. As Murray (2006) expressed “if these changes continue, a whole culture [the Inuit] and ecosystem could melt away like the ice” (p. 35).

4.7 Conclusions

The traditional knowledge of Pond Inlet residents provides an important foundation for understanding changes in the Arctic ecosystems due to climate change; it also can inform the management of changes occurring including the increase in cruise ship tourism in sensitive arctic ecosystems. As discussed in this chapter, federal and territorial government regulations are perceived by many Inuit of Pond Inlet as inadequate in addressing the growth in the cruise ship tourism industry and the impacts it is having on marine habitat, wildlife and people. The issues are not just local –there is an important global context to the issues as many ships arriving in the region are from diverse countries with different norms and values than those of local residents.

There is an urgent need to take into consideration what local residents of Pond Inlet perceive to be needed to protect sensitive arctic ecosystems and their way of life. In addition, to understand the Pond Inlet community attitudes to face the changes and uncertainty of negative effects in the environment and ecosystems in the future. Despite many regulations, guidelines, and rules related to CST in the Canadian Arctic presented in this study, as others authors presented previously, the application of regulations, guidelines and rules still appear fragmented according to interviewed stakeholders. Moreover, many regulations, guidelines, and rules are still contributing to misinformation among government representatives, as Dawson, Johnston and Stewart (2014) stated it. In addition, the changes in the CST industry that are expected the years to come present a new challenge for the stakeholders, including the northern communities.

Chapter 5

Conclusions

5.1 Summary of the Thesis

This thesis presented the complexity of the encounter between Pond Inlet, one of the northernmost communities of Nunavut territory, and a developing industry, cruise ship tourism. On-going climate warming and new plans to develop this industry challenge the Inuit of Pond Inlet with growing number of tourists in their community (see fig. 1.3). The literature reviewed provided an overview of the circumstances surrounding the development of this industry in the northern Canadian archipelago. In addition, it is also explained that the Nunavut Government is interested in the continual development of the cruise ship industry as a tool for a sustainable development. Several papers present cruise ship tourism results in economic benefit in different countries, but an examination of all aspects of sustainable growth is imperative. These aspects are socio/cultural, economic, and environmental protection. The sociocultural aspect for sustainable development takes into consideration the perspective of the community to define which elements are needed to determine what sustainable development means. To understand the sociocultural aspect of cruise ship tourism in Pond Inlet, the focus was to understand what elements the community believed should be considered (Chapter 3).

Through years of observations, the Inuit traditional knowledge of Pond Inlet (Inuit Qaujimajatuqangit) provides an in-depth perspective of all of the changes in their environment. These include changes derived from the warming as a consequence of the climate change, and the changes in the ecosystem and the wildlife surrounding them. In addition to those changes, the increase in the shipping traffic is also affecting the marine ecosystems, according to the community members.

The community expressed their interest in participating in this study related to the cruise ship tourism (Chapter 3). All of the community member participants talked extensively about the cruise

ship tourism, how they face the increase in the cruise ship tourists and changes in the environment attributable to this industry. The main themes were classified in six categories. Those themes are economic and cultural impacts, adverse effects on marine and terrestrial ecosystems, disruption of traditional livelihoods, communication, infrastructure, and impact on well-being.

The majority of the community members interviewed did not see any economic benefit related to the cruise ship tourism, and if there is economic benefit, the authorities should consider a better plan to distribute the economic benefit in the community. All of the community members interviewed mentioned the negative impact on the ecosystem related to shipping in general, the increase in cruise ship numbers and how their activities are disturbing the marine wildlife. The disruption of the Pond Inlet traditional lifestyle is considered dramatically negative for most of the community members who participated in this study. On the aspect of communication, the community members expressed a significant lack of active community participation in the resource management or consultations for projects. In general, the community of Pond Inlet is concerned about their well-being presently and in the future, if there are no improved plans for the sustainable development of cruise ship tourism for their community.

In chapter four, it was explained that the federal jurisdiction regulates the cruise ship tourism through an extensive list of legislations and regulations (see Table 4.1). The Nunavut Land Claim Agreement is included and explained in this list. This agreement provided the Inuit communities of Nunavut the rights and the recognition of their knowledge and participation in resource management. Despite this recognition, the decision-making power does not rely on the community or in the co-management boards of the protected areas of Sirmilik National Park and Bylot Island Migratory Bird Sanctuary. The federal or territorial government agencies are the ones in the position of power. The Inuit community of Pond Inlet has “traditional rules” of conduct related to the marine ecosystems and cruise ship tourism (see Table 4.3). In the discussion provided in chapter 4, there is a comparative overview of the formal and “traditional” rules. However, there are similarities and differences between those rules.

5.2 Recommendations

Overall, the effects of the tourism industry –positive and negative- in the communities have to be monitored carefully. These effects, economic or not, should be considered in data and analyzed by the decision-making agencies or institutions. The Leung et al. (2014) and several academic authors emphasize that to collect information and monitor the tourism activities, resources including infrastructure and permanent staff are needed. Several academic papers talk about the communities' participation in these activities to make them affordable and well-done (Nepal, 2003; Johnson, 2002; Johnson et al., 2015). Pond Inlet community already expressed their interest in participating in cruise ship tourism related activities. It is well documented that environmental changes require long-term monitoring (Luzar et al., 2011), and it is recognized as part of traditional ecological knowledge (Berkes et al., 2000). All this community participation is also part of the rights included in the Nunavut Land Claim Agreement.

