USING INTEGRATED RESOURCE MANAGEMENT AND THE PUBLIC TRUST DOCTRINE TO EXAMINE WILDLIFE MANAGEMENT PRACTICES IN NORTHERN LABRADOR: A CASE STUDY ON THE GEORGE RIVER CARIBOU HUNTING BAN

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A (Thesis) submitted to the

School of Graduate Studies

In partial fulfillment of the requirements for the degree of

MA in Environmental Policy

Environmental Policy Institute

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Abstract

The people of Labrador, especially the Inuit, rely on their surrounding resources to sustain themselves and their culture. In particular, the Labrador Inuit depended upon the George River Caribou Herd (GRCH), once one of the largest caribou herds in the world, to provide them with a staple food supply, nourishment, materials, and facilitate the intergenerational sharing of knowledge and important social and cultural norms, all of which are critical to life in Arctic and subarctic environments. This woodland caribou population, however, has declined by 99% over much of it range resulting in a hunting ban, and consequently, a cascade of impacts on the Inuit of northern Labrador. Examining and understanding these impacts is the focus of this thesis. As management of wildlife in North America is to follow the Public Trust Doctrine—to manage wildlife in the public trust—this thesis helps bring the information of Inuit impacts into the discussion to help inform future best practices for more accountable, responsible, and locally responsive wildlife management efforts in the North.

Key words: Inuit, caribou, wildlife management, Public Trust, impacts, northern Labrador, Nunatsiavut, resource management.

Impact Summary

This research project looked at the George River Caribou Hunting Ban that is currently in place in northern Labrador. The Inuit who live in this area of Newfoundland and Labrador are not allowed to hunt nor harvest from this caribou herd due to the low headcount of animals. Northern Labrador Inuit relied on this caribou species for centuries and having this taken away from their culture, lifestyle, and communities takes a toll on their well-being, knowledge, and traditional skills. The method that was used to look at this research project, integrated resource management and the Public Trust Doctrine, allows policy makers and stakeholders to share and use their knowledge and skills to make better management policies on wildlife that are important to resource users. In this case, Inuit in northern Labrador are willing to share their voice at the decision making table to reform wildlife management policies and practices that influence their communities, culture and society to meet their needs and how they would like to see the hunting ban managed. Applying their knowledge and perspectives on the experiences that they felt from the hunting ban could help reshape wildlife management.

Impacts of COVID-19 Restrictions

This research project was not entirely impacted by COVID-19 since a large portion of it was already conducted during the summer and fall of 2018. Although, the attempt to deliver the research findings back to the communities in Nunatsiavut was hindered by the pandemic in March and April 2020. Nunatsiavut communities were closed to non-essential travel this spring and restricted travel between communities.

Acknowledgements

Before getting into the details about this research paper on caribou, wildlife management, and policy, I would like to show my tremendous amount of appreciation to a handful of people, support programs, and post-secondary officials. First, I would like to thank both of my parents, Karen Dicker & Harry Haye for supporting my academic efforts throughout my post-secondary career for the last 9 years. Thank you for all that you do and continue to do. To Dr. Stephen Decker, who encouraged me to pursue my Master's degree and who helped me understand, write, and document such an important topic that is a primary, central, crucial, and integral to my Inuit background, culture, and livelihood. Your effortless support, advice and time allowed me to better understand the importance of the social sciences, resource management and policy to apply and practice in my home and region of Nunatsiavut. To the Nunatsiavut Government's Post Secondary Student Support Program for the financial coverage throughout my academic career. To Tradition & Transition program for funding my research in each Nunatsiavut community, I would not have been able to do it without their assistance. And to my extended family and friends who provided additional motivation and support throughout my studies.

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List of Acronyms

PTD: Public Trust Doctrine

US: United States

GRCH: George River Caribou Herd

CLO: Community Liaison Officer

GC-REB: Grenfell Campus – Research Ethics Board

NAMWC: North American Model of Wildlife Conservation

IRM: Integrated Resource Management

WM: Wildlife Management

NL Newfoundland and Labrador

LISA: Labrador Inuit Settlement Area

LILCA: Labrador Inuit Land Claims Agreement

Introduction

This history of wildlife conservation in North America has been one of various accomplishments and failures. Through these lessons, wildlife management in Canada and the USA has been identified by many as an example of successful wildlife management and conservation for wildlife management professionals and resource users (Feldspausch-Parker, Parker & Vidon, 2017). This model has been perceived in various ways with two major depictions being alternatively: a historical description of how wildlife conservation has unfolded in Canada and the USA, and a prescriptive model of characteristics paving the way on how wildlife management should be carried out in Canada and the USA (Peterson & Nelson, 2017). With its origin in Roman civil law, the Public Trust Doctrine (PTD), is identified as an essential component of North American wildlife management that institutes a relationship in which government managers are to act as trustees who hold and maintain wildlife, fish and waterways for the benefit of the resources and for the general public (The Wildlife Society, 2010). The PTD requires that trustees have an accurate and credible understanding of the perceptions, attitudes, values, and beliefs of the public if they are going to work on the structure of wildlife on the public's behalf (Smith, 2011). The PTD acknowledges the structure of the North American Model of Wildlife Conservation (NAMWC) and is used for law, policy, program framework, and technical studies that can influence conservation, protection, and restoration of wildlife populations in Canada and the USA (The Wildlife Society, 2010).

As stated by The Wildlife Society (2010), it is known that wildlife professionals used the PTD to explain the method of conservation and natural resource management as it can provide clear understanding on how it should be used. These natural resources can be seen as water resources, submerged lands and by limits to fish, wildlife, and others that gives this PTD the highly

successful model it was built on. Although, Smith (2011) clarifies elected office officials (such as the governor general) and appointed officials (such as commissioners) are the main trustees of the public's wildlife and from these representatives, professionals are trust managers. In a public trust structure, the trustees are given the role to make objectives and widely informed policy-level decisions that sets the goals for the public and to determine the share of trust benefits (Smith, 2011). Also, Decker et al. (2015) argue that, managers (such as expert wildlife professionals) are given the duty to manage resources to maintain the portfolio of benefits desired (such as accomplishing goals set by the trustees) and distributing those benefits equally among beneficiaries. Understanding public opinions or perspectives of knowledge and power can help improve management effectiveness that evens out the top-down and bottom-up approaches (Lute & Gore, 2014). Technical knowledge that is produced from science has an extensive background for persuading decision-making, but non-technical information such as personal opinions and opinions, and social aspects have been unacknowledged in wildlife decision-making (Lute & Gore, 2014). Western science has the ability to influence wildlife management, but understanding the public point of view could also have the same effect. Brewer & Ley (2013) argue that, when people do not meet eye-to-eye about what to do with knowledge because they have different values and beliefs, science alone may not be able to address the conflict between the publics based values.

There is a growing recognition that environmental resources must be managed as parts of the extensive socio-ecological systems in which environmental and human social processes are profoundly related (Quin, 2007). The enterprise of integrated resource and environmental management is, by its terminology, a framework for quality, not just the administrative and jurisdictional lines that appear on maps, but also of the contemporary fields between studies of nature and culture (Fall, 2003). A case study by Lute & Gore (2014) explored wolf management.

They state that animal rights activists may not accept hunting wolves even if they learn that removing up to 30% of the wolves in a population will not jeopardize the sustainability of that population. Another example presented by the authors describes a rancher who is concern about the impacts of a harsh winter on his cattle and that it will not directly experience a population decrease knowing that the additional risk posed by wolves is low by some standard. The point regarding these examples is that, the public are aware of the direct processes of how wildlife are maintained and that the public should have a say in the decisions on policies and regulations made by the wildlife experts. The examples stated above could shuffle the top-down and bottom-up structures as the case studies could enhance wildlife management and its relation to the PTD.

Adaptive management and ecosystem services examinations are regularly used in decision-making. However, adaptive management and ecosystem services have a natural—but to date underexplored—compliance (Epanchin-Niell et al, 2018). Both are oriented in policy and decision-making as they try to represent the conflicts of resource management choices on the outcomes of interest to stakeholders. Given this idea, having to integrate resource management in terms of wildlife decisions that are being made that would be "suitable" for the public would be a beneficial action to addressing the needs of the public.

Integrated resource management is the process that identifies and considers all resource use and management emphasis based on current uses, the mix benefits produced the ongoing capability of the land to produce benefits, and social preference (Mitchell & Shrubsole, 2007). The organizational theory behind this management is that like most theories, it requires numerous types of complex information for sound, effective decision-making. Such questions can be asked like "How much wildlife habitat is protected from future development and how will such a development will unfold?" For example, with the George River Caribou Herd (GRCH) (Rangifer

tarandus), a type of woodland caribou, that is on the decline in Labrador and northern Quebec. The management of this herd seeks to reduce the impacts created by unknown and various (physical and health) factors and the policy of not hunting this herd until the herd shows improvement of population growth and retention. Taking this approach with respect to the GRCH hunting ban that is currently in place in norther Labrador would be beneficial. It is known that such a hunting ban exists since the GRCH population numbers are at an extreme low, dropping from nearly 800,000 animals to less than 5000. It has the opportunity to provide scholarly information on how this affects Inuit within this region, as there are no evidence of public engagement in place to document the impacts that are being inflicted upon. The sole purpose of this thesis is to document the social impacts on northern Labrador Inuit in Nunatsiavut in relation to the GRCH hunting ban.

Methods

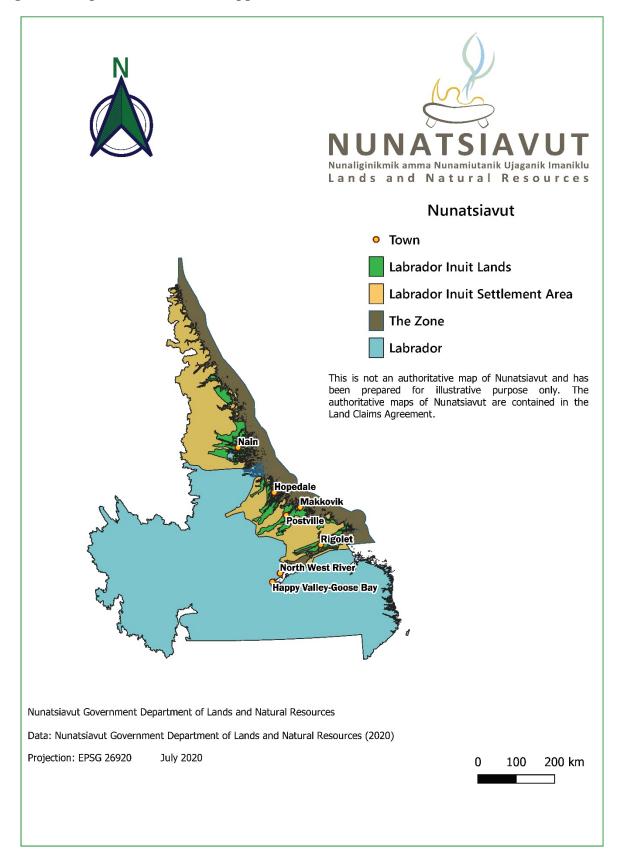
This study involved Indigenous people of the province of Newfoundland and Labrador, specifically Inuit living on the north coast of Labrador. The method of data collection used to gather information from participants was interviews. The researcher used semi-structures interviews because they provide one of the most useful ways to collect data and information in qualitative research, as this method allows the researcher to have the opportunity to better understand and handle raw data provided by the participant(s) (Nelson et al, 2013). The interview processes gathers information from oral knowledge face-to-face (Dunn, 2016). The opportunity to listen directly to Inuit in northern Labrador about their point of view and concerns regarding the GRCH hunting ban was invaluable both in terms of the richness of the information provided and to meet the research outlined for this study. The importance of earnest engagement with Inuit in this study was imperative to its success as one of the main drivers for this research was to help

shape and inform future wildlife management decision-making processes in northern Labrador. For this reason, participant preference was given to experienced hunters and harvesters. However, the researcher was also open to the public who are beneficiaries that live in the Labrador Inuit Land Claims Agreement.

Semi-structured interviews were conducted within all five Inuit communities in northern Labrador. Semi-structured interviews are often used in policy research as it directs questions and topics that relate to the researcher's subject matter (Harrell & Bradley, 2009). Interview data can be used to make claims or to provide evidence of the extent to which public opinions can help formulate new theories that help give voice to the ideas and concerns of subsets of the population that are often marginalized or overlooked (Dunn, 2016). To this end, the current research, conducted within northern Labrador, fits this ideal by allowing Inuit participants to share their ideas and concerns surrounding the caribou hunting ban, as these communities are often seen (by both community members and outsiders) as marginalized when it comes to decision-making made by higher authorities.

Seven to ten interviews were conducted in each of the five Inuit communities: Nain, Hopedale, Makkovik, Postville, and Rigolet. In each community, interviews were conducted over the course of four to five days. Community profiles follow along with a map (Figure 1) the geographical locations of each community in the Nunatsiavut region:

Figure 1: Map of Nunatsiavut & Upper Lake Melville communities.



- Nain: population, 1,125 (Statistics Canada, 2016). The northernmost community in the province of Newfoundland and Labrador and the largest of the five Inuit communities in Nunatsiavut. Established in 1771 by Moravian missionaries (Nunatsiavut Tourism, n.d.). 10 interviews were conducted within this community.
- ➤ Hopedale: population, 574 (Statistics Canada, 2016). The capital of Nunatsiavut and the second largest community in the region. It continues to play an important role by acting as the center of decision-making for the region. 10 interviews were conducted with this community.
- ➤ Makkovik: population, 377 (Statistics Canada, 2016). The community of Makkovik is well off due to the rich fishing grounds nearby, attracting both Inuit and settler populations. 7 interviews were conducted within this community.
- ➤ Postville: population, 177 (Statistics Canada, 2016). Traditionally known as Kaipokok Bay, Postville was renamed by a pastor that helped establish the town's school and church. Inuit families here would often trade in the area throughout the fall, winter and spring before returning to their coastal camping grounds in the summer. 7 interviews were conducted within this community.
- ➤ **Rigolet**: population, **305** (Statistics Canada, 2016). One of the longest boardwalks in world could be located in this community, giving the town a tourist attraction. Inuit families from throughout the Labrador coast would migrate here for educational and employment opportunities that the town offered. 7 interviews were conducted here.

