



FROM LAPLAND TO LABRADOR:  
EXPLORING THE POTENTIAL OF INDIGENOUS PARTICIPATION IN  
ENVIRONMENTAL IMPACT ASSESSMENTS  
April Connolly

MEM FINAL REPORT  
TRANSFOR-M PROGRAM

---

FREDERICTON 2017



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

## ABSTRACT

---

Environmental impact assessment (EIA) is a common planning tool used to assess the impacts of proposed development projects and will play an important role in sensitive Arctic ecosystems as the demand for development increases. There is criticism of how indigenous peoples are involved in EIA despite international political and academic recognition of its value. To analyse this discrepancy two frameworks were developed. The *ILO Convention No. 169, The Indigenous and Tribal Peoples Convention*, was reviewed for the first framework and eight components related to the rights of indigenous peoples regarding natural resource management were identified to represent an international standard for involvement. Academic literature was analysed for the second framework and 22 components of successful collaborative environmental management (CEM) were identified. The language in the four pieces of EIA legislation affecting the Innu in Labrador, Canada and the Sámi in Lapland, Finland was analysed to determine how well the components of the two frameworks were met. For the CEM framework, only 16 components were able to be assessed by looking at legislation and the other six were excluded from this study. The results of this content analysis found that the *Canadian Environmental Assessment Act, 2012* met both frameworks the best, followed by Newfoundland and Labrador's *Environmental Protection Act*, the EU's *EIA Directive*, and lastly Finland's *Act on the Environmental Impact Assessment Procedure*. Analysis of the results in the context of existing literature on the implementation of EIA legislation and indigenous peoples' involvement identified areas where the jurisdictions can learn from one another and where the legislation can be improved. This research supported 20 recommendations to help inform policy decisions and better align current EIA processes with the international and academic standards of indigenous peoples' participation in environmental management.

**Keywords:** indigenous peoples, environmental impact assessment, legislation, Canada, Finland, *ILO Convention No. 169*, collaborative environmental management

## FOREWORD

---

After living for a year in Finland, I noticed that the challenges facing the Arctic environment and the indigenous peoples living within it are similar in Finland and Canada, although they are addressed differently. International agreements and academic literature outline the importance of involving indigenous peoples in the development of natural resources, but I have observed through my professional and academic work that the implementation of these theories often leaves all involved dissatisfied. Through this research, I hope to identify ways for Canada and Finland to learn from each other to improve how indigenous peoples are involved in environmental impact assessments. I am still learning about this topic every day and hope this thesis will contribute a small voice to a complicated and rapidly changing conversation.

I would like to thank my supervisors Melanie Wiber and Jouni Pykäläinen for their support, feedback and checking up on me over the years. Your guidance and encouragement helped me focus my ideas and find my way out of a rabbit hole of research. Thank you also to Jukka Matero and Stephen Wyatt for supervising me at the early stages of this thesis and letting me bounce ideas off you.

To all the program coordinators of the TRANSFOR-M program, thank you for organizing such an amazing opportunity and caring so much about each of the students to come through it. I would also like to express my gratitude to all the people who took the time to talk with me about this topic over the last six years from strangers on the street to academic researchers, members of indigenous communities, government employees, and colleagues. They are too numerous to list and have helped to shape my perspective on indigenous peoples and environmental management.

I would like to thank my friends and colleagues who have been willing to help throughout my thesis whether through an encouraging word, a second set of eyes or an unofficial translation. Most importantly, I am incredibly grateful to my parents, brother, nana and boyfriend for their unending support and not asking me when I was going to finish too often. I could not have done this without your love and encouragement.