The main recommendation of this study is the creation of the network in the community, by community members, to monitor the cruise ships and the tourists landing. Some examples of this recommendation implemented in other parts of Canada and other countries are presented by academic authors. Johnson et al (2015) mentioned arctic residents as active participants in monitoring and observing activities, presenting examples in Alaska, Greenland and Russia. In particular, marine ecosystems, Dobbs et al. (2016) presented a study conducted in Australia considered a success. In this case, an Indigenous rangers group is responsible for monitoring and managing a remote wetland area. In Canada, Berkes et al. (2007) presented examples of coastal management in Canada where the Indigenous community and their traditional knowledge were part of the planning and monitoring marine ecosystems. Another example of success is the one presented by Thomlinson and Crouch (2012); the Haida Watchmen Program. This is considered a success in the integration of Indigenous communities in a Protected Area management. The relationship between Parks Canada and the Haida people working together on tourism for a sustainable development of the community. These examples embodied the network recommended for Pond Inlet community.

A community-based monitoring network can also be implemented between Pond Inlet and other communities that are facing similar situations, such as unexpected cruise ships visits, like in Grise Fiord community. It could include tracking small or personal vessels that are not currently monitored by any government agency. This network will work to provide vessels' information, activities and routes to the authorities responsible of regulate those activities. In addition, the network would provide information in the communities, about tourism, parks and other places or sensitives areas, to ensure the tourists proper conducts for permissions, licenses or activities. An example of network with more than one community is the Guardian Watchmen Programs in British Columbia, CA, is another example of this recommendation. This is a program where the First Nations in the region are monitoring and protecting their lands and waters of the territory. The network was created in 2005, 8 communities along on British Columbia's North and Central Coast and Haida Gwaii are working together to address sustainable policies and practices in their land and marine sources (for more information visit the web page <http://coastalguardianwatchmen.ca/>).

According to the findings of this study, and mentioned by Eligio (2012), communication is an issue that must be addressed to achieve better social development. I also recommend a better communication for the sustainable development of CST. The communication between the different CST stakeholders would create a better way to facilitate the interaction between the community and the rest of stakeholders, and communication between community groups. For example, the interaction between the community and the tourist could be improved through the visitor center's efforts to create pamphlets to distribute to the tourists when they arrive in the community. The pamphlet has a list of conduct "rules" for visitor. Unfortunately, those are only conduct suggestions.

In addition, I recommend that the federal and territorial governments review the legislation and amend it, it is important that the Government properly address the changes in the cruise ship tourism in the Canadian Arctic. This could be achieved by a proper legislation, upgrading the guidelines and standards to biding regulation. It is relevant to include the Inuit traditional knowledge (Inuit Qaujimagatuqangit) of the communities, like Pond Inlet, in the process. All their traditional knowledge is related to a better relationship between the community and their

environment. The integration of the “traditional rules” into the formal legislation can provide the deep in-sights of the people facing the environment changes and the consequences of the increase of the cruise ship tourism. I also recommend the revision of the terms for funding and grants for the northern communities. In order for those communities to have access to programs, the funding has to be according to their special weather conditions and activities. The requirements to apply for funding are general, but the supplies to the communities in the north depend on the shipping in summer or the training from government agencies. The training depends on the staff of the agencies, such as Parks Canada for tour guides or polar bear monitors, or the training for money management from representatives from the Economic Development and Transportation of Nunavut in the communities. Normally those training are once a year and not every year, and the participants are limited. The people in the community and in the Hamlet mentioned this as an important issue to address.

Only a few community members expressed a radical opposition to the CST, the middle range of the emotion towards the tourists in the community could be handled with a proper legislation and enforcement in place. With the participation of the community in the decision-making process and monitoring the industry, and administration of proper sanctions to the people who do not follow regulations, the community can direct cruise ship tourism toward a more sustainable form of development for the community and the territory.

5.3 Further Research

The cruise ship tourism in Pond Inlet affects political, social and economic aspects of the region. This study provided community insights of the social aspects. Further research could explore other aspects, like the cultural differences between tourists and residents in the community. In addition, all the themes provided by the community members of Pond Inlet (Chapter 3), related to cruise ship tourism and to manage its impacts on Sirmilik National Park and Bylot Island Migratory Bird Sanctuary, could be a starting point for further research, as the community participation in the co-manage board of the areas. These themes can also provide lessons for other communities that are facing increased growth of CST.

The changes that help to increase the cruise ships in the region are expected to continue and open the door to CST expanding into other communities in the region. Another starting point arising from this study is the research of other stakeholders, as cruise ship operators and NGO's. The inclusion of the traditional knowledge or cultural respect at early stages of the routes developing for cruise ships could be a way to avoid conflicts or disruptions on the marine ecosystems or communities. The Arctic Marine Tourism Project also mentions the non-profit organizations and tourism operators as important stakeholders. Government representatives interviewed emphasized the importance of cruise ship operators for a sustainable marine tourism in Nunavut. A Tourism Nunavut representative highlighted this issue saying: "*Some cruise ship operators do it right, have some cultural interpreters on board, and they are trained, training the passengers, training the crew, on Inuit life, on Inuit culture, that type of thing, ensuring that they have a positive impact on the community*" (021102). Johnson (2002) built on this topic emphasizing the importance of strategies and management initiatives for cruise tourism operators.