Interview participants were recruited from each of the five Inuit communities with the assistance of Community Liaison Officers (CLO) from the Nunatsiavut Government offices. A recruitment letter (Appendix A) was sent out through email to each CLO and, in response, the

researcher received a list of willing interview participants' names and contact information. These officers work at the community level, overseeing information between communications division and beneficiaries, coordinating meetings, and assisting beneficiaries with information requests (Nunatsiavut Government, 2018). Prior to this stage of the research process, the researcher applied for research approval through the Grenfell Campus Research Ethics Board (GC-REB) as well as with the Nunatsiavut Government's Research Advisory Committee. This was an extensive process as research that is going to be conducted with Indigenous communities; it falls within the Tri-Council Policy Statement (TCPS): Ethical Conduct for Research Involving Humans. Chapter 9: Research Involving the First Nations, Inuit and Metis Peoples of Canada specifically acts a structure for ethical conduct of research conducted within Indigenous communities (Government of Canada, 2018). Ethics board approvals from both GC-REB and the Nunatsiavut Government's Research Advisory Committee were obtained before commencing the research. The Nunatsiavut Government's letter of approval (see Appendix C) was confirmed prior to GC-REB's approval.

At the beginning of the research process and after ethics approval from both parties, the researcher developed an informed consent form (see Appendix D) required by the GC-REB that informed his interview participants on the nature and purpose of the study, their rights and role in the study, confidentiality and anonymity, and the possibility of reporting results. The interview questions were structured in a way that allowed each participant to have open-ended discussions with the researcher. Such an inductive approach was used to allow the participants and researcher more freedom and flexibility than would be possible using deductive approaches that employ closed ended questions in a survey format. This more open and flexible approach was also undertaken in an effort to counter less culturally appropriate research approaches. Such research methods are known to be invasive on social well-being, especially in and on Indigenous

communities within Canada. Research methods would often result in information being extracted from Indigenous peoples without providing appropriate feedback and often only at the end of a study or research practice (Panel on Research Ethics, TCPS2 Chapter 9, 2018). Interview responses were recorded using both a digital voice recorder, provided by the Nain Research Centre, and notes taken by the author. Recordings of each interview were then manually transcribed and organized by community, date and participant (with respect to the informed consent form that was provided, described, and signed by each participant at their choice). This more inductive/explorative research design used in the current study allowed for the identification of resource and wildlife management issues of importance to Indigenous communities not often captured or even perceived by other researchers, policy makers, or institutional or organizational parties working in the region. The organizational process in which this thesis will undertake is by using traditional data analysis using audio transcriptions and identifying significant common themes based on interview questions. Audio transcriptions from the researcher's interviews will be categorized into themes, showing patterns of the impacts identified by the interview participants. Themes will have in depth detail as the thesis progresses with the literature review and results section.

Literature Review

The Public Trust Doctrine (PTD) emphasizes the opinions and values presented by the general public—namely the beneficiaries of the trust as it relates to their assets and interests. A trust is the accumulation of benefits committed to a person or organization to handle or care for in the interest of another (The Wildlife Society, 2010). Trust within this sense relates to wildlife management policy, how this policy should be reasserted, and how this policy needs to be applied for more effectively to properly manage wildlife within the province of Newfoundland and

Labrador, specifically on the north coast of Labrador. Smith (2011) states that, the PTD is considered the cornerstone of the NAMWC and that it holds specific resources into account, such as wildlife, fish, and water resources. The origins of the PTD was undertaken by common law and from an academic standpoint. Emerging from stored power from the sovereign; the PTD is based on the notion that government has a liability to maintain wildlife, fish, and water resources for the use of and to provide benefits to the public (Lum, 2003). The PTD was established as a legal framework derived from Roman civil law and suggests that government is to act as a trustee to maintain wildlife, fish, and water resources (The Wildlife Society, 2010). The PTD provides an obligation for governments to conserve natural resources in the interest of all present and future generations of the public (Horner, 2000). Lauber et al. (2014) argues that, the implications of modern public trust discussions should recognize the ongoing topics related to both the significance and limits of human dimensions' research and stakeholder engagement practices in helping fish and wildlife management agencies to fulfill these principles.

In a time when natural resources are near the tipping point of scarcity, whether it is in the field of species at risk, water supplies, non-renewable resources, or even the idea of having access to space for recreation and/or development, the public will have to prioritize readily available resources (Harris & Marsh, 2016). Lining up priorities when it comes to natural resources, allows for opportunity to consider which resource sector to management—based on public values and input. If we choose to go down this path where we consider resources to become developed, it will in itself become an act where the weight of impact on species at risk, potential land development, and water resources will become outweighed by a lifestyle where it is not transparent to the effects that are put in place. Public trust in this sense becomes blinded by the actions that do not address the adversities where such development on natural resources occur. Although, the Wildlife Society

(2010) states that the weight and consequences of the impacts are not systematic. The following issues have been acknowledged as important challenges that are eroding the public trust-focused management of wildlife: unreliable possession of wildlife as private property, unregulated commercial sale of live wildlife, prohibitions on access to and use of wildlife, and a value system established toward animal rights. A thorough review could address these challenges, which could include an assessment of the present condition of provincial statues and case law in relation to the PTD.

The first principle of the NAMWC focuses on wildlife being treated as a public trust and this interpretation from the model translates the idea on how professional scientists helped hunters and harvesters to recognize the conservation movement (Peterson & Nelson, 2017). Geist et al. (2001) provides a statement that supports the latter sentence as: "it is hunters, specifically hunting, which started the movement to establish the framework for the North American wildlife conservation". Hunters as resource users have the ability and knowledge to share with wildlife experts and these experts help support these resource users by advocating for better wildlife management. The PTD has been translated by some as the cornerstone of the NAMWC. The PTD holds the primary assumption central to the model and it is a public resource, managed for the common good, and held in custodianship by an organization of experts who take up the role as trustees and are held accountable by the public (The Wildlife Society, 2010). The model morphed in response to the continental demise of once abundant wildlife resources because of uncontrolled financial markets that imposed value only on hunted and harvested wildlife. Wildlife is a public resource, especially for those who deeply rely on it for substance, economy, and culture. If wildlife is going to be managed by the government, trustee as a public trust for the benefit of all people.

The notion of applying traditional social practices (i.e. hunting, harvesting and gathering specifically by Indigenous peoples and those who practice it for recreational or leisurely purposes) paved the way for wildlife management to grow. It is believed that these are being replaced in practice by newly found ways or behaviors that reflect a need for integration of many disciplines in management and the desire among various stakeholders to take part in decision-making (Riley et al., 2002). During the 1970s, people of primary concern to fish and wildlife managers were hunters, trappers, and anglers—resource users that fit the traditional term of a "constituency" which is described as a group of people who authorize or support the efforts of professionals to act on their behalf (Decker et al., 1996). It is known that these fish and wildlife professionals attempt to meet the needs of these resource users based on their decisions and actions. However, Decker et al. (2014) refers to the idea written by Smith (2011), that there are ways organizations help support trustee administrators in fulfilling their public trust obligations. These obligations can be met through: 1) informing the public about the public trust, which could result in increased demand for inclusiveness and accountability, 2) ensuring that trustees have complete and balanced social science data to inform and influence decisions and 3) engaging a diversity of stakeholders to discuss and debate conservation issues. There is a need for transparent communication with the public so that they have an understanding of their rights to challenge actions that fail to meet trust standards, which has been largely unacknowledged by government. Taking the public's opinion and values into account, once communication is established, formulating policies in wildlife management could meet the needs of the public and provide a social perspective to the scientific realm. Wildlife resources provide numerous benefits to the public, as they have many values for the evaluation of worth an individual gives to an object relative to other objects, including assigned values to wildlife (Conover & Conover, 2003).

The Wildlife Society reviewed the NAMWC, showing the many ways in which wildlife conservation has came about in North America. They also reviewed the framework that establishes a handful of principles paving the way on how management of wildlife should be considered in North America, given if any of the principles could succeed or fail. Peterson and Nelson (2017) list these precepts as follows (which have matured over several years):

- > Treating wildlife as a *public trust*;
- > Prohibiting wildlife commerce;
- ➤ Allocating of wildlife by rule of law;
- ➤ Allowing hunting opportunity for all;
- > Only allowing legitimate killing of wildlife;
- > Treating wildlife as an international resource and;
- Providing science a primary role in wildlife policy.

However, Peterson and Nelson (2017) also argue that, this diversity of the description on the NAMWC indirectly references the fact that history can without a doubt change human influences by framing them, thus raising the important concern that conservation failures should just be as much a part of the descriptive NAMWC as conservation successes. Additionally, those who have provided literature about the NAMWC and who advocated for its application in structuring wildlife conservation have argued that increased diversity among the wildlife management stakeholders is valuable, but have not reviewed or dropped the historical NAMWC narrative ways that accentuate the role of women, non-hunters, and other minorities. This suggests that wildlife managers are recommended to refer to the PTD, as this piece provides knowledge and information about the public—on whose behalf they are to manage wildlife. It not only tends to the needs of certain groups, but it encompasses all of society without excluding valuable information that can help improve wildlife management policies. Decker et al. (1996) states that, adoption of this new and widened mindset about whose interests and issues should be taken into account and who should

have a say in fish and wildlife management decisions is a significant approach to maintaining professionalism within a viable and primary role in conservation.

As stated by Poole (1974) in Kennedy's (1985, p. 571) article, "the future of fish and wildlife depends as much, if not more, on understanding the social, behavioral, and economic habits as it does on knowing the habits of the animal". Public meetings may be overrepresented by traditional stakeholders such as hunters, anglers, and some wildlife managers who are concerned that policies developed based on data and knowledge from public consultations may not reflect the attitudes of the broader public—especially those who are new to this social setting like non-hunters and minorities (Peterson & Messmer, 2010). When public opinion and preference is not acknowledged, one option for wildlife managers is to attempt design policies they see as desirable to the public and in doing so, managers may rely on their own personal choice to make their decisions (Philips, Boyle, & Clark, 1998). Knowledge derived from both managers and the public, however, influence each other, allowing opportunities for discussion, more responsible decisionmaking and well-supported policies (drafted by managers based on public preference) to better manage wildlife dimensions. In a time where change and challenges occur, a profession must understand itself. In recent times, there has been an opportunity where change and challenges for American professions (including doctors, scientists, educators and even wildlife managers) as the attitudes and perceptions brought on to wildlife are evolving and wildlife managers are often caught between a divide where values from the public in regards to hunting, trapping, and resource development are conflicting (Kennedy, 1985). This challenges addressed by wildlife management have changed drastically during the last century as wildlife managers now face numerous situations and obstacles prioritized by immediate, increasing demand to minimize conflicts between people and species of wildlife that were scarce just a few decades ago (Decker & Chase, 1997).

If the public's ownership of wildlife or the value they place on it is compromised then the PTD could be jeopardized as threats to the PTD could occur such as inappropriate or unsustainable commercialization and privatization of wildlife (The Wildlife Society, 2010). If these undesirable outcomes become successful, a people-wildlife problem could develop. A people-wildlife problem is potentially any situation where:

- > The behaviour of people negatively affects wildlife (such as habitat destruction or population decline);
- > The behaviour of wildlife establishes an unfavourable impact for some stakeholders or is seen by some stakeholders to impact themselves or others immensely;
- > On the other hand, the wildlife-focused behaviour of some people produces a negative interaction with other people (i.e. overlapping values).

Human-wildlife problem can involve a people-wildlife interaction or a people-people interaction (i.e. controversy) or both (Decker & Chase, 1997). If these threats go unaddressed, the trust (wildlife populations or their habitats, water quantity and quality) could become mismanaged or the public may lose access to these resources which in turn diminishes their value placed by the public. The lack of awareness and understanding of the benefits and responsibilities of the PTD leading to social and legal indifference by the government (trustee) or the public (beneficiary) could end up with unwanted consequences for wildlife management (The Wildlife Society, 2010). As law represents a general type of social contract that exists within communities (Lawson, 2002, p. 53), Tonnies (1988) suggests, a community has solidarity through tradition and sentiment on one hand and impersonal contracts on the other. Wildlife is not regarded as part of our community, but in order to regulate and maintain them in a sustainable manner, management must be applied to both wildlife and people (Lawson, 2002). This suggests that we have to understand and closely

examine how people behave and how their actions, purpose, and impacts are placed on wildlife. This provides a need for ethnographic research where the observer studies how people go about their day. In doing such social science research, people's actions and attitudes towards wildlife could be revealed to allow for better management of wildlife. Managing wildlife, however, can be complicated and requires information on management outcomes, resource user knowledge (traditional), and relevant policies to meet the needs of the public for whom we are to manage these resources.