April Connolly  
Edmonton, Canada  
June 2017

# TABLE OF CONTENTS

---

1. Introduction.....	6
1.1 Statement of Importance .....	6
1.2 Defining the Scope .....	7
1.3 Summary of Existing Literature.....	9
1.4 Justification .....	10
1.5 Objectives.....	11
1.6 Research Questions .....	11
1.7 Research Limitations.....	11
1.8 Thesis Structure.....	12
2. Literature Review.....	12
2.1 Arctic Environments .....	13
2.2 Environmental Impact Assessments.....	16
2.2.1 Public Participation in Environmental Impact Assessments .....	19
2.2.2 Traditional Ecological Knowledge .....	22
2.3 International Agreements .....	27
2.4 The Context in Lapland, Finland .....	29
2.4.1 Physical Environment and Demographics of Lapland.....	29
2.4.2 Indigenous People and their Traditional Livelihoods.....	30
2.4.3 History of EIAs and Sámi Participation in Resource Management.....	33
2.4.4 Political Status of Sámi Participation in Finland .....	35
2.4.5 Cultural Values Related to the Environment in Finland.....	38
2.5 The Context in Labrador, Canada .....	39
2.5.1 Physical Environment and Demographics of Labrador .....	39
2.5.2 Indigenous People and their Traditional Livelihoods.....	40
2.5.3 History of EIAs and Innu Participation in Resource Management.....	42
2.5.4 Political Status of Innu Participation in Canada .....	45
2.5.5 Cultural Values Related to the Environment in Canada .....	48
2.6 Comparison of Lapland, Finland and Labrador, Canada .....	49
3. Methods.....	51
3.1 Data Collection to Identify Relevant Legislation.....	52
3.2 Characteristics of Effective Collaborative Environmental Management.....	53
3.3 <i>ILO Convention No. 169 vs. United Nations Declaration on the Rights of Indigenous Peoples</i> .....	54
3.4 Content Analysis of Legislation.....	55
3.5 Expected Challenges and Mitigations .....	56
3.6 Alternative Methods Considered.....	58
3.6.1 Interviews.....	59
3.6.2 Case Studies .....	60
4. Theoretical Framework.....	60
4.1 <i>ILO Convention No. 169</i> .....	61
4.2 Collaborative Environmental Management .....	65
4.2.1 Background.....	65

4.2.2	What is the theory? .....	67
4.2.3	Benefits .....	68
4.2.4	Challenges.....	70
4.2.5	Criticisms .....	71
4.2.6	CEM in the context of indigenous peoples' involvement in EIAs .....	73
4.2.7	CEM Framework .....	75
5.	Results.....	76
5.1	<i>ILO Convention No. 169</i> .....	77
5.1.1	Recognition of indigenous peoples as having rights related to their culture, history and values .....	77
5.1.2	Self-identification as an indigenous group .....	78
5.1.3	Governments have a responsibility to protect the rights of indigenous groups with their participation.....	79
5.1.4	Participation and consultation are done in good faith.....	80
5.1.5	Recognition of the rights of ownership and possession to traditional territory ..	83
5.1.6	Recognition of the rights to participate in the use, management and conservation of resources .....	84
5.1.7	Transboundary consideration to address issues of the indigenous peoples as a whole .....	85
5.1.8	Capacity funding.....	86
5.1.9	Summary of <i>ILO Convention No. 169</i> components in the legislation .....	87
5.2	Collaborative Environmental Management .....	89
5.2.1	Knowledge integration.....	90
5.2.2	Community is actively involved in decision-making .....	91
5.2.3	Rights and responsibilities are clearly defined .....	93
5.2.4	Mechanisms for conflict resolution and debate .....	95
5.2.5	Recognition of shared values and a responsibility to act.....	96
5.2.6	Community is well-defined and cohesive.....	96
5.2.7	Resources are well-defined .....	97
5.2.8	Mechanisms for monitoring exist .....	98
5.2.9	Mechanisms for graduated sanctions .....	99
5.2.10	Opportunities for new interactions to build trust .....	100
5.2.11	Opportunities to experiment and adapt the management.....	101
5.2.12	Communities receive support and resources.....	103
5.2.13	Process is applied to the local conditions .....	104
5.2.14	Collaboration occurs early and at several stages in the process .....	105
5.2.15	Nested enterprises .....	106
5.2.16	Effective and time-sensitive.....	107
5.2.17	Summary of CEM components in the legislation .....	109
5.3	Conclusion.....	111
6.	EIAs Beyond the Legislation .....	111
6.1	EIA Legislation in Lapland, Finland.....	112
6.1.1	<i>ILO Convention No. 169</i> .....	113
6.1.1.1	Recognition of indigenous peoples as having rights related to their culture, history and values .....	113
6.1.1.2	Self-identification as an indigenous group.....	114

6.1.1.3	Governments have a responsibility to protect the rights of indigenous groups with their participation .....	115
6.1.1.4	Participation and consultation are done in good faith.....	116
6.1.1.5	Recognition of the rights of ownership and possession to traditional territory	117
6.1.1.6	Recognition of the rights to participate in the use, management and conservation of resources.....	119
6.1.1.7	Transboundary consideration