This study documented only a few of the "traditional rules" commented by the community members, a further research on this topic can document more extensively relevant Inuit traditional ecological knowledge. Finally, I would suggest a further investigation of the interaction between the Inuit community and tourists. A deeper study in this topic could provide information for a better understanding of the cultural aspects for a cooperative projects and better relationships.

References

- Agrawal A., Gibson C., (1999). Enchantment and Disenchantment: The Role of Community in Natural Resources Conservation. *World Development*, 27, 4, 629-649
- Akani K., (2012). A Community Resilience Model for Understanding and Assessing the Sustainability of Forest-Dependent Communities. *Research In Human Ecology*, 19, 2, 99-109
- Arctic Marine Tourism Project (2013-2015) [former Arctic Shipborne Tourism Initiative], Protection of the Arctic Marine Environment (PAME) http://www.pame.is/images/03_Projects/AMSA/Cruise_Ship_Tourism/Artic_Marine_Tourism_Project_draft_work_plan_Mar_2014.pdf
- Beltrán J., Phillips A., (2000). Indigenous and Traditional Peoples and Protected Areas; Principles, Guidelines and Case Studies, World Commission of Protected Areas, Best Practice Protected Area Guidelines Series No. 4, IUCN-The World Conservation Union
- Berkes F., Colding J., & Folke C. (2000). Rediscovery of Traditional Ecological Knowledge as Adaptive Management. *Ecological Applications*, 10, 5, 1251-1262
- Berkes F., Kislalioglu Berkes M., Fast H., (2007). Collaborative Integrated Management in Canada's North: The Role of Local and Traditional Knowledge and Community-Based Monitoring. *Coastal Management*, 35, 143-162
- Berkes F., (2009). Indigenous way of knowing and the study of environmental change. *Journal of the Royal Society of New Zealand*, 39, 4, 151-156
- Berlinger R.D., Sabau G.V., (2016). General Considerations on the enforcement (application) of Law. *Journal of Legal Studies*, 17, 3, 122-128
- Borrini-Feyerabend G., Kothari A., Oviedo G., (2004). Indigenous and Local Communities and Protected Areas: Towards Equity and Enhanced Conservation. IUCN, Gland, Switzerland and Cambridge, UK. Xviii + 111
- Brida J., Bukstein D., Tealde E., (2015). Exploring Cruise Ship Passenger expending patterns in two Uruguayan port of call. *Current Issues in Tourism*, 18, 7, 684-700

- Brosius P.J., Lowenhaupt Tsing A., Zerner C., (1998). Representing communities: Histories and politics of community-based natural resource management. *Society & Natural Resources*, 11 (2), 157-168
- Bull J., (2010). Research with Aboriginal Peoples: Authentic Relationships as a Precursor to Ethical Research. *Journal of Empirical Research on Human Research Ethics: An International Journal*, 5 (4), 13-22
- Burndtland G.H., (1987). Report of the World Commission on Environment and Development: Our Common Future. Oslo, Norway
- CAFF (Conservation of Arctic Flora and Fauna), Protected Areas of the Arctic: Conserving a Full Range of Values. Ottawa, 2002
- Chavez V., Israel B., Allen A., DeCarlo M., Lichtenstein R., Schulz A., ... McGranaghan R., (2004). A Bridge Between Communities: Video-making Using Principles of Community Based Participatory Research. *Health Promotion Practice*, 5 (4), 395-403
- Cronon W., (1996). The Trouble with Wilderness; or, Getting Back to the Wrong Nature. *Environmental History*, 1(10), 7-28
- Dawson J., Johnston M.E., Stewart E.J., (2014). Governance of Arctic expedition cruise ships in a time of rapid environmental and economic change. *Ocean & Coastal Management*, 89, 88-99
- Dobbs R.J., Davies C.L., Walker M.L., Pettit N.E., Pusey B.J. Close P.G., ... Davies P.M., (2016). Collaborative research partnerships inform monitoring and management of aquatic ecosystems by Indigenous rangers. *Rev Fish Biol Fisheries*, 26, 711-725
- Domínguez-Torreiro M., Soliño M., (2015). Measuring Social Preferences for Rural Development in Southern Europe. *Int. J. Environ., Res.*, 9(1), 27-34
- Dove M.R., (2006). Indigenous People and Environmental Politics. *Annual Rev. Anthropol.* 35(1), 191-208
- Inuit Health, Education and Country Food Harvesting, (2008) Aboriginal Peoples Survey, Component of Statistics Canada Catalogue no. 89-637-X
- Eagles P.F.J., McCool S.F., Haynes C., (2002). Sustainable Tourism in Protected Areas: Guidelines for Planning and Management. IUCN Gland, Switzerland and Cambridge, UK. xv + 183 pp