Who has a say over wildlife? The part of this question that sparks a broad interest is who. The solution to this question can be found in the PTD framework, which affirms that wildlife managers are to manage wildlife resources in the best interest of the public. They are the folks that should know about the public on whose behalf they are to manage wildlife. Wildlife managers who are working with people-wildlife conflicts report that human dimensions of such situations are the most challenging to grasp and manage (Decker & Chase, 1997). Despite these challenges, the profession of wildlife management requires wildlife trustees to address any type of wildlife impact (The Wildlife Society, 2010). The management response to such impacts could include a wide range of actions including a form of sustainable hunt or to take care of an invasive species that is causing a nuisance to society, the environment or other wildlife (i.e. habitat and prey competition). A profession has a structural component like a systematic theory, authority, community consent, ethical codes and guidelines as well as culture (Kennedy, 1985). With respect to these professional roles and their significance to caribou management and impacts on the Labrador Inuit, the social preferences regarding this wildlife resource is of importance for Inuit well-being. Kennedy (1985) suggests that caribou and wolves are important socio-political and wildlife keystone species as they are rich in professional theories and values based on a few points:

i) underlying notions of professional management expertise; ii) belief in logical scientific thinking; iii) utilitarian values of caribou vs. wolves and; iv) impatience and mistrust of nature's actions. While it is noted that the values listed here are not shared entirely or applied to the public or wildlife professionals universally, some points do clearly apply regarding management response to the ongoing caribou-hunting ban in northern Labrador.

Traditionally, serving only a handful of interested parties (tailored to resource users such as hunters) the wildlife profession or field now must create or establish management programs that are acceptable and appropriate to an increasingly diverse collection of stakeholders (Riley et al., 2003). Managing wildlife based on stakeholder interest and concerns is one way to resolve any issue or controversy that is pressing public needs or demands. Jacobson & Decker (2006) state that in light of these changes, having an interest in questions that ask:

- ➤ How are provincial wildlife management agencies and policy makers adapting to these contextual shifts?
- ➤ Is the pressure for change being embraced as an opportunity to sustain relevance for the public, or is change seen as a threat to be resisted?

Wildlife managers are recommended to accept new opportunities that are presented by the pivotal time of change that is being experienced for provincial wildlife management. The impacts that feed into these changes derived from stakeholder involvement will lead to: i) management of the priorities identified by the public that will lead to more rigorous political support for management and ii) improvements is shared learning among scientists, managers, and stakeholders (Riley et al., 2003). This in turn fulfills the idea on whose behalf wildlife managers they are to manage wildlife.

Theoretical framework

Integrated resource management (IRM) is starting to have more applications within the wildlife management field. The trend with this framework integrates various disciplines to manage certain topics that need a for integrated approaches. With respect to this theoretical framework, IRM will be applied to this subject matter to address the GRCH hunting ban in northern Labrador; as a case study to examine the social impacts that are currently being experienced by Inuit within this region.

Stakeholders are significant to modern society and there is a global interest in ensuring their participation for policy formulation and process (Niraj, Krausman, & Dayai, 2012). They are any person or organization who influences and are affected by wildlife or wildlife management decisions or actions (Decker et al. 2009). IRM essentially means that integration of ecological and socio-economic research, of traditional and western science, and of different actors and stakeholders (Saxena et al. 2002). While there are numerous approaches and directions of thoughts that supporting it, from conservation and multiple use to ecosystem approaches, adaptive management, and participatory approaches, there is difficulty in defining such a multifaceted theory (Slocombe & Hanna, 2007, p. 1). IRM is a contemporary framework that is being applied within the academic and resource management realm where it brings together various disciplines to address an issue, subject matter, or project that requires numerous inputs, types and sources of knowledge. Although, knowledge about the principles and potential advantages of integrated applications has increased recently, there are scientific, technological, and institutional drawbacks when it comes to applying the theory in practice (Sexana et al. 2002). In the United States, the interpretation of IRM seems to be the production of one condensed framework by leaving out other single programs that address environmental issues and using a larger framework. However, this

approach is only one of a number of ways in which integration may be achieved, and reorganization of administrative frameworks alone is unlikely to prevent conflicts (Watson, Mitchell, Mulamoottil, 1996).

There is an increasing opportunity to seek out an approach to resource management. This general agreement encourages environmentally friendly economic development by handling economic growth and environmental management protection as a continuum that transects the limits of numerous scientific disciplines (Lal & Applegate, 2002). More than a handful of disciplines lack an integrational framework and Slocombe & Hanna (2007) lists them as the following:

- ➤ Disciplines;
- ➤ Information;
- > Spatial/ecological units;
- ➤ Governments;
- > Agencies;
- ➤ Interests/sectors and;
- Perceptions, attitudes, and values (PAV).

Criticizing the notion on resource and environmental management has the opportunity to develop a transparent understanding. This criticism allows for identification of any possible strengths and weaknesses so that wildlife professionals understand areas that need improvement. This has long been recognized in planning and related literatures. Wildlife management is just one aspect of resource conservation that is undergoing global adoption of more integrative approaches to management (Riley et al. 2003). The components detailed by Slocombe & Hanna (2007) could allow effective integration for wildlife management as the list provides areas that could better shape policies and decisions formulated by the public in association with and issued by professionals. The literature review by Keough & Blahna (2006) examined and researched eight key factors that are significant for integrative, collaborative ecosystem management:

- ➤ Integrated and balanced goals—do wildlife managers attempt to identify and meet social, economic, and ecological goals continuously?
- ➤ Public participation—does the process include all potential stakeholders, regardless of their relative size or influence?
- > Stakeholder influence—is stakeholder input actually used and does it have real impact on final decisions; such that stakeholders are empowered through meaningful participation?
- Consensus group approach—do stakeholders meet as a group and use a consensus-based action for forwarding opinions, values, and beliefs?
- Collaborative stewardship—do stakeholders produce a sense of ownership for and become personally invested in the plan or decision?
- ➤ Monitoring and adaptive management—do stakeholders agree to include monitoring in plan implementation and support future remedial actions required to meet social and environmental goals?
- > Multidisciplinary information—are environmental, social, and economic factors included during data collection, analysis, and monitoring?
- Economic incentives—are economic factors readily available for stakeholders, communities, and agency partners to implement plans or decisions? (p. 1375).

The key factors that are addressed here may be useful for ecosystem management, but using the theory based on points listed could also be applied for IRM to address wildlife management as these features include social, environmental, and economic aspects that wildlife managers should use.

Professionals in wildlife management allow for IRM recognition as this theory starts to approach planning and management that positions resource use problems and opportunities in a

systemic or holistic framework with a goal to finding integrated solutions (Bellamy et al. 1998). Integrated solutions can provide an array of opportunities to address resource use problems that result from fragmented approaches. The fairness of integration highly depends on three variables that are required to address any resource use problem(s): i) effectiveness, ii) efficiency, and iii) equity. Mitchell & Shrubsole (2007, p. 22) describe these variables in a fashion that is just and considerable, given that resource use problems maybe identified by resource users as resource users could benefit from these variables. The rationale for using integration is to help accomplish a vision that allows a desired future condition to be met effectively, efficiently, and equitably. Effectively in a means that develops effects that are desired, efficiently by a means that produce the desired effects without wasting time and energy and equitably to ensure that the benefits and costs of the desired effects are evenly and fairly distributed among the public. If IRM is to contribute to effective, efficient, and equitable achievement of a vision, there must be a transparent understanding of the theory. If there is no clear, understanding to what this theory is. Outcomes of this framework might become imbalanced and to address this imbalance, identifying the cause to it will be challenging. The application of IRM can now be seen taking more than several approaches to a diverse background, such as education, species at risk, water management, and human resources. Of these disciplines, IRM application is going to vary in terms what resource area that have to be managed. The effectiveness of the application is going to depend on what has to be assessed, how it will be assessed and if the outcome will be desired or not. Within this sense, IRM is trending towards numerous fields that require its effectiveness, efficiency and the idea of having an equitable outcome. One drawback to consider is that, since this framework is comprehensive in its own right, the way it has to be described is to provide a clear meaning. In this

sense, efforts to formulate plans are needed to understand the whole operation of the natural and societal dimensions and their interconnectedness (Hanna & Slocombe, 2007).

Given the idea that IRM can stem into different types of domains, Dovers & Price (2007, p. 38) discuss more than a handful of drivers for integration, but the issue is that the application provide different notions. The factors that Dovers & Price (2007) describe integration at different areas and levels are integration in space and time, within and across academia dimensions, professional areas, and the policy/management sectors. Integration within social systems and within and across sectors; integration of knowing the natural systems, economic drivers, legal and organizational contexts, and social/psychological factors in policy formulation and application; as well as integration of different areas of society and the knowledge systems they use and value; and finally, to be able to communicate these drivers. All of these drivers are valuable within their own right, given that they have a unique focus of integration at various levels and the actors that are used to address any type of resource issue. However, one driver that is prominent to this thesis is that one which discusses integration that is applied in vertical social systems, within, and across sectors. This integrational consideration has the opportunity to stem into the wildlife management policy imposed on Inuit within northern Labrador with respect to the GRCH hunting ban. It should be noted that, this part of the thesis will discuss more about this integration later, but the idea is the social consideration is indispensable. The way that Dovers & Price (2007) discuss this crucial point is that, to address systemic causes of environmental degradation deep within patterns of production and consumption, settlement and governance, this demands recognition to address the issues instead of treating temporary symptoms. This entails that, action is required from various levels of government, stakeholders and institutions that surround a resource issue (taking both a bottom-up and top-down approach to evaluate where and what need to be considered). Integrating

social aspects and perspectives within this sort of idea could better address the whole cause instead of putting a bandage on a wound that requires major treatment.

With respect to research, policy and management—the last two imperatives that Dovers & Price (2007, p. 38) talk about is related to participation. It has the ability to integrate these three areas and is no less complicated nor is imperfect when it comes to implementing this idea, as participation has the opportunity to influence these areas. Participation also has the convenience to allow knowledge to flow within to research, policy, and management as it creates this loop that feeds into each other. Participation in research could change or create new policies, which in turn allows for management of those policies that research has influenced. Another thing to consider with this imperative is that, it includes a social application for developing programs. The PTD has the ability to relate to this imperative as well, because it relates to all aspects of the public (integration of non-government actors—general public) and different types of sources of knowledge (i.e. traditional and scientific). It can be seen formal in this sense. At the same time, multifaceted research programs provide a need for policy and management from higher levels of government and stakeholders identified within the community as they have the ability to identify issues from the three stages of sustainable development: economic, social, and environmental areas. The need for higher level of integration, coordination, and recognition at numerous scales are the characteristics of environmental and natural resource policy regimes that constrain the development of neo-governance arrangements (Lockwood et al. 2010).

Wildlife management policies has the opportunity to change the relationship between people and wildlife, given that whatever idea or value that people place on wildlife is going to change or whether the value is being compromised as the reaction developed by people reverts it back to the original state. This idea means that, value placed on wildlife has the opportunity to

make changes to management and that if the value on wildlife is merely not the same, then people may try their best to make that value go back to itself. However, wildlife management more so manages the way people interact with wildlife, whereas wildlife does not. The science and practice of wildlife management will benefit from many frameworks showing a concrete and stable concept that can hold tons of professional and public activities (Decker et al. 2009). Drawing back to human-wildlife interactions, values that are placed on wildlife through public interest are increasingly recognized more so then ever. Stakeholders merely place value on wildlife whereas organizations or institutions should not. This suggests that, stakeholders have more engagement to and for wildlife, as value is this sense is seen primary and important to managing wildlife. The purpose of this idea is that, increasing the awareness for recognizing the value placed on wildlife gives the opportunity to also management values. It also considers the idea on how the public interacts with wildlife based on those values that are being applied and to what degree.

Manfredo (2008) suggests that, in wildlife management, there is value in all areas to it. As an example, he talks about value and how it is essential when they apply policies to control human activity and taking of wildlife, enforce wildlife regulations, teach the public about wildlife, ensure peoples safety in relation to wildlife, control human actions in order to protect or better wildlife populations, and so forth. This shows evidences that, managing people is more dominant when it comes to wildlife management. It all comes down to managing the values that people place on wildlife. Wildlife managers must abide by peoples intentions towards wildlife. If this is not considered, challenges will present itself, which in turn is going make more work for themselves. Decker, Brown, and Siemer (2001) states:

"Wildlife management is based on human values. It exists because wildlife are viewed as a resource for people. When landowners practice management on their own lands, it reflects their personal values. When a state agency undertakes, management on behalf of its citizens, it reflects community or social values in that state. North Americans' views of wildlife—our belief in their value for us—motivates wildlife management at all levels" (p. 3-4).

If wildlife is perceived as a resource for people, then this would mean that looking for proper research techniques, management, and policies that surround it would have to be considered.

One way to look into different research techniques, management or policy practices for wildlife is taking an interdisciplinary approach. Interdisciplinary research has the likelihood to understand the many sides to a particular subject. Dovers & Price (2007, p. 44) proves that, this type of research, with stakeholder input and institutional support, aims to create analytical methods, decisions or policy-support techniques. It integrates knowledge and input from stakeholder engagement and allows managers to apply these newly found inputs to find appropriate ways to manage wildlife. This is one way on how wildlife management is now taking on an integrated approach, the idea of methodological development and applied problem solving. The other dimensions of wildlife management that Dovers & Price (2007) talk about are inter/multidisciplinary research and development, policy processes organizational structures, and institutional settings, as well as communication as integration. These methods and processes can help shape wildlife management if integration of resources are the focus to addressing research practices. In Bellamy et al. (1999), their research on policy evaluation from the support of Wallace et al. (1995), found that, natural resources has three common issues when it comes to implementing organizations of natural resources management policies and they are:

- ➤ How to evaluate programs in light of poorly defined and understood objectives;
- How to respond to a call for more public involvement in decision-making and;
- ➤ How to examine programs with new scientific understanding and the changes that it brings in management and practice (p. 345).

Taken together, addressing these issues requires the adoption of integrated approaches and thus new strategies as they provide information and knowledge in support of necessary policy changes. The process of reviewing, developing, and implementing policies are not useful without stakeholder input. Niraj, Kraudsman, & Dayal (2012) talk about stakeholder involvement and its request by international policy framework conventions such as the Convention of International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Convention of Biological Diversity (CBD) as dominant role players with government in terms of international policy evaluation. Having these large actors close to policy formulation for wildlife management can strengthen policy authenticity. Although, some methods that are developed are associated with the lengthy approaches that are already in place such as cost-benefit analysis (Dovers & Price, 2007). Since the creation of wildlife policy during the early 1900s in North America, until the start of the National Environmental Policy Act and the Endangered Species Act, was highly concerned with management of game species and was undertook by state and provincial agencies funded by hunting and fishing license sales (Bissell, 1994). If this can be misinterpreted since issuing hunting licenses since the start of the wildlife policy movement from the early 1900s. Though, licenses for hunting are often times feasible in the long run and that it has a quick style to eradicate wildlife populations, a portion of the public will not abide by this policy implementation since it is sensitive to ethical wildlife practices.

Decker et al. (2009) argues that, both wildlife managers and stakeholders should try their best to avoid a "did this, done that" method without considering such desired outcomes. They use an example of deer-vehicle collisions as a way to present appropriate measures and details that should be considered before applying the simplest method to manage deer population in order to avoid and lessen vehicle collisions. First, it comes down to the wildlife managers assuming that

the public would like to have deer populations decreased as the number of deer-vehicle collisions are worrisome from their perspective. When the public recognizes this issue, if they conclude that issuing hunting licenses is going to solve the problem, wildlife managers are going to have to consider their options, line up facts, and hear what the public or stakeholders have to say. Assuming that this scenario is accepted right off the bat, wildlife managers are going to miss a few professional solutions because this would be a trial of "did this, done that". This type of poor decision can be revaluated, as there is always room for improvement. The facts to this scenario is that, infrequent incidental reports could be a factor allowing the manager to conclude his or her policy. Second, false assumptions do not line up with deer abundance and vehicle collisions. Finally, the solution may fall out of range for the manager as other key actors may have to be involved (i.e. transport managers and municipal governments). It fails to consider other objectives and opportunities such as education and information at the appropriate times as well as poor strategic planning to address this issue (Decker et al. 2009). This type of example allows for revaluation of wildlife management practices and policies. It depends on the situation, type of wildlife species involved, and public perception and how they are affected by such management practices. Emphasis is placed on social knowledge as the public has the capacity to learn and make appropriate decisions where they see fit. However, that would mean wildlife managers have to come in to provide the knowledge and understanding so that the right measures will be taken.

If there is uncertainty in the appropriate management method for wildlife (such as the deer-vehicle collision example), looking for other methods would be ideal. Drawing back to the NAMWC, it is probably the most common means to manage wildlife as the start of this model shaped the way on how wildlife is regulated, for and by the public. Peterson & Nelson (2017) says that, if we change or modify the NAMWC it will not move forward with conservation but if we

apply changes it may. With respect to the seven principles of the NAMWC, applying changes to any of these principles would have to depend on what the change would be and which principle is going to be looked at. Though, having to undertake this decision would need to reconcile with public advice. Since the concept of wildlife management primarily influences the actions of people and their relationship with wildlife and that people are the ones who are being managed, the best practice in this sense would require public consultation and input. The principles that are laid out under the NAMWC are largely human-based, as the intentions of each principle directly or indirectly influences policies that are tailored to the public. Organ et al. (2014) suggest that, the NAMWC has been criticized for being only applied to wildlife for value of hunting and trapping for benefiting only stakeholders interested in those values. Though, regarding one of the principles outlined from the model, biases are present as the model emphasizes a white male dominance (since this type of audience favors the act of hunting more than the other sex, but this can be outweighed by recognizing interests from marginalized populations that the model oversees). There is a room for improvement, but allowing change to the model may become challenging as this is the go-to management scheme for wildlife. Prioritizing on what aspect of management to wildlife (based on the principles of the NAMWC) is going to be considered, informative administration with the public and wildlife professionals are required.

Lundmark, Matti, & Sandstrom (2018) talk about their understanding of policy beliefs and coalitions in conflicted policy areas in regards to wildlife management. Their research suggests that, policy research this day and age uses an advocacy coalition strategy as a way to theorize the importance of actors, beliefs, and coalitions in policy formulation. Considering this type of action can allow for identification of fundamental aspects that can shape wildlife management or influence wildlife management practices. In other words, to revamp or revise policies or principles

that are in place now, such at the NAMWC. It is already understood that, attempting to change this model is intricate. However, the opportunity is available to apply such changes since some methods involve the extension of existing approaches. Of such existing approaches, IRM can be applied to address conflicted policy areas where attention is needed that is affecting the public. In IRM, Dovers & Price (2007, p, 45), state that, integration is the creation of policy processes, organizational settings, and organized structures to achieve integration of environmental, social, and economic factors. Sustainable development in this sense has a way to integrate policies with the assistance of respected stakeholders and institutional bodies. Specifically, Dovers & Price (2007) also suggest that, approaches such as strategic environmental or sustainability assessment look at integrating environmental concerns into the policy process across different areas, with emphasis on the degree and impact of the tradition of more limited project-based environmental impact assessment. If integration of such traditional projects looking at assessing the environment (as well as sustainable development), the policy processes will have to critique the authenticity and effectiveness as any traditional projects that are successful in the long run as it can be applied to similar future scenarios. However, wildlife agencies may currently not have the funding, capacity, legal authority, or institutional flexibility to work in a way that the PTD entails (Hare et al. 2017). Since it is suggested that the PTD is supposed to work in this sense, wildlife management decisions should avoid foreclosing options for the future citizens to benefit from the resource (Decker et al. 2016).

To understand how future resource and non-resource users are to benefit from decisions surrounding the opportunities presented by the PTD, looking at the public characteristics about their finance, culture and moral values is one way. Organ et al. (2014) bridges this idea with their research proving that, human dimensions research can help trust administration by providing

trustees and trust managers with detailed information about the public (beneficiaries) such as their socio-economic status, values and beliefs, behaviour and actions with respect to policies, and their idea on how management should be conducted. Of course, this is all collected with consent and permission from those who are involved. Without public involvement, knowledge, and their logistical characteristics, models such as the NAMWC would not be highly effective for wildlife management. The PTD provides the opportunity to apply these public characteristics, given that trustees and trust managers abide by the policies of the PTD and are committed to applying them. It's the commitment and application of knowledge and input from the public that make changes to wildlife management. As we already know, the public trust is one of the main principles to the NAMWC. In relation to Organ et al. (2014) idea and regarding the NAMWC, as well as the PTD, successful wildlife management practice is not going to occur without the right credentials. These assumptions have to work harmoniously, given that engagement between them are positively functioning. Adapting to this style overtime can allow policies to set in, giving the public a chance for integration to occur.

Managers, experts, and analysts who work together in an ongoing, collaborative and, productive fashion has a chance to learn about new environmental systems and the dynamics that are produced to ensure effectiveness (Kaplan-Hallam & Bennett, 2018). This relationship building can maximize the efficiency for conservation, environmental management, and development initiatives at numerous levels and in different contexts. Taking this approach to wildlife management allows the application of the PTD as it would involve public participation from different key stakeholders, organizations, and even government.

The preceding section of this graduate research paper has identified and described the fundamental theoretical frameworks that present both a transition toward, and sometimes-

unrecognized basis with respect to stakeholder engagement. To undertake wildlife management in the trust of the public, it requires knowledge of stakeholder perceptions, attitudes, and values in relation with Organ et al. (2014) as the modern platform in the evolution of wildlife management in North America is focused on integrated approaches (Gigliotti, Schoufe, & Gurtin, 2009). The principle of wildlife management, however, goes beyond theory and must be put into practice. Unfortunately, it seems that such theories of integrative approaches are not manifest on the ground in all contexts. One context where the application of such engaged approaches is conspicuous in its absence is the management of the GRCH in northern Labrador.

In traditional Indigenous management, rights to use wildlife are not distinguished from the responsibilities for management, as hunting and gathering of resources is considered an overt part of caring for their environment (Davies et al. 1999). As the stability of ungulate populations in many areas of Canada (such as caribou and moose) continue to fluctuate, managing large species without a holistic approach, as with many other species in decline, become more challenging and uncertain (Popp, Priadka, & Kozmik, 2019). The holistic approach in which this graduate research paper is taking is previously described in the preceding section (PTD and IRM as the main anchors for the approach). Considering the idea of co-management of wildlife is one way to combat any off-puts that position the affected resource and non-resource users. Co-management and inclusion of Indigenous knowledge and holistic perspectives of species and the environment can help fill the gaps in scientific understanding and ensure the effective management decisions are made that lead to sustainable wildlife populations and harvest, meeting the needs of Indigenous communities, and supporting provincial population dynamics. Wilson, Edwards, & Smits (2010), in their study in Australia, state that, Indigenous resource use and western science can be integrated and support Indigenous passion for caring for and living on their land. Integrating traditional and Indigenous

knowledge into resource management should be required. Specifically, if this is applied and implemented into wildlife management, there could be more opportunity and benefits that could emerge from it. Given that, the support, evidence, and existing literature is recognized and administered in a proper way that describes the use of Indigenous and traditional knowledge that could be applied into resource management. Policy formulation and implementation in Nunatsiavut can allow such changes to occur, depending on the appropriate actors and time.

Indigenous knowledge is inherently complex in its own right as it bridges the concepts of nature as well as the politics and ethics with no transparent defined limits between them (Weiss, Hamann, & Marsh, 2013). The meaning behind this statement is that, Indigenous knowledge and ways of being has many facets that can be applied to a diversity of disciplines such as water, forest, and wildlife management (given that these areas are primary to Indigenous knowledge in terms of resources). The case study of this graduate research paper is a keystone example of the GRCH hunting ban in northern Labrador. The wildlife management policies surrounding this example is quite comprehensive, theoretical, political, and involves in depth research, public participation, knowledge sharing, suggested policy revaluation, and government assistance to find appropriate solutions to address this situation. The lack of acknowledgement of cultural and traditional context of Western science as well as Indigenous knowledge's disrupts valuable criteria across cultures and can result in the denigration of certain worldviews and the authenticity of others (Weiss, Hamann, & March, 2013). Unfortunately, while the application of Indigenous knowledge and Western science into collaborative resource management is undoubtedly a unified path headed towards Indigenous empowerment—this "integration" may be combated with power inequalities detrimental to Indigenous interests resulting from government-dominated power structures (Weiss, Hamann, & March, 2013, p. 287).

The northern Labrador context regarding the latter paragraph, the GRCH hunting ban has similar inequalities, but this will be discussed more in detail in the coming sections of this graduate research paper. Though, wildlife management policies and practices within the province of Newfoundland and Labrador is in dire need of reinvigoration as it is obvious through the perspective of the researched literature and the ongoing challenges that northern Labrador Inuit are currently facing with respect to the GRCH hunting ban. The forthcoming section of this graduate research paper will present the direct and evidence-based impacts that northern Labrador Inuit are currently facing. It should be noted that, the themes that emerge in the Results section were all identified by the graduate researcher based on the existing methods stated prior to the beginning of this thesis. Themes that are used in the Results section will be categorized into different levels, impacts, and disciplines identified by the participants as a unified outcome formulated by the graduate researcher. The following section provides evidence that wildlife management practices within this province is recommended to revaluate, revamp, and reconsider current regional government policies and practices, decisions, and establish healthier relationships with local Indigenous governments and their communities for appropriate wildlife management.

Results

This section will present the results of semi-structured interviews conducted from July to August 2018 and November 2018 in the Nunatsiavut communities of northern Labrador. A total of 41 interviews were conducted to collect information from northern Labrador Inuit who are directly impacted by the George River Caribou Herd hunting ban. It should be noted that these communities that the researcher visited for his data collection are all Indigenous based communities, specifically Inuit communities of the Nunatsiavut region. This is one of the four Inuit Nunangat (Inuit owned regions) recognized by the Inuit Tapiriit Kanatami. Ten interviews

were conducted in the communities of Nain and Hopedale and seven interviews were conducted in each of the communities of Makkovik, Postville, and Rigolet. The following section of this chapter details and explains the impacts that northern Labrador Inuit are perceiving due to the hunting ban on the GRCH. The themes throughout this section reflect the impacts identified by participants. The following sections are organized based on the interview questions asked by the researcher and responses by the participants.

Caribou importance

Based on contributions from northern Labrador Inuit throughout the communities of Nain, Hopedale, Postville, Makkovik and Rigolet, caribou are most valued as a staple food for many families and households throughout the region of Nunatsiavut. Prior to the hunting ban, caribou was a primary commodity that sustained Inuit along the northern coast. Consumption of caribou was a traditional practice that was evident within numerous families along the north coast of Labrador. The centrality of caribou consumption was clearly evident in responses from two interviewees from Nain who stated:

"It is really important to me cause we used to go hunting when we were younger and used to always have caribou meat and that and we, all people in Labrador, are craving for caribou meat" (A. Lidd, Nain 2018).

"We grew up with caribou meat and that was probably our main diet. We'd have caribou meat at least 3, 4, or 5 times a week. It was our main source of food" (NN09, Nain 2018).

The various ways that Inuit interacted with caribou promoted familial activities, valuable practices, and significant life skills such as hunting, and intergenerational knowledge of sharing for the purpose of caribou-related clothing, meals, and tools. A majority of interviewees stated that caribou was sustainably used when it was harvested. These caribou-focused practices and this unique lifestyle represented these Labrador Inuit apart from other Inuit within the Canadian Arctic

and subarctic. Although, Inuit are a group of people who are recognized as one of the three main Indigenous groups in Canada, Inuit in Nunatsiavut are identified as their own and caribou provided that distinguishing representation as Inuit. Evidence discovered throughout the data collection collected by the author proves that WM practices and policies have to be re-reviewed, revisited, and revamped for better practices and management that meets the needs of these resource users so that their lives are not compromised any worse than it should be.