- Eligio A., (2012). Communication Imperatives for Indigenous Peoples' Representation in Policy Making: Lessons from the IPRA (Indigenous Peoples Rights Act) Experience. *Telematics and Informatics*, 29, 324-334
- Ellis S., (2004). Meaningful Consideration? A Review of Traditional Knowledge in Environmental Decision Making. *ARCTIC*, 58 (1), 66-77.
- Federay J., Muir-Cochrane E., (2006). Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Developing. *International Journal of Qualitative Methods*, 5(1), 80-93
- Funston Bernard (2014). Arctic Marine Tourism Project, Workshops Report, Northern Canada Consulting, Ontario, Canada
- Guidelines for the Operation of Passenger Vessels in Canadian Arctic Waters (2017-01-09) <https://www.tc.gc.ca/eng/marinesafety/tp-tp13670-menu-2315.htm#preface>
- Hornby R., (1991). The Canadian Laws Offshore Application Act: The Legislative Incorporation of Rights over the Continental Shelf [notes]. *Canadian Yearbook of International Law*, 29, 355-372
- Huntington H., (2000). Using Traditional Ecological Knowledge in Science: Methods and Applications. *Ecological Applications*, 10(5), 1270-1274
- Huntington O., Watson A., (2012). Interdisciplinary, Native Resilience, and how the Riddles Can Teach Wildlife Law in an Era of Rapid Climate Change. *Wicazo SA Review*, 49
- ITK & NRI (2006). Negotiating Research Relationship with Inuit Communities: A Guide for Researches. Scott Nickels, Jamal Shirley, and Gita Laidler (Eds.). Inuit Tapiriit Kanatami and Nunavut Research Institute: Ottawa and Iwaluit. 25 pp.
- IUCN (International Union for Conservation of Nature) 2016, http://www.iucn.org/about/work/programmes/gpap_home/
- Johnson D., (2002). Environmentally sustainable cruise tourism: a reality check. *Marine Policy*, 26, 261-270
- Johnson N., Alessa L., Behe C., Danielsen F., Gearheard S., Gofman-Wallingford V., ... Svoboda M., (20014). The Contributions of Community-Based Monitoring and Traditional Knowledge to Arctic Observing Networks: Reflections on the State of the Field. *Arctic*, 68, 28-40

- Johnston A., Johnston M., Dawson J., Stewart E., (2012). Challenges of Arctic Cruise Tourism Development in Canada: Perspectives of Federal Government Stakeholders. *Journal of Maritime Law & Commerce*, 43(3), 335-347
- Johnston A., (2015). Stakeholders Perspectives on Climate Change and Adaptation in Expedition Cruise Tourism in Nunavut, Stakeholder Report. Arctic Tourism and Climate, AECO web page
- KangikHITEAGUMAVEN: A Plain Language Guide to the Nunavut Land Claims Agreement (2003). Nunavut Tunngavik Incorporated, Department of Communications
- Kellert S., Mehta J., Ebbin S., Lichtenfeld L. (2000). Community Natural Resource Management: Promise, Rhetoric and Reality. *Society & Natural Resources*, 13(8), 705-715
- Koivurova T., (2009). Governance of protected areas in the arctic. *Utrecht Law Review*, 5, 44-60
- Laidler G., (2006). Inuit and Scientific perspectives on the relationship between sea ice and climate change: the ideal complement? *Climate change*, 78, 407-444
- Lalonde S., (2004). Increased Traffic through Canadian Arctic Waters: Canada's State of Readiness. *Revue Juridique Themis*, 38, 49
- Leung, Y., Spenceley, A., Hvenegaard, G., & Buckley, R. (Eds.). (2014). *Tourism and Visitor Management in Protected Areas: Guidelines towards sustainability*. Best Practice Protected Area Guidelines Series No. XX. Gland, Switzerland. IUCN
- Levon S., (2017, June 11). Nunavut gears up for increase in Arctic tourism. Eye on the Arctic, retrieve from <http://www.rcinet.ca/eye-on-the-arctic/2017/03/28/nunavut-gears-up-for-increase-in-arctic-tourism/>
- Lix L., Bruce S., Sarkar J., Young T., (2009). Risk factors and chronic conditions among Aboriginal and non-Aboriginal populations, Statistics Canada, Catalogue no. 82-003-XPE. *Health Reports*, 20(4)
- Luzar J., Silvius K., Overman H., Giery S., Read J., & Fragoso J., (2011). Large-Scale Environmental Monitoring by Indigenous People. *American Institute of Biological Sciences*, 62(10), 771-783
- Maher Pat T., (2012). Expedition Cruise visits to Protected Areas in the Canadian Arctic: Issues of Sustainability and Change for an emerging market. *Tourism*, 60(1), 55-70

- Manseau M., Parlee B. and Ayles B., (2005). A Place for Traditional Ecological Knowledge in Resource Management. In F. Berkes, R. Huebert, H. Fast and M. Manseau (Eds.), *Breaking Ice: Integrated Ocean Management in the Canadian North*, 1141-1164. Calgary: University of Calgary Press.
- Martin V., Tyler N., (Edited by), *Arctic Wilderness*, (5th Ed). World Wilderness Congress, North American Press, Golden, Colorado USA
- Master Nunavut Cruise Ship Itinerary 2016, Government of Nunavut (NG), (2017) <http://www.gov.nu.ca/edt/documents-tourism>
- McDougall L., (2001). Cana Benefitting from Cruise Boom. *Travel-Log*, Vol. 20, No. 2
- Minkler M., (2005), *Community-Based Research Partnerships: Challenges and Opportunities*. *Journal of Urban Health*, 82(2)
- Murray L., (2006). On thin Ice. *Geographical, Arctic Hunters*, 32-35
- Nepal S., (2003). Involving Indigenous Peoples in Protected Area Management: Comparative Perspectives from Nepal, Thailand, and China, *Environment Management. Environmental Management*, 30(6), 748-763
- Noe C., Kangalawe R., (2015). Wildlife Protection, Community Participation in Conservation, and (Dis) Empowerment in Southern Tanzania. *Conservation and Society*, 13(3), 244-253
- Nunavut Marine Tourism Management Plan 2016-2019, Government of Nunavut, Department of Economic Development and Transportation,
- Nuttall M, et al., (2004). Hunting, Herding, Fishing, and Gathering, Indigenous Peoples and Renewable Resource Use in the Arctic. *ACIA Scientific Report, External Review*
- Pearce T., Wright H., Notaina R., Kudlak A., Smit B., Ford J.D., Furgal C., (2011). *Human Ecology*, 39, 271-288
- Remierson E., (2013). Between culture and nature: exploring space for indigenous agency in the Convention of Biological Diversity. *Environmental Politics*, 22(6), 992-1009
- Reynolds L., (2016). Watching a Whale's Tale: The Protection of Cetaceans in Canada. *Journal of Environmental Law and Practice*, 28, 259
- Searles E., (2008). Inuit Identity in the Canadian Arctic. *ETHNOLOGY*, 47(4), 239-55
- Singleton R. & Straits B., (2010). *Approaches to Social Research* (5th ed.). New York, NY. Oxford University Press