Transitioning through each Nunatsiavut community from Nain to Rigolet, the caribou importance, in a broad sense, was its value through how it was hunted, treated, and identified as a food source. The impacts associated with the loss of a staple food supply were also felt throughout each of the Nunatsiavut communities such as Hopedale for instance. Participants that were interviewed here saw and felt similar impacts that their neighboring Inuit communities experienced as well. It should be noted that the geographical distribution of the communities engaged for this research, has also revealed information and impacts pertaining to contrasting and distinct travel routes to caribou grounds which are located in closer proximity to more northern caribou settlements. As in most communities, Inuit who were interviewed in Hopedale were diverse in terms of age, gender and skills in caribou hunting experience. While preference was given to experienced hunters and harvesters, contributions by all Inuit were welcome to allow for a deeper understanding on how the GRCH hunting ban is affecting various Inuit sub groups including Nunatsiavut Inuit women, non-hunters, and lower income individuals. While many participants acknowledged the importance of caribou as a staple food, a number of interviewees from Hopedale also highlighted the role of caribou in Inuit culture. These two points are well-captured in the following interview contributions from Hopedale residents in the following quotations:

"Life, it is a part of our lifestyle. We used caribou to identify ourselves as Newfoundlanders used cod to identify themselves...It was also important for our food source. Five caribou would feed four to five families and last the whole year and we would share it" (W. Piercy, Hopedale 2018).

"It was part of our diet ever since I was young. All my life it was a source of food and materials" (HN09, Hopedale 2018).

The geographical range of the GRCH has imprinted a degree of common identity among the Inuit of Nunatsiavut. Not only do the caribou represent them, it also brought them together. Inuit in Nunatsiavut have a close knit relationship, especially at the household and familial level. Families within these communities have relations to each other outside of their home communities. For instance, a household in Nain will have extended family members in Hopedale and/or Makkovik. The GRCH in turn, prior to the hunting ban, brought them together (directly and indirectly). Information from a Makkovik resident stated in their interview on how the importance of caribou brought families together from other communities proves that, the social well-being has been compromised and this quote shows evidence:

"It is an important source of food for the community and individuals, as ourselves. The hunt itself, it gets everybody together to go for a caribou hunt—that kind of thing. Socializing with each other, meeting with other people from other communities like we used to do—a lot of traveling" (MN01, Makkovik, 2018).

Based on this statement and others like it from the interviews show that households and families are impacted across communities in Nunatsiavut. The social connection and importance that was tied to the GRCH is non-existent during this time. This means that, since the onset of the hunting

ban took place, Inuit in Nunatsiavut have not been able to connect with each other through the social gathering and sharing of harvesting caribou. It brought them together.

Personal Impacts

Given the nature of this question interviewees often reflected on individual impacts as opposed to the more generalized impacts presented in response to other interview questions. On an individual level, the researcher asked each interviewee how the GRCH hunting ban impacted them personally. While some discussions were similar to those offered in response to the preceding question on how caribou was important to them, this question elicited individual-level responses and perspectives. A majority of feedback based on the question related to personal impacts were similar from each Nunatsiavut community. The unified answers from the question posed regarding personal impacts were recorded, analyzed, and summarized based on the following quotes made in this chapter.

Inuit in northern Labrador have similar knowledge, experience, and realities on how the GRCH hunting ban impacts them personally. The GRCH hunting ban affects northern Labrador Inuit from three different levels: personal, household, and community. Firstly, the researcher asked each interviewee to talk about how the hunting ban affects them personally. One interviewee from Postville discussed the economic cost of having to live without caribou as Inuit in northern Labrador now have to rely more heavily on store bought foods. In the words of the interviewee:

"I mean, that was our source of food—source of fresh food, right? We cannot get it no more, you know it has become very expensive to live without the caribou, right?" (H. Jacque, Postville, 2018).

Interviewees in Rigolet and Makkovik stated similar responses when asked how the GRCH hunting ban affected them personally and lamented the extra cost of store-bought food. These

participants, however, also expressed discontent with having to rely more heavily on other game animals for food. The interview quotation below captures the Inuit preference for caribou over other species such as moose.

"Well, it made a big difference to everyone's grocery bill. Now when you had the caribou meat, there would be a lot less buying store bought meats. I mean we do get some moose too, but not like the caribou. It is not good like the caribou. We tried to eat it." (RN01, Rigolet, 2018).

"The biggest change is having to substitute caribou for something else—it means that we eat more other wild meat like birds or seal meat, but many people and even us, it meant that we have had to turn to other expensive meats that you buy from the store." (Toby Andersen, Makkovik, 2018).

Suggest that moose is treated as a substitute to caribou as they have a comparative taste, texture, and protein content. A majority of interviewees indicated that caribou meat was much preferred to moose meat. Due to the GRCH hunting ban, interviewees noted a greater reliance on other wild game species such as waterfowl (ducks and geese) and seals. This suggests that Inuit in northern Labrador are beginning to put stress and pressure on other traditional wildlife species in order to substitute the caribou.

Household Impacts

At the household level, interviewees indicated that the GRCH hunting ban is affecting their finances, traditional knowledge sharing between parent(s) and children, and the mental and emotional wellbeing previously on caribou-dependent communities. When asked how Inuit households where impacted, commonalities once again emerged like in pervious responses. Respondent contributions throughout the Nunatsiavut communities indicated that, without the caribou, Inuit and their families are obliged to depend on imported meats such as beef and chicken or hunt and harvest alternative wild game to match the equivalence that caribou would fulfill

annually. Due to the isolation of these communities, however, imported goods and services are costly. For example, an interviewee from Nain indicated that impacts ripple across generations from himself to his children and grandchildren by preventing him from passing his traditional knowledge down and this places cultural and traditional practices at risk:

"It really hurts my grandchildren. I need to teach them, all them are growing up and I need to teach them how to hunt them in the wintertime. We need them to learn because we got to teach them how to live without us—that's how I think. They are going to be living without us when we are gone. My children miss it, all my family does." (T. Angnatok, Nain, 2018).

A resource user from Hopedale described a similar perspective as she highlighted how her son cannot have the legal access to hunt from the GRCH later on in his lifetime. This knowledge gap is apparent throughout the communities in Nunatsiavut and it is perceived by interviewees as growing. The interview participant from Hopedale also discussed community freezers as a way to mitigate traditional knowledge gaps. This type of community focal point is seen in other Nunatsiavut communities where Inuit and non-Inuit have the access to take certain kinds of wild meat provided by hunters and harvesters from the communities. Resource users would be given a stipend or fuel allowance to go out and hunt or harvest seals, Arctic char, Arctic hare, ducks, and geese (anything that would be considered culturally appropriate and edible) to bring back to the community freezer. Residents within each community would have the ability to take one or two pieces of meat a day and that would offset some of the costs for purchasing market foods and for those who were low-income that could not support themselves to go out and hunt. Jolyn Pijogge of Hopedale specified her ordeal in these words when asked how the GRCH hunting ban affected her household:

"Lack of food. I don't know if that is applicable or not because if we didn't have money or are low-income, then we always had to reserve caribou in our freezer. We don't have that anymore, so thank goodness that we have a community freezer here that provides moose—but other than

that, we relied on caribou if we didn't have the money and we can't do that anymore." (J. Pijogge, Hopedale, 2018).

It is crucial for households within Nunatsiavut to have access to caribou, but given the political fact that the GRCH is still restricted from being hunted and harvested, Inuit in northern Labrador are required to abide by the provincial regulations. Although, this is a painstaking process and dependent on the GRC these people are resilient enough to withstand the impacts. Interviewees have enough patience to see an increase in the GRC populations because they understand the significance that the caribou play in their livelihoods, people, and communities.

Community Impacts

Turning to a broader perspective with input from Inuit in Nunatsiavut, understanding the position of each community in terms of the GRCH hunting ban, interviewees were asked how they thought their towns were impacted. Interviewees felt neighboring communities faced similar issues as they understood that everyone who resides and is from the north coast of Labrador share similar lifestyles. Although, it was pointed out that looking for differences between communities would be a good indicator on how the GRCH hunting ban is affecting each town. Responses from interviewees from each town were analyzed and the common themes originated from this question related to food insecurity, traditional loss of practice, emotional strain, and the thought of WM reform in terms of moose licenses, caribou herding, and shipping down caribou meat(s) from other northern territories in Canada.

Embodying this level of research brought light to community concerns surrounding the hunting ban as it impacts Inuit who live in northern Labrador. These communities are unique in their own right, given that each town is different but yet share similar commonalities. Financial constraints and reliance on store bought foods was brought up throughout the discussions in all interviews. Significant points were made showing how caribou was important to Labrador Inuit,

one that being reliant on it for food. As mentioned a few times already, caribou provided a wealthy amount of food and nutrition to sustain Inuit in their communities. The thought of having a legal and regulated hunt of the GRC was also brought up a few times to help offset some of the impacts that Inuit are facing. This idea was discussed in a way that allowed a certain amount of percentage to be distributed throughout the communities. Communities with greater population numbers would end up getting a majority of the percentage of legal hunted caribou and communities with lesser population numbers would get the remaining. A respondent from Postville discussed this idea in the following statement:

"Even if there was a percentage for each community. I know we are only a small community, we would only get a portion...the bigger the population would have to get a bigger percentage anyways. Even if that happened, it can be shared out through community feasts or gatherings." (PN, Postville, 2018).

This data suggests that, if there were a regulated hunt of the GRCH, community members throughout Nunatsiavut would share their harvests as they would with any other type of traditional game species—given that Inuit in these parts are known to share with family and friends who are unable to go out and hunt and harvest for themselves and it is in their nature to provide for their families and friends. This interviewee suggested that, having community gatherings would be ideal and fair since anything surrounding caribou would spark interest.

Culture: hunters, youth, and elders

Culture is a vital and paramount facet within Inuit lifestyle. Inuit way of life is unique and exclusive in its own right—especially in northern Labrador. Inuit settled here identify themselves incomparable to those who live different realities elsewhere such as Newfoundland or Nunavik. Their culture is what sustains their livelihoods, especially when it comes to relying on their surrounding resources—given what is readily available. In this sense, the GRCH was an important part of their lives as it was a resource that provided meals, materials, and traditional knowledge.

With seven years into the hunting ban, we are starting to deeply understand the challenges Inuit in northern Labrador are facing. The caribou provided a sense of identity and cultural importance accumulated over time. In general, wildlife that they rely on has traditional implications for identifying their well-being. When Inuit hunters and harvesters in northern Labrador go out and provide for their families, it is shown that they are involved in maintaining their lifestyle. Their actions represent the idea that the GRCH was once an invaluable resource. A resource that is now in conflict with their culture, social norms, and economic prosperity.

When asked how the GRC hunting ban impacted their culture, interview participants referred to the ideas of life skills, food sources, navigating long-distant travel routes between Nunatsiavut communities, traditional knowledge—specifically correlated to the younger and the elderly peoples. Youth and the elderly were brought up frequently throughout each interview when questions were related to culture and traditional practices. These two important demographics in the communities of Nunatsiavut were emphasized throughout each interview. This is where knowledge is passed down to the younger people from their parents, family, and importantly the elders. This concept of knowledge sharing is thought to be come jeopardized and will compromise younger people's way of life. When a hunter or harvester (usually the man of a household—in modern times now women as well) would go out for the day or a few days at a time to go hunting and provide for their families, the hunter or harvester would also take their families with them, about the land or waters. The idea of navigating the lands and waters in northern Labrador provides a sense of security, safety, and a life skill that would centralize awareness, familiarity, judgement, and gaining expertise to upholding cultural stability. Reconsidering Pijogge's remarks regarding the hunting ban refers to these cultural barriers in these words:

"I think about my son. He just turned 7 and I think the ban happened just when he was born or around the same time. He doesn't have the pleasure of knowing what I've had growing up and I don't think that should be. I'm Inuit and he's Inuit. What caribou provided, the heat, the clothing, the food, the way it strengthened families—it's all lacking now." (J. Pijogge, Hopedale, 2018).

Referring to what Pijogge stated in her interview, the consequences on Inuit culture are already being felt—given that her son cannot access caribou the way she did prior to the hunting ban. She also ties it to the manner on how caribou would have provided a variety of resources and the basic necessities valued by northern Labrador Inuit. This intergenerational traditional knowledge not only effects Pijogge and her family, but every Inuit family in northern Labrador. Questions were asked on how the hunting ban affected the youth and elderly in each community. Concerns that were presented by a majority of interviewees stated that the younger people now are not able to engage in caribou hunting. Nonetheless, emotional and psychological distress in terms of culture is present within the younger Inuit demographics. Parents or family members of younger people stated that the hunting ban does not impact the youth on a larger scale. The notion is that, if caribou was or is not present in a younger person's life in northern Labrador then they will not be effected as much as their parents, older family members and most importantly, their grandparents or greater family members who grew up in relation to the GRC. This impact is alive and will be until the hunting ban is lifted once the GRCH population begin to increase.

The traditional transfer of knowledge from the GRCH will have an impact on the younger people for as long as the hunting ban exists. This gap will not be filled, only with other traditional wildlife species such as seal and partridges. This threatens their cultural inheritance surrounding caribou as their parents will not be able to pass down their knowledge (i.e. how to paunch, geographical locations to hunt, processing of meat, etc.).

With respect to the elderly peoples in northern Labrador, they are ones who have invaluable knowledge and experience of the GRCH. They hunted and harvested from the GRCH and during these times, they cannot have access to it. According to the researcher's interviews, a handful of interview participants stated that they felt empathetic towards the elderly. Those who showed that emotion felt that it was not right for them to go through this hunting ban without having access to caribou anymore. Interview participants felt remorseful for them. One interviewee related to this interpretation by stating these words:

"...but elders for sure because my goodness, they've had hard enough lives already with relocation. Life can be very hard and our elders within our region have really live through a lot of traumas and I would imagine that this ban, I mean it's not traumatic, but it's definitely not easy for the elders." (K. McLean, Nain, 2018).