- Spaargaren G., Mol A.P.J., (1992). Sociology, environment, and modernity: Ecological modernization as a theory of social change. *Society & Natural Resources*, 5, 323-344
- Stankey G., Clark R., Bormann B., (2005). *Adaptive Management of Natural Resources: Theory, Concepts, and Management Institutions*. US Department of Agricultural, Forest Services
- Stewart E.J., Howel S.E.L., Draper D., Yacjel J., Tivy A., (2007). Sea Ice in Canada's Arctic: Implications for Cruise Tourism. *Arctic*, 60(4), 370-380
- Stewart J., Draper D., (2008). The Sinking of the MS Explorer, Implications for Cruise Tourism in Arctic Canada. *InfoNorth, Arctic*, 61(2)
- Stewart EJ, Tivy A, Howell SEL, Dawson J, Draper D, (2010). Cruise Tourism and Sea Ice in Canadian's Hudson Bay Region. *Arctic*, 63(1), 57-66
- Stewart E., Dawson J., Draper D., (2011). Cruise Tourism and Residents in Arctic Canada: Development of a Resident Attitude Typology. *Journal of Hospitality and Tourism Management*, Vol. 18, 95-106
- Stewart E., Dawson J., Howell S., Johnston M., Pearce T. & Lemelin H., (2012). Local-Level responses to sea ice change and cruise tourism in Arctic Canada's Northwest Passage. *Polar Geography*, 36, Iss. 1-2, 142-162
- Stronghill J., Rutherford M., Haider W., (2015). Conservancies in Coastal British Columbia: A New Approach to Protected Areas in the Traditional Territories of First Nations. *Conservation and Society*, 3(1), 39-50
- Thomlinson E., Crouch G., (2012). Aboriginal peoples, Parks Canada, and protected spaces: a case study in co-management at Gwaii Haanas National Park Reserve. *Annals of Leisure Research*, 15, 69-86
- Throsby D. & Petetskaya E., (2016). Sustainability Concepts in Indigenous and Non-Indigenous Cultures. *International Journal of Cultural Property*, 23, 119-140
- Tunngasajji: A Tourism Strategy for Nunavummiut, (2013). Nunavut Tourism, Minister of Economic Development and Transportation, Nunavut Government
- VanderZwaag D., (1983). Canadian Fisheries Management: A Legal and Administrative Overview. *Ocean Development and International Law*, 13(2), 171-212

- Vasquez V.B., Lanza D., Hennesey-Lavery S., Facente S., Halpin H., Minkler M., (2007). Addressing Food Security Through Public Policy Action in a Community-Based Participatory Research Partnership. *HEALTH PROMOTION PRACTICE*, 8(4), 342-349
- Warner L., VanderZwaag D., Engler C., (2014). Canada and the Governance of Arctic Marine Fisheries: Tending a Fragmented Net. *Ocean Yearbook*, 28, 380-422
- Willems-Braun B., (1997). Buried Epistemologies: The Politics of Nature in (Pos)colonial British Columbia. *Annals of the Associations of American Geographers*, 87(1), 3-31
- Wray K., Parlee B., (2013). Ways we respect Caribou: Teetl'it Gwich'in Rules. *ARCTIC*, 66(1), 68-78

APENDIX

Appendix A
PROJECT PROPOSAL DESCRIPTION

Project: “Sustainable Development in Nunavut”

Research Coordinator:

Fabiola Lopez

University of Alberta

Department of Resource Economics and Environmental Sociology

1-11 Pembina Hall

Edmonton, AB

Canada T6G 2H8

fabiola@ualberta.ca

Principal Investigator:

Dr. Brenda Parlee, Canada Research Chair

University of Alberta

Department of Resource Economics and Environmental Sociology

507 General Services

Edmonton, AB

Canada T6G 2H1

Office (780) 492-6825

email: brenda.parlee@ualberta.ca

Project Location:

Iqaluit, Nunavut

Timeframe:

June 2016 – June 2017

Project Description:

Climate change in many regions of Nunavut is creating increased stress on many marines protected areas; access to new areas is increasing due to warming temperatures and multi-year ice melt. The Government of Nunavut is seeing an increase in international shipping as well as cruise ship tourism in many areas including those around Auyuittuo National Park and Bylot Island Migratory Bird Sanctuary. Although there are some existing laws under the Department of Fisheries and Oceans, Parks Canada and Transport Canada, current regulations are perceived as outdated or disconnected from the beliefs, knowledge, practices and rules (socio-cultural norms for respecting the land) of local Inuit communities including those living in Iqaluit, Nunavut.