According to McLean (2018), she agrees that culture in this sense is beginning to fade—if this knowledge is gone, cultural practices suited to caribou will be impacted as well. Although, since the onset of the hunting ban up until its commencement in early 2013, a few years later older peoples in Nunatsiavut have begun to accept the fact that a hunting ban is in place. Communication is effective and once any course of action is taken that influences the whole communities, Inuit talk and consult with each other. According to an interview participant from Makkovik, this concept can be validated in these words:

"Well, I think that the, from the people that I spoke with, they accept the fact that there is no caribou left. The few that are left, we have to protect for the future—there will be some. Like myself, although they have quietly accepted it, they're still talking to me and asking 'what happened?' You know, there really has nothing been done, there's no people out there on the ground as the herd was declining. Out there to see what is happening, you go for a helicopter survey once or twice a year—what does that do? Nothing! There was no monitoring of what was happening to this herd until they were gone!" (T. Andersen, Makkovik, 2018).

Action that is being done by government on WM practices does not seem to satisfy Inuit in northern Labrador. Interviewees state that the only news or information that they hear is the head count of the animals and that the hunting ban is still in place. Since Andersen from Makkovik and others from Nunatsiavut stated this claim, then more action has to be taken to maintain the GRCH. Social engagement in Nunatsiavut communities has to start. This is where trust is built and can help identify the actions that could be take (i.e. consult on a limited hunt, substitute GRC meat with caribou from healthier and larger populations in the Arctic). An unjustifiable action that is being perpetrated by another Indigenous group in Labrador does not help the GRCH populations. Inuit in northern Labrador understand this unequal activity as this other Indigenous group, a First Nations society, continues to hunt and harvest from the GRCH. Inuit in northern Labrador are calling for equal and just action from the provincial government of Newfoundland and Labrador (NL). This differing circumstance requires immediate action as this does not help the Inuit from Nunatsiavut. It is problematic and crucial as it worsens the impacts and issues that were discussed so far in this section. It is not easy to maintain cultural stability when another society does not tolerate provincial regulations when it comes to WM. Northern Labrador Inuit strive to see response and equitable authoritative action from the NL government. Enforcing wildlife monitoring in communities who are not adhering to provincial conservation efforts by the provincial government would be ideal. In saying that, wildlife conservation practices would be able to minimize or eliminate illegal hunting activity where is it being practiced. Acknowledgement on this situation would reduce the conflicts on numerous levels.

Future decision making in Wildlife Management

Reanalyzing WM practices and approaches has to be considered for the better and fulfillment for northern Labrador Inuit. Remodeling WM practices that fit the fundamental requirements in which northern Labrador Inuit needs are achieved in a fashion that is appropriate,

unbiased, pertinent, and opportune. Nearing the end of each interview and after each participant stated the impacts that they identified, the researcher finally asked how each level of impact(s) should be addressed. Commonalities referring to provincial government actions on WM enforcements were one the major considerations identified by northern Labrador Inuit. The idea of accepting the perspectives, opinions, values, and beliefs from the Inuit in Nunatsiavut is significant and can strengthen the efforts in attempting to revisit the decisions on why such a hunting ban on the GRCH was considered in the first place without acknowledging their thoughts and ideas prior. Accepting the core perspectives from Inuit in northern Labrador, it would reduce the stress on the GRCH populations. In saying that, having to trust Inuit knowledge can be added to the provincial WM agenda moving forward. Frequent reliance on scientific evidence and data could imbalance the interests and misplace the trust from resource users who live closely and in relation with the GRC. If Western science and traditional ecological knowledge is required when it comes to research, support, and approval from doing work in Indigenous communities, finding balance between these two knowledge sources should be enacted by the NL government. It is known that Inuit have knowledge that is not taught in the classroom. This type of knowledge is learned overtime and practiced constantly throughout Inuit lives.

Furthering the concept on knowledge to improve WM practices, enabling conservation efforts would be ideal to ensure the protection and conservation of the GRCH. Interviewees suggested that, having provincial wildlife enforcement officers on the grounds in communities who do not abide by the hunting ban should be prioritized immediately. Inuit in northern Labrador follow provincial WM regulations even though the hunting ban is immensely impacting their livelihood in numerous ways. It's the unevenness and unfair practices that another Indigenous society is still harvesting from the GRCH. Nunatsiavut Inuit are concerned as they should be since

the province of NL restricted hunting of the GRCH and their priorities should have been identified earlier by those who decided to set out this WM policy. Echoing A. Andersen's remark on how decisions that are and were being made without consulting with Inuit in northern Labrador in relation to the hunting ban, he states:

"...maybe it was the provincial government, I am not sure because I was not involved. Whoever it was maybe didn't understand the impact it would have on people's lives up here. People who make those bigshot decisions in government don't live their life trying to hunt caribou. I don't think they understand the decision they were making would affect us. It's different I guess for southern people. Up here is not like that, it's all on the land and it's all traditional knowledge." (A. Andersen, Nain, 2018).

Transparent and appropriate communication, authority, and acknowledgement would have been optimal during the decision-making process for the GRCH hunt restriction. Had Andersen's perspective been exemplified beforehand, or if community consultations in each Nunatsiavut community been done prior, WM policies affecting Inuit in northern Labrador today could have reduced the challenges faced by Nunatsiavut communities. Including Inuit knowledge when it comes to decisions that are being made on a provincial or federation level should be prioritized.

Building off the idea on provincial WM practices and policies, another theme identified throughout the researcher's interviews is that, Inuit from Nunatsiavut referred to the idea on opening a small caribou hunt to help offset the impacts that they are currently facing. With scientific evidence that the GRCH is not doing well in terms of population size, the intention that Inuit from Nunatsiavut are suggesting is that, each community should have the traditional access to hunt and harvest from the GRCH. Even though this solution seems nonessential, it would be a small portion of the population for each community. An interview participant from Rigolet expressed his point of view in these words:

"I support a *very* limited hunt. It has to be limited now because they are telling us now that the population is down to 5000 animals...one animal per community, just to have that social connection to the land and to be able to bring young people and some elders who are starving for tuttuvinik (caribou meat). It is a part of our identity or a big part of our identity to some of us." (D. Pottle, Rigolet, 2018).

If the province of NL and the Nunatsiavut Government (NG) could establish a partnership or agreement to go ahead with opening a regulated hunt on the GRCH, it could provide a sense of relief and comfort for those who are longing for tuttuvinik (caribou meat). The idea is surprising in the sense that the GRCH population is not doing well, but this is what Inuit in Nunatsiavut articulated. It is uncertain that, if such a deal was made, harvesting from the GRCH would be sustainable or monitored in a way that would be adequate for provincial WM measures. Surely it would meet NG guidelines in terms of traditional access to hunting and harvesting grounds and waters through their Labrador Inuit Settlement Area (LISA). Access to Inuit domestic harvest is established in the NG's Labrador Inuit Land Claims Agreement (LILCA). Under chapter 12 of LILCA, part 12.3 states that, Inuit have the right to harvest wildlife and plants throughout the LISA at all times of the year. Of course, they are subject to specific governance through conservation and federal laws. However, finding an approach to get past these guidelines is challenging and requires legal understanding and trust between the NG and the NL government.

Realistically, if such a regulated hunt were to come about, it would be challenging to go ahead and initiate one. This idea comes from interviewees who are longing for a taste of caribou meat. In addition, they still accept the fact that such a WM policy exists within their communities and region. A resident of Makkovik states that:

[&]quot;...with all the technology that we have now, GPS units we have on our skidoos and boats, it's easy to get from one place to the next. I think when the caribou do comeback, we should have better WM policies in place, not just go out and kill caribou—have some limits to what's there and follow the seasons would be a big thing." (MN, Makkovik, 2018).

The determination to tolerate such a WM policy is there, it is just the circumstances are not worth the impacts that are present in their communities. Nunatsiavut residents understand the reason for such a hunting ban exists on the GRCH, but what could be emphasized in their communities are scientific facts surrounding the GRCH population. The population data is present, it is the reproductive capacity that the GRCH must carry in order to maintain their existence and to be shared in the communities. Presenting this data would have to be communicated effectively, so that decisions that could be made have concrete support and evidence. These final decisions are what makes it challenging for Inuit in northern Labrador. Provincial decision makers have to understand the realities that Inuit are facing in Nunatsiavut. With the statement that A. Andersen of Nain claimed, decision makers from the province of NL do not understand the ability to appreciate and respond to complex, emotional or aesthetic influences that caribou have on Inuit in northern Labrador. The sensibility is unknown at the provincial NL government when it comes to making decisions on wildlife management and Inuit culture. This is where the gap has to be bridged. To incorporate Inuit trust, the public values and beliefs that government should be advocating on their behalf.

Discussion

The results originating from this research project are undoubtedly, significant, and substantial. The thesis findings document core values identified by northern Labrador Inuit, whether it be loss of traditional knowledge and sharing opportunities, reliance on imported and store bought foods, and the emotional and psychological pressures on individuals, their families, the youth, and the elderly. Not surprisingly, caribou are shown to be of paramount importance among Inuit and were found to furnish the various necessities that Inuit in Nunatsiavut have been accustomed to over a millennial period. This research documented differences between how each

level of structure (personal, household, and community) was coping with the hunting ban and also identified perspectives and attitudes toward the impacts of the ban that showed some commonalities across their communities. In addition to these levels, the impacts of the ban on Inuit youth and elders was also often discussed by participants as these groups widely influence and are influenced by their families and rest of their communities.

Youth and elders in Nunatsiavut are essential parts of their communities. The social importance of caribou for these groups is evident as caribou once played essential roles in familial and civil structures. Analysis of interview contributions found that these roles involved a means of knowledge transmission as interactions with caribou provided opportunities to teach Inuit in Nunatsiavut the traditional, cultural, and social importance that should be held between their people and within their communities, especially for the youth and elders. Caribou were also identified as perhaps the main source of food for Inuit in Nunatsiavut. This resource was a crucial dietary component within their lifestyle. In addition to a source of protein, the social interaction and collective effort that was present during the times when the caribou was plentiful, were essential to peoples' wellbeing as they came together, shared, and celebrated caribou. While these essential benefits for Inuit health, wellbeing, and culture are no longer available due to the GRCH hunting ban, acknowledging these benefits reaffirms the commitment by Inuit to sustain the GRCH as the widespread impacts of loss of access are substantial. While the traditional knowledge held in the minds and actions of the elders say that the caribou will make a comeback and that their people just have to sit and wait, Inuit are facing challenges right now in terms of having no caribou in their diet, household, freezers, and communities.

Addressing the impacts of the GRCH hunting ban outlined in this thesis are challenging and require thorough discussions between the communities in northern Labrador, the Nunatsiavut

Government, the NL government, neighboring jurisdictions that also rely on the GRCH, and possibly the federal government. Some have advocated for establishing a minimal caribou hunt for Inuit as a way of delivering at least some of the benefits outlined above. Currently, however, such an option presents significant challenges as the population of the GRCH is extremely low. In the meantime, moose meat, as a substitute for caribou, is something that Inuit in northern Labrador are trying to continue—some are not too fond of it and some are accepting it and report that it is similar to caribou meat. Since the NG has access to moose harvested from Newfoundland, the provision of moose meat is one of the few ways in which Inuit in northern Labrador are offsetting the impacts that they are facing. This is something that they will have to get used to until the GRCH start to show stronger population numbers—which in itself is extremely hard to determine when this will happen.

Food was identified by Inuit in Nunatsiavut as the primary benefit provided by the GRCH. Since they will not be able to access it for the foreseeable future, it is Inuit and their allies must strive to determine the right measures to help counteract the impacts felt throughout Inuit communities. The results discussed in this chapter represent the voices, opinions, and values brought forward from Inuit in Nunatsiavut. They are longing for caribou meat in their lives, especially for their youth and elderly. The health, wellbeing, and cultural benefits once provided by caribou are no longer available. The emotional and psychological stress of this loss is evident and the hardships that Inuit are facing requires better WM policies that suit their lifestyle as Inuit. Having their perspectives, voices, and expressions heard through this research can go a long way in working toward positive change. Those in higher positions that make decisions on WM policies have to consider the opinions from the people that they are working for at the provincial level. Remodeling WM policies, practices, and decisions have to start with the perspectives, attitudes,

values, and beliefs originating from the resource users who rely on their surrounding environment to sustain their livelihoods. Once government takes this into account before and after they make decisions, it could better the relationships between Indigenous peoples, the communities they represent and the wildlife managers Indigenous, provincial, and federal levels of government. Building such that relationships can go a long way in contributing to better, more responsible management in the future as it will educate all parties on what is at stake in sustainable wildlife management efforts. The GRCH hunting ban is a prominent reality throughout the livelihoods of Inuit and their communities since the onset of it back in early 2013.

Inuit in Nunatsiavut have always placed value on resources that are important to them. They devote their lives to hunting, fishing, gathering, and harvesting from their land and waters. They ensure that these actions are maintained sustainably as it has always been practiced in their communities and culture for centuries. If trustees and trust managers are to refer to the PTD, then informing and applying it in communities in Nunatsiavut can be a first step to ironing out positive relationships with the beneficiaries of the PTD. If the interest and ownership of wildlife or the values that Inuit in Nunatsiavut place on wildlife species is put in jeopardy, then the PTD loses its value and purpose as it could lead to unsustainable harvest, mistrust from the public, and poor management of wildlife. This is already in effect as we have seen from the results chapter that there is no trust between government and the Inuit in Nunatsiavut. Those who are not abiding by the GRCH hunting ban have already lost the interest in building a healthy relationship with trustees and trust managers. This is where trust managers and wildlife managers have to come in and establish priorities in the communities that break the PTD barrier such as no social engagement, enforcement actions on wildlife conservation, and unsustainable harvesting. Inuit in Nunatsiavut recently have noticed this type of action over the course between last two to three years where

certain Indigenous groups in Labrador are still harvesting from the GRCH. This behaviour is out of sync with wildlife conservation and serves no beneficial purpose to Inuit in Nunatsiavut. The call for proper enforcement on the GRCH is booming from the communities in Nunatsiavut and has to be accomplished immediately. The NL government has the capacity and ability to undertake this action, but Inuit in Nunatsiavut are not seeing this happen. This is where the public/Inuit revoke their trust from trustees and trust managers. Transparent communication between the Inuit in Nunatsiavut and the government of NL is required. By doing so, this can be the start of building trust and a positive relationship between both parties.