The goal of this project is to assess the current institutional arrangements in place for managing the socio-economic opportunities and environmental impacts of tourism (cruise ship tourism) on Auyuittuo National Park and Bylot Island Migratory Bird Sanctuary. In addition to assessing the formal federal and territorial regulations and guidelines associated with the management of cruise ship tourism, the graduate student (Fabiola Lopez) will work with Nunavut government staff in different Departments to document the beliefs, knowledge, practices and rules of local Inuit about to respectfully manage these important arctic ecosystems (**Inuit Qaujimaqatuqangit**). An analysis of the fit between these formal and informal rules will help identify gaps as well as opportunities to improve the sustainability of cruise ship tourism in Nunavut.

Many of the shared environmental, social, and economic problems created by cruise tourism are faced by Indigenous communities in remote areas; their beliefs, knowledge, practices and "rules" related to protecting local environments in Nunavut are little considered in formal registration and regulatory arrangements. Although consideration of traditional knowledge **Inuit Qaujimaqatuqangit (IQ)** increased with the creation of the territory of Nunavut and policies to integrate IQ in decision-making, there is limited understanding of how IQ is synergistic or at odds with other laws and regulations territorially and federally. This is particularly true in respect of laws and regulations for managing marine protected areas. To address this gap, the student will work with the Government of Nunavut to assess the current institutional arrangements in place for managing the socio-economic opportunities and environmental impacts of tourism (cruise ship tourism) on Auyuittuo National Park and Bylot Island Migratory Bird Sanctuary through the following objectives:

- Document IQ (beliefs, knowledge, practices and rules) of representatives from the Inuit communities of Iqaluit related to the Auyuittuo National Park and Bylot Island Migratory Bird Sanctuary and the current and potential impacts of cruise ship tourism in these areas of Nunavut.
- Identify formal laws, regulations and guidelines related to the management of Auyuittuo National Park and Bylot Island Migratory Bird Sanctuary. To achieve this objective, the student will undertake a legal review as well as interview key informants from federal and territorial departments responsible for managing cruise ship tourism and Auyuittuo National Park and Bylot Island Migratory Bird Sanctuary.

- Determine the fit between formal laws, regulations and guidelines for managing Auyuttuo and Bylot Island and the rules based on IQ (from Obj.1) and what kinds of gaps, opportunities and challenges may need to be addressed in the future.

Methodology:

The methodology considered is semi-structured interviews with people with past experience, current position and/or expertise related to these issues and/or the areas of Auyuttuo National Park and Bylot Island Migratory Bird Sanctuary, and the current and future impacts of cruise ship tourism in these areas. There is no requirement to participate and the persons can withdraw at any time.

Interviews from Iqaluit will be selected by the elected members (Chair) of the local Hunters and Trappers Organizations (HTOs) which serve as the local environmental management committees in Nunavut. Interview from the territorial and federal governments will be selected based on input from a collaborator in the Government of Nunavut and according to their relevant expertise (i.e., there are limited number of individuals with expertise related to these protected areas and the socio-economic and environmental cruise ship tourism).

All the interviews will be carried out by the graduate student (Fabiola Lopez). We anticipate participation from an equal number of men and women. Another criteria for selection will be: willingness to participate (confirmed by consent form). If the participant is not fluent in English, a translator will be provided to assist the participant. All the interviews will be done in person (face-to-face) in either the local communities or in Iqaluit where regional meetings are often held. Iqaluit is also the territorial capital where anticipated interviewees from territorial government and federal government have permanent offices.

The community of Iqaluit was selected based on three main reasons. The first one for be the base for Nunavut Government. The second is their livelihood linked to the protected areas. The last one, the impact they can receive by Cruise Ship Tourism.

Data:

We will be using audio/video recording equipment that is the property of the Principle Investigator/University of Alberta. Only the graduate student and the Principle Investigator will be involved in audio/video recording.

Potential research participants will be given the opportunity to have all personal identifying information (e.g., name) removed (anonymized) prior to transcription of audio/video recording as indicated on the consent form. The audio/video file and text transcript will be stored for at least five years at the University of Alberta. If the interviewee chooses to participate but does not want to be identified publicly by name, an alias identifier will be used (e.g., A001) The complete transcripts from the project will be stored in a locked filing cabinet in the Department of Resource Economics and Environmental Sociology (Dr. Brenda Parlee's office) during and after the project. Any future use of the data beyond that defined in this project description will be mediated by further consultation and consent of the participants.

A second digital copy of the audio/video recordings will be stored on the portable laptop computer of the graduate student which is to be stored in a locked case in her possession. Data sets emerging from the transcripts will be stored on secure computers within the Department of Resource Economics and Environmental Sociology, with access restricted to members of the research team.

Reporting:

The student (Fabiola Lopez) will produce a thesis and 2 scholarly publications from the research. The work will also be presented at one academic conference in 2017.

The HTOs in the community, Iqaluit, will receive a plain language newsletter (summary) as an interim report and a plain language summary of the final thesis.