Theorizing the framework used in this research paper and using the GRCH hunting ban as the case study, integrated resource management, provided a reasonable and applicable structure to explaining the groundwork used in the research project. This application is relatively new for WM and especially one of the first of its kind applied in northern Labrador. IRM helped bridge the gap between the need for social engagement from government and Inuit communities where legitimate WM practices are in need of proper application. The need for IRM depends on what resources require inputs and certain knowledge to help provide the appropriate management technique. Wildlife managers have to start recognizing the need for IRM, especially as a theory that should begin with the approach to planning and management that examines resource problems. In doing so, this can allow for opportunities to address resource use problems that result from divided approaches that lack earnest stakeholder engagement.

Conclusion

This research project was created to examine the GRCH hunting ban that is currently in place in northern Labrador. The researcher believed that this research project was of the utmost necessary for the Inuit of Nunatsiavut. The motivation behind this research project was driven by the social need on wildlife management reform from Nunatsiavut communities since the Inuit who are from there saw that there is a lack of provincial and federal social engagement in their communities. The researcher believes that this thesis can be used as a tool for future decisionmaking processes, especially pertaining to resources that are crucial to their lifestyle. The GRCH hunting ban in itself brings a chain reaction to numerous responses, concerns, and impacts that are imposed on Inuit who live and reside in Nunatsiavut. The conclusions of this research reaffirm that better WM practices, policies, and decisions must include the perspectives, attitudes, values, and beliefs from Inuit in northern Labrador. If the NL government is going to initiate a policy that is going to affect Inuit, Inuit communities, and Inuit well-being, transparent consultation must be required at all times lest it compromises the values that we saw in the Results chapter. This was discussed throughout the interviews conducted by the author and the Inuit who participated in the research study. The GRC provided food for Inuit who live in one of the most northern, isolated and remote places in the province of NL. This suggests that those who are living in these parts greatly rely on their surrounding resources—fresh water, hunting and cabin grounds, fishing areas, and other significant features crucial to Inuit culture and lifestyle. We now understand that the GRCH was one of the important resources that they relied on prior to the hunting ban.

To better understand the hunting ban in Nunatsiavut communities, IRM and the PTD was used as lenses to view and examine the ongoing impacts that Inuit are facing. Since IRM focuses on two key dimensions, first being the idea that the natural environment and forms of consultations

are necessary and second, participation and collaboration between the public and government (i.e. social engagement). These factors can be shaped to better WM practices and policies in northern Labrador should be discussed in detail and consider those who are affected by the GRCH hunting ban.

This research project serves as the first of its kind to record and document the social connotations of the GRCH hunting ban in northern Labrador. This qualitative study fleshed out several concepts that Inuit in Nunatsiavut know is important to them. The findings outlined here represent three social levels: personal, household, and community. The concepts were shaped to establish what was and is significant to Inuit with respect the GRCH hunting ban. This thesis reaffirms the importance of caribou throughout Nunatsiavut and highlights the fact that this importance has been even more keenly felt since the initiation of the GRCH hunting ban back in early 2013. Inuit social well-being, nutritional intake, and knowledge sharing have specifically been impacted and these are issues that have to be addressed sooner rather than later. This is where the Public Trust should be taken into account when decisions are being made, especially when it comes to WM. Integrated Inuit knowledge, perspectives, and input could greatly offset these impacts. The identification of caribou importance has been established throughout this thesis. This acknowledgement has many primary facts that make Inuit in Nunatsiavut apparent throughout this research project. The participants who solely and strongly believe that caribou play a versatile role within their communities, households, and for the well-being. Given this significance on what questions can be asked such as "How much wildlife habitat is protected from future development and how will such a development will unfold?" Questions like this require structured reasoning for better decision-making. This type of question will see how development will unfold as we address questions like this. Inuit must be engaged in the decision making processes when

discussions are related to their interests. If we ask a question that is in line with what Inuit in Nunatsiavut are facing because of the GRCH hunting ban, like "How much longer will the GRCH hunting ban be in place?" Talking about these questions requires social input and perspective on wildlife management should be included in decision making processes, especially if its resources that are important to Indigenous peoples. In this case, Inuit in Nunatsiavut have a better understanding on the traditional caribou knowledge and this should not be outweighed by western science since both knowledge concepts has the ability to compliment each other.

Integrating Inuit knowledge and public awareness is a step toward maintaining trust between the public and government. By doing this, it would make clear that the NAMWC is being used since it enables the idea of public trust on how professional scientists and experienced hunters/harvesters move toward conservation. The hunting ban in itself serves the purpose to try and conserve and maintain the GRCH numbers. It is the hunters and harvesters that allow such a conservation idea to come about and the knowledge that they have in regards to wildlife that help inform effective efforts in conservation. Scientific support allows conservation to become a management strategy that is developed from the public input. The trust that managers gain from the public must be acknowledged into discussions at higher levels of government. Hunters as resource users have the ability and knowledge to share with wildlife experts and these experts help support these users by promoting better WM. This relationship was discussed in the literature review chapter where the author pointed out several actions that organizations can adopt to help fulfill public trust obligations, obligations that could effectively integrate public participation and interest. Recognizing that such a doctrine exists that enables their interest to participate and include their point of view, decisions, and voices. In doing so, this could maintain where trustees invest

their information and trust for better decision making. Lastly, there is a need to ensure that there is diversity of stakeholders to participate and discuss conservation matters.

These obligations need transparent communication, recognition, and endorsement. The trust from Inuit in Nunatsiavut is not taken seriously and based on the interviews and evidence from the results chapter, it is evident that their obligations for earnest stakeholder engagement by trustees and trust managers have to be met immediately. Wildlife managers are to refer to the PTD since it includes every public individual, since each person holds valuable piece of information that can influence decisions, policies and actions to better WM. This was shown in the research method adopted for this study where the author tailored the research questions to experienced hunters and harvesters but was also open to Inuit in Nunatsiavut. This type of method allows perceptions, attitudes, values, and interests to be heard across society. It does not discriminate social barriers such as low-income, single parents, the elderly, and young adults who are highly impacted by the GRCH hunting ban. These type of individuals and groups hold information and knowledge that can transform WM policies and actions and help establish trust between trustees, trust managers and the beneficiaries. Inuit in Nunatsiavut long for their voices to be heard at the roundtable when it comes to updating, managing and regulating WM policies, especially when trustees and trust managers are reviewing the GRCH hunting ban.

The fairness of IRM depends on effectiveness, efficiency, and equity. Once a resource use problem is identified by its user(s), it could benefit from these factors. The rationale for using integration is to help accomplish a vision that allows a desired future condition to be met effectively, efficiently, and equitably. There IRM is a driver that is acknowledgeable to this research paper and that is applied in social systems, within, and across sectors. This integration has the ability to stem into WM policy imposed on Inuit in Nunatsiavut. Policies relating to this

discipline allows for opportunity to change the relationship between people and wildlife, given that the idea or value that people place on wildlife is going to change or that the value is being compromised as the response developed by people goes back to the original state. We have already seen this discussed from the points, comments, and beliefs that Inuit in Nunatsiavut made resulting in the interview discussions. The relationship between Inuit and caribou in Nunatsiavut have changed since the onset of the GRCH hunting ban. This also greatly changes the future on WM and social well-being with respect to younger generations. The younger Inuit in Nunatsiavut will not be able to place value on caribou the way their parents and family did prior to the hunting ban. Establishing a response or solution for this challenging situation will be difficult to start, but administering the values made in the results chapter is a step towards developing value based actions.

We saw and understand the concerns that the GRCH hunting ban brings to Inuit in Nunatsiavut and the various types of impacts that each community faces and how uniform and similar each impact sets across. It is essential to consider the values Inuit placed on the GRCH. Policies that originate or established based on their values can potentially control Inuit activity towards the GRCH. It is known that Indigenous peoples only take what they need from the resources they rely on. If there were such a policy in place that was made in response to applying Inuit values, then it could be that Inuit will abide by that policy(ies) in which they help developed. This could be difficult to comprehend or acknowledge, but this is where trust between government and public should be recognized and considered. In the end, it comes down to managing the values that people place on resources in that are important to them. To understand the values that people place on wildlife, communication and education are key factors to making it transparent. Communication and education are forms of interdisciplinary approaches to taking on different

techniques for management and policy implementation. It is known that, this type of approach integrates knowledge and input from stakeholder engagement and gives the freedom for managers to apply these new inputs to pave a new and effective path for WM.

Considering a new direction that is built and operated on public persuasion, this form of action still yet has to make it acknowledgeable in northern Labrador. With the ongoing GRCH hunting ban and lack of social engagement within the communities of Nunatsiavut and before paving a new direction for a management on wildlife, managers must work with Inuit to help manage their concerns identified from the results chapter and find appropriate actions to help develop an approach that is adequate and tolerable for the communities. Drawing back to Decker et al. (2009) where managers and stakeholders should avoid the idea on "done this, done that", the communities in northern Labrador have to start making decisions on where the best path forward is. It has to come down to trust managers knowing that the public would like to have a management strategy that is satisfactory for both managers and the public. Using the evidence presented in this thesis could help open up solutions toward a common goal that meets the needs for both Inuit and wildlife managers. It is known that once these discussions and actions are taken considerably, there will be missing ideas and actions that may not be achievable but this is required nonetheless. Integrating Inuit values into decisions to help identify remedies that can be administered across levels of government and the public. The reminder here is that, social knowledge from communities have always had the capacity to learn and make decisions based on their needs (if the consensus is agreed upon) which means that trust managers have to provide an understanding and stability for the right actions to be taken.

We have already saw that understanding the future of resource and non-resource users benefit from decisions with respect to the opportunities that were brought forward by the PTD and saw that public and community subsistence like their socio-economic status, values and beliefs, behaviour and actions towards policies and their thoughts on how management should be conducted. The results chapter have already provided these understatements identified by the communities and Inuit in Nunatsiavut. The PTD is lacking here and to make WM work effectively, efficiently and equitably, trust managers and trustees must take Inuit trust into consideration. Inuit in Nunatsiavut have already identified their pitfalls and shortcomings and these can indicate the current status on their economic well-being, strongly recognize their position and hardship from the unforeseeable and unnoticed social engagement by government (trustees), and behaviours and actions all in relation to the GRCH. The need for a human dimensions approach to tackle these issues is required since public involvement, knowledge, and characteristics (such as the PTD) is known to be effective and useful for WM.

The future of the GRCH hunting ban is still uncertain and continues to bring unwanted repercussions to the north coast communities in Labrador, especially to the Inuit who live and reside there. Hunting and harvesting are one of the two major roles and actions that are done within the communities of Nunatsiavut. Solely for traditional and cultural purposes. Hunting and harvesting brings not only food, nourishment, and emotional well-being, but importantly traditional knowledge. Hunting and harvesting are not distinguished from the responsibilities for management, but we saw that it provides care for the environment. The results chapter of this graduate research paper looked at many examples and evidence with respect to WM and the value that is added to other resources that Indigenous peoples place. We saw that caribou is a major and significant type of ungulate species in northern Labrador. The relationship established between Inuit in Nunatsiavut and the GRCH go back centuries. Up until now, the results chapter proves that this relationship is slowly losing its primary value.

The overall study and research on this topic was very important to conduct. Such a study and research project like this one was needed in the communities of Nunatsiavut. Inuit who are from there supported this study and are hoping to hear positive news in the future as it could be used as a tool for future decision making processes on WM in the province. This can also provide insight to how wildlife species that Inuit depend on are significant to their culture. The social engagement is non existent since the onset of the GRCH hunting ban established early 2013. It is also difficult to determine a single factor on the decline when there are numerous internal and external plausible causes such as poor calf retention due to parasites/disease, predation, and climate change. Inuit in Nunatsiavut understand that the GRC population decline is due to illegal harvesting. This conflict is painstaking and worrisome felt by the Inuit in Nunatsiavut and they strongly believe that this act requires immediate action by having enforcement management efforts in the communities where poaching exists. It should be noted that this will not solve the population decline but it will provide a sense of relief and comfort. This type of action is ambitious and favourable since several interviewees recognized illegal harvesting of the GRCH. This is why Inuit in Nunatsiavut would like to have their voices and opinion heard at the decision making table, to help persuade and influence those decision makers when it comes to resources that are significant to their lifestyle.