Warm regards,

Fabiola Lopez

fabiola@ualberta.ca

Dr. Brenda Parlee,

bparlee@ualberta.ca

Office (780) 492-6825

Appendix B
LETTER of INTRODUCTION

Sustainable Development in Nunavut

Research Coordinator:

Fabiola Lopez

University of Alberta

Department of Resource Economics and Environmental Sociology

1-11 Pembina Hall

Edmonton, AB

Canada T6G 2H8

fabiola@ualberta.ca

Principal Investigator:

Dr. Brenda Parlee, Canada Research Chair

University of Alberta

Department of Resource Economics and Environmental Sociology

507 General Services

Edmonton, AB

Canada T6G 2H1

Office (780) 492-6825

email: brenda.parlee@ualberta.ca

Dear Potential Research Participant:

Your name was provided to me by _____ who indicated you may be interested in participating in a research project on Sustainable Development in Nunavut. I am a student at the University of Alberta in Resource Economics and Environmental Sociology. This project is part of my

graduate degree. I am very interested in marine protected areas, the role of Traditional Knowledge in natural resource management and sustainable development of Indigenous peoples.

Resources for this study are being provided by “Resources and Sustainable Development in the Arctic” which is a research network funded by Social Sciences and Humanities Research Council of Canada. The study hopes to acquire insights on how traditional knowledge is important to sustainable resource development and how increasing cruise ship tourism in Nunavut can be made more sustainable in sensitive marine ecosystems.

You were suggested because of your past experience, current position and/or expertise related to these issues and/or the areas of Auyuittuo National Park and Bylot Island Migratory Bird Sanctuary, and the current and future impacts of cruise ship tourism in these areas.

There is no requirement to participate and you can withdraw at any time. If you agree, you will be asked to either participate in a conversation (narrative interview) lasting approximately one and half-hours at a venue and time of your convenience. This narrative interview will focus on your beliefs, knowledge, practices and the rules that you think are important for protecting the Auyuittuo National Park and Bylot Island Migratory Bird Sanctuary, now and in the future.

I will be contacting you by phone or by follow up email, to schedule an interview. You can also contact me or my supervisor (Brenda Parlee) at the emails and phone numbers below.

Warm regards,

Fabiola Lopez

fabiola@ualberta.ca

Dr. Brenda Parlee,

bparlee@ualberta.ca

Office (780) 492-6825

Appendix C

COMMUNITY INVOLVEMENT and REGIONAL BENEFITS

Sustainable Development in Nunavut

Research Coordinator:

Fabiola Lopez

University of Alberta

Department of Resource Economics and Environmental Sociology

1-11 Pembina Hall

Edmonton, AB

Canada T6G 2H8

fabiola@ualberta.ca

Principal Investigator:

Dr. Brenda Parlee, Canada Research Chair

University of Alberta

Department of Resource Economics and Environmental Sociology

507 General Services

Edmonton, AB

Canada T6G 2H1

Office (780) 492-6825

email: brenda.parlee@ualberta.ca

For this study, the MSc Student, Fabiola Lopez, at the University of Alberta in Resource Economics and Environmental Sociology. This project is part of my graduate degree. I am very interested in marine protected areas, the role of Traditional Knowledge in natural resource management and sustainable development of Indigenous peoples.

To conduct this project, the student started literature review of Nunavut and Tourism. To include update information emailed several people of the Nunavut Government, including:

Sebastian Charge (Senior Advisor, Tourism Legislation, Tourism and Cultural Industries Division, Department of Economic Development and Transportation), March 7, 2016

Francisca Mandeya (Project Monitoring and Evaluation Specialist of the Department of Economic Development and Transportation), March 1st, 2016

Matthew Illaszwics (Communication Manager) march 2nd, 2016.

The study hopes to acquire insights on how traditional knowledge is important to sustainable resource development and how increasing cruise ship tourism in Nunavut can be made more sustainable in sensitive marine ecosystems. Potential benefits of the proposed research to participants include the opportunity for participants to voice their traditional knowledge, experiences and concerns regarding impacts to resources, livelihoods, and culture as a result of cruise ship tourism development. The traditional rules documented for further researches and consideration to be included in laws. The results of this research are intended to contribute to policy development regarding Indigenous knowledge and communities affected by the cruise ship tourism industry developing in Nunavut to be more sustainable.

Warm regards,

Fabiola Lopez

fabiola@ualberta.ca

Dr. Brenda Parlee,

bparlee@ualberta.ca

Office (780) 492-6825

Appendix D
PARTICIPANT INFORMATION SHEET

Sustainable Development in Nunavut

Research Coordinator:

Fabiola Lopez

University of Alberta

Department of Resource Economics and Environmental Sociology

1-11 Pembina Hall

Edmonton, AB

Canada T6G 2H8

fabiola@ualberta.ca

Principal Investigator:

Dr. Brenda Parlee, Canada Research Chair

University of Alberta

Department of Resource Economics and Environmental Sociology

507 General Services

Edmonton, AB

Canada T6G 2H1

Office (780) 492-6825

email: brenda.parlee@ualberta.ca

Why am I being asked to take part in this research study?

You are being asked to participate in this study because you are a recent resident of Clyde River or Iqaluit. We are interested in interviewing you about your beliefs, knowledge, practices and rules you think are needed for protecting the regions of Auyuittuq National Park and Bylot Island Migratory Bird Sanctuary.

- Historic and contemporary uses and observations related to sustainability of marine wildlife, habitats or related ecological conditions at Auyuittuo National Park and Bylot Island Migratory Bird Sanctuary;
- Observations or perceptions about the environmental impacts of cruise ship tourism in these areas and socio-economic opportunities for Nunavut;
- Ideas about what kinds of laws or rules (including those based on Inuit Qaujimajatuqangit) should be in place to protect these areas or how they should be enforced.