The youth and elders in Nunatsiavut communities face similar impacts, but each generation are impacted differently. For instance, youth are missing out on an important subject matter that holds a wide array of cultural interpretation and significance. Elders are longing for a resource that was a part of their life prior to the hunting ban. The knowledge gap will grow larger as the hunting ban persists. This overall is damaging to Inuit culture and social well-being and finding the right and appropriate solution to this crisis is extremely challenging. But one of the actions that

Nunatsiavut communities and the NL provincial government could do is start integrating Inuit knowledge into policy making. The long-run of this solution will no doubt take time, but that time will be more valuable than doing nothing for the Inuit in Nunatsiavut. With existing food and imported goods that are expensive, it makes it much harder to afford store bought foods to substitute the GRC. The options or ideas that Inuit have brought forward from the results chapter are challenging to consider such as importing similar caribou meat from other Inuit communities and territories in the Arctic, to opening a small cultural hunt and to share out a certain percentage for each community if these ideas were to come to light. Inuit well-being in the end is compromised and adjusted culturally, socially, economically and nutritionally. The purpose of this study was to examine the social implications of the GRCH hunting ban on Inuit in Nunatsiavut and the overall research project was well worth the study and important to the Inuit in this region. It is undeniable that such a hunting ban jeopardizes Inuit ways of life with extensive impacts that draw across individual, households, communities, and certain age groups within Nunatsiavut communities. All impacts identified and documented shows the different levels of hardship between Inuit and their communities. The PTD has to come into play to help integrate Inuit values to lessen the impacts that Inuit are currently facing with the GRCH hunting ban in place. The actions that could potentially help with the integration are building relationships with Inuit in Nunatsiavut to better understand their concerns and impacts brought on by the GRCH hunting ban. Once relationships are built, decision making processes could run a lot smoother and be directed to a path in which is suitable to Inuit well-being and culture in terms of wildlife. Gaining trust comes with relationships between those who rely on resources that are at stake and with those who are willing to make the changes to better meet the needs of resource users. Resource users in this context, Inuit in Nunatsiavut, also need to show that they are open and willing to work with trust and wildlife

managers if they would like to see appropriate and just policies on and for resources that are important to their lifestyle. Community engagement and social participation in decision making and policy formulation is also another step forward to utilizing the PTDs nature and purpose.

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Appendices

Appendix A: Recruitment Letter sent to Community Liaison Officer's from the Nunatsiavut Government

Jason Dicker 80 Sandbanks Road Nain, NL A0P 1L0 April 10, 2018 Community Liaison Officer Nunatsiavut Government

Dear Community Liaison Officer,

My name is Jason Dicker. I am from Nain, Nunatsiavut and I am currently enrolled as a graduate student at the Grenfell Campus, Memorial University of Newfoundland. I am completing a Master of Arts degree in Environmental Policy and my research is focused on the George River Caribou Herd hunting ban and its potential impacts on the Inuit of Nunatsiavut. For generations, the hunting of this caribou by the Inuit of Nunatsiavut provided them with a staple food supply, nourishment, materials, and sharing of knowledge which are important to life in the Arctic and subarctic.

My research will explore four levels of potential impacts of the hunting ban: 1) personal/individual impacts, 2) household impacts, 3) community-wide impacts, and 4) cultural impacts. I have a personal and in-depth understanding of the importance of caribou to the Inuit people on the north coast and my research will highlight the need to more effectively identify and understand the residents' perspectives regarding impacts of the hunting ban. To gather this information I plan to conduct interviews with some of the residents in the communities of Nain, Hopedale, Makkovik, Postville, and Rigolet.

Approximately 10-12 interviews will be conducted in each of the five Inuit communities on the north coast. To participate in these interviews, participants must be 19 years of age or older but there is a preference for older, experienced hunters and harvesters. Ideally interviews will be done in English but I can also conduct the interview in Inuktitut if preferred by the participant. Interviews will take approximately one hour to complete and participants will receive a \$50.00 honorarium.

I would very much appreciate your assistance in identifying some potential interview participants in your community who are willing to provide beneficial and significant information for me to shape my thesis for my research project.

If you have any questions, please feel free to contact me by telephone at 709-922-2380 or reach me by email at jdicker@grenfell.mun.ca.

Thank you for your time and I hope to hear from you soon. Sincerely,

Jason Dicker

M.A. Candidate, Environmental Policy Grenfell Campus, Memorial University of Newfoundland

Appendix B: Grenfell Campus Research Ethics Board letter of approval



Research Ethics Board

University Drive, Corner Brook, NL Canada A2H 5G4

Tel: 709-639-2399 Fax: (709) 637-2885 http://www.grenfell.mun.ca/research-ethics-board

July 4th, 2018

Reference number: 20190080

Dear Mr. Dicker,

Thank you for your application for ethical clearance for your proposal *Examining the impacts of the George River Caribou Herd hunting ban on northern Labrador Inuit: an integrated resource management perspective.* The Grenfell Campus Research Ethics Board (GC-REB) has reviewed your application and finds your proposal in ethical compliance with the Tri-Council Guidelines.

Your approval for this project expires on July 4th, 2019. To remain in compliance with Article 6.14 (Continuing Research Ethics Review) of the Tri-Council Policy Statement on Ethics in Human Research (TCPS2), should your project continue past that date, you are required to renew your ethics approval before that time. As well, please note that any changes to the proposed study will need to be cleared by the GC-REB first.

The Board wishes you success with your research.

(Diniel Madolius

Best wishes,

Daniel Nadolny, Ph.D., Chair

IMPORTANT REMINDERS - PLEASE READ:

Student Project(s): you must maintain active ethics clearance until the final version of your thesis/dissertation has been approved by your department / the School of Graduate Studies.

If you have graduated prior to receiving this notice, please note that you are still required to submit an annual update indicating completion of your project and requesting closure of your ethics clearance.		
Funded project(s): it is strongly recommended that you submit your annual update at least 4 weeks prior to expiry of your clearance. Lapsed ethics clearances may have negative impacts on administration of your funding.		

Appendix C: Nunatsiavut Government Research Advisory Committee (NGRAC) approval

letter



May 25, 2018

Jason Dicker 80 Sandbanks Road PO Box 271 Nain, NL AOP 1L0

Re: Examining the impacts of the George River Caribou Herd hunting ban on northern Labrador Inuit: an integrated resource management perspective.

Dear Mr. Dicker

Please accept this letter as confirmation of the Nunatsiavut Governments approval for the above research project as outlined in your application, subject to the following suggestions:

- 1. Please provide a scanned e- copy of the signed ethical approval letter from your university or institution for this project once you receive it.
- 2. Please provide a c opy of your interview questions
- 3. Tradi tional Knowledge is a very important issue for the NG and beneficiaries to the Agreement. Therefore, we would like copies of all of the processed data and reports.
- 4. Please provide copies of any reports, journal articles, papers, posters or other publications related to this project to the, Nunatsiavut Inuit Research Advisor upon completion of your work. A plain language summary detailing the work, translated into Labrador Inuttitut should also be provided.
- 5. NG would appreciate copies of any photographs that you acquire during your research in the Nunatsiavut area as Nunatsiavut Government is developing a digital database of regional photos. Recognition will always be given to the photographer.

Please note that if you are going to make any changes to your proposal, any such changes must be considered and supported by the NGRAC before they are implemented.

Sincerely,

Carla Pamak

Inuit Research Advisor

Nunatsiavut Government

P.O. Box 70

Appendix D: Informed consent form

Informed Consent Form

Title: Examining the impacts of the George River Caribou Herd hunting ban on northern

Labrador Inuit: an integrated resource management perspective.

Supervisor: Mr. Stephen Decker, Grenfell Campus Memorial University of Newfoundland, email:

sdecker@grenfell.mun.ca, phone: 709-639-6578

Researcher: Jason Dicker, Grenfell Campus, Memorial University of Newfoundland, email:

jdicker@grenfell.mun.ca

You are invited to take part in a research project entitled "Examining the impacts of the George River Caribou Herd hunting ban on northern Labrador Inuit: an integrated resource management perspective."

This form is part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. It also describes your right to withdraw from the study at any time. In order to decide whether you wish to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. This is the informed consent process. As we go through this form together, please feel free to ask any questions related to informed consent. Please feel free to also contact the researcher, Jason Dicker or the research supervisor, Mr. Stephen Decker, if you have any such questions in the future.

It is entirely up to you to decide whether to take part in this research. If you choose not to take part in this research or if you decide to withdraw from the research once it has started, there will be no negative consequences for you, now or in the future. If you choose to withdraw, the agreed-upon honorarium will still be provided.

Introduction

I am a beneficiary of the Labrador Inuit Land Claims Agreement in Nunatsiavut and a graduate student in the Environmental Policy program at the Grenfell Campus, Memorial University of Newfoundland. This research is funded partially by the Tradition & Transition between Memorial University and the Nunatsiavut Government.

Purpose of study:

Under the supervision of Mr. Stephen Decker, I am conducting research to better understand the impacts of the George River Caribou Herd moratorium on the Inuit of Nunatsiavut. Given the significance of the caribou in Nunatsiavut, it is important to identify and understand the possible impacts of this moratorium to better inform future wildlife efforts in this region.

What you will do in this study:

You, as the participant, at your consent, will provide your opinions on the personal, household and community-wide impacts of the caribou hunting ban in Nunatsiavut.

Length of time:

The interview will last between **45** to **60 minutes** of your time. You may wish to choose to stop at any time during the interview.

Withdrawal from the study:

Indicate

- If you choose to withdraw from the interview at any point, simply communicate this to the interviewer
- If you choose to withdraw from the interview before it is complete, the information that you have provided can be removed from the interview record at your request
- Interview contributions can be withdrawn up until the graduate thesis submitted or when the researcher presents final outcomes in presentations or in print.
- There will be no consequences for your withdrawal and the agreed-upon honorarium will still be provided.

Possible benefits:

Participating in this interview will allow you the opportunity to express your feelings and thoughts on the caribou hunting ban in Nunatsiavut. It will also allow you to voice your opinions on how you, your household, and your community are impacted by the caribou hunting ban. Your participation can contribute to identifying and better understanding indigenous worldviews related to wildlife management and environmental policy.

Possible risks:

Given the significance of the GRCH to Inuit in this region, it is possible that discussing impacts of the caribou hunting ban could result in strong emotions and feelings about the role of caribou.

If you feel the need to skip questions or topics during the interview, please communicate this to the researcher.

Confidentiality vs. Anonymity

There is a difference between confidentiality and anonymity: Confidentiality is ensuring that identities of participants are accessible only to those authorized to have access. Anonymity is a result of not disclosing participant's identifying characteristics (such as name or description of physical appearance).

Confidentiality, Anonymity, and Storage of Data:

While the nature of the study suggests that it is not likely necessary to protect the confidentiality of participants, such arrangements can be made if participants so desire. If applicable, interviews can be conducted at a time and location which meets the participant's need for discretion. Interviews can also be conducted over the telephone with participants who desire an extra layer of anonymity. You can choose whether or not to have parts of your interview used in the final report and whether or not you want your name to be included. It is important to note that depending on the information you provide during the interview, it may be possible for those reading parts of your interview in a final report to identify who you are.

Interview transcripts and digital recordings will be kept confidential by the researcher. Interview transcripts and digital recordings will be kept in a secure location (locked filing cabinet) in the researcher supervisor's office at Grenfell Campus of Memorial University of Newfoundland. Research assistants and or transcribers (if hired for the study) will be asked to sign a nondisclosure form requiring them to keep participants' identities and interview contributions confidential. Interview transcripts and digital recordings will be held in this manner for a period of five years as per Memorial University Policy on Integrity in Scholarly Research.

Reporting of Results:

Interview contributions will be used as data by the researcher for his thesis as required for the researcher's program of study at Grenfell Campus Memorial University. Interview contributions may also be used to prepare conference presentations, journal articles, or other reports. With your consent, portions of your interview may be included in these reports and presentations. Also with your consent, your name may also be associated with your interview contributions. You can chose how the research can use your interview contributions at the end of this form.

Sharing of Results with Participants:

Upon completion of the thesis, the researcher will provide a short summary of the research outcomes that is to be distributed to interested residents with the assistance of community liaison offers in each of the five communities. Upon completion of the thesis, the researcher will also work with each community to schedule a public presentation of the research outcomes. The researcher will also seek out opportunities provided by the Nunatsiavut Government share information regarding research outcomes with communities in the region.

Questions:

You are more than welcome to ask questions at any time during your participation in this research. If you would like more information about this study, please contact: Jason Dicker at jdicker@grenfell.mun.ca.

The proposal for this research has been reviewed by the Grenfell Campus-Research Ethics Board and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the GC-REB through the Grenfell Research Office (GCREB@grenfell.mun.ca) or by calling (709) 639-2399.

Consent:

Your signature on this form means that:

- You have read the information about the research.
- You have been able to ask questions about this study.
- You are satisfied with the answers to all your questions.
- You understand what the study is about and what you will be doing.
- You understand that you are free to withdraw from the study at any time, without having to give a reason, and that doing so will not affect you now or in the future.
- You understand_that if you choose to withdraw from the interview before completion, you can choose to have any data collected from you up to that point destroyed.

If you sign this form, you do not give professional responsibilities.	up your legal rights and do not release the researchers from their
•	nd understood the risks and benefits. I have had adequate time to ity to ask questions and my questions have been answered.
	oject understanding the risks and contributions of my participation that I may end my participation at any time.
☐ I agree to be audio-recorded during th	e interview.
☐ I do not agree to be audio-recorded du	uring the interview.
I agree to the use of quotations and t study.	hat my name be identified in any publications resulting from this
I agree to the use of quotations but d from this study.	o not want my name to be identified in any publications resulting
☐ I do not agree to the use of quotations	i.
A copy of this Informed Consent Form has	been given to me for my records.
Signature of participant	Date
Researcher's Signature:	
•	of my ability. I invited questions and gave answers. I believe that is involved in being in the study, any potential risks of the study be in the study.
	,
Signature of Researcher	Date

Appendix E: List of research questions

Examining the impacts of the George River Caribou Herd hunting ban on northern Labrador Inuit: an integrated resource management perspective.

Research Questions.

- 1. In what ways are the caribou important to you?
 - a. And how do you think this can be addressed?
- 2. How has the hunting ban impacted you personally?
 - a. And how do you think this can be addressed?

3 How has the hunting ban impacted your household?

- a. And how do you think this can be addressed?
- 4. How has the hunting ban impacted your community?
 - a. And how do you think this can be addressed?
- 5. How has the hunting ban impacted Inuit in Nunatsiavut?
 - a. And how do you think this can be addressed?
- 6. How has the hunting ban impacted your culture?
 - a. And how do you think this can be addressed?
- 7. How do you think these impacts can be addressed in future wildlife management decision making processes? *

Caribou = George River Caribou