Before you make a decision, a researcher will go over this form with you. You are encouraged to ask questions if you feel anything needs to be made clearer. You will be given a copy of this form for your records.

Why is this research being done?

I am a student at the University of Alberta. I myself am a recent resident of Canada, and have always been interested in how people from different cultures experience Canada, especially the Arctic. My main interests are in:

- Marine protected areas;
- The role of Traditional Knowledge (Inuit Qaujimajatuqangit) in natural resource management;
- Sustainable Economic Development for Indigenous Peoples

Resources for this study are being provided by “Resources and Sustainable Development in the Arctic” which is a research network funded by Social Sciences and Humanities Research Council of Canada.

What is the reason for doing the study?

The study hopes to acquire insights on how traditional knowledge is important to sustainable resource development and how increasing cruise ship tourism in Nunavut can be made more sustainable in sensitive marine ecosystems.

What will I be asked to do?

You will be asked to either participate in a conversation (narrative interview) lasting approximately one and half-hours at a venue and time of your convenience. This narrative interview will focus on your

beliefs, knowledge, practices and the rules that you think are important for protecting the Auyuittuo National Park and Bylot Island Migratory Bird Sanctuary, now and in the future.

What are the risks and discomforts?

There are no risks or discomforts that may result from the study. You can withdraw your participation during any point before and during the research process.

What will you need to do?

You will sit with an interviewer (Fabiola Lopez) and you are free to tell her anything about your life that you think is relevant to the study.

What are the benefits to me?

You will receive a \$100 honorarium (gift card) to compensate you for your time.

Do I have to take part in the study?

You do not have to participate in the study, and you can stop the interview anytime.

Will my information be kept private?

In addition to your story, we would like to record your first name and last initials, your phone number, and email address in order for us to send you a copy of the study report. Your name and address will not be shared with any other person or organization. All of your information will be kept private and secure. No data relating to this study that includes your name will be released outside the research team or published by the researchers.

You will receive a written transcript of the interview for review and may withdraw any part or the entirety of the transcript data from the project within 30 days of receipt of the transcript. Follow-up verification emails will be arranged to confirm transcripts have been received, to clarify any unclear statements, correct any errors or misquotations, and confirm there is no problem with the data being published. The follow-up stage provides a last opportunity to withdraw from the study. If you wish, your interview

transcript will be destroyed and will no longer inform the data set. You may communicate this wish during or after the interview, up until the follow-up email is completed.

The audio/video file and text transcript will be stored for at least five years at the University of Alberta. If you choose to participate but do not want to be identified publicly by name, an alias identifier will be used (e.g., A001). The complete transcripts from the project will be stored in a locked filing cabinet in the Department of Resource Economics and Environmental Sociology (Dr. Brenda Parlee's office) during and after the project. Any future use of your audio/video files will be mediated by further consultation and your consent. All the information and the data will only be kept for five years unless otherwise you required. The files and information will be destroyed through shredding of any materials emerging from the project and deletion of any audio/video recordings.

What if I have questions?

If you have any questions about the research now or later, please contact:

Fabiola Lopez

fabiola@ualberta.ca

OR

Dr. Brenda Parlee,

bparlee@ualberta.ca

Office (780) 492-6825

“The plan for this study has been reviewed for its adherence to ethical guidelines by a Research Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Research Ethic Office at (780) 492-2615.”

Appendix E

PARTICIPANT CONSENT FORM

Sustainable Development in Nunavut

Principal Investigator(s): Dr. Brenda Parlee

Phone Number(s): 780-492-6825

Email: bparlee@ualberta.ca

Study Coordinator: Fabiola Lopez

Email: fabiola@ualberta.ca

	<u>Yes</u>	<u>No</u>
Do you understand that you have been asked to be in a research study?	<input type="checkbox"/>	<input type="checkbox"/>
Have you read and received a copy of the attached Information Sheet?	<input type="checkbox"/>	<input type="checkbox"/>
Do you understand the benefits and risks involved in taking part in this research study?	<input type="checkbox"/>	<input type="checkbox"/>
Have you had an opportunity to ask questions and discuss this study?	<input type="checkbox"/>	<input type="checkbox"/>
Do you understand that you are free to leave the study at any time, without having to give a reason?	<input type="checkbox"/>	<input type="checkbox"/>
Has the issue of confidentiality been explained to you?	<input type="checkbox"/>	<input type="checkbox"/>
Do you consent to the interview being audio recorded?	<input type="checkbox"/>	<input type="checkbox"/>
Do you consent to the results of the interview being stored at the University of Alberta?	<input type="checkbox"/>	<input type="checkbox"/>
Would you like your name to be included in the public use of information from your interview?	<input type="checkbox"/>	<input type="checkbox"/>

Who explained this study to you? _____

I have been fully informed of the objectives of the project being conducted. I understand these objectives and consent to being interviewed for the project. I understand that steps will be undertaken to ensure that this interview will remain confidential unless I consent to being identified. I also understand that, if I wish to withdraw from the study, I may do so, without any repercussions.

Signature of Research Participant _____

(Printed Name) _____

Date: _____

Signature of Witness _____

Only required if you anticipate that your participants will be unable to read the consent for themselves. If so, an impartial witness (i.e. not associated with the study team) must be present during the entire informed consent discussion and is witnessing that the participant understood what was discussed (i.e. not just witnessing the signature process).

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

Signature of Investigator or Designee _____

Date _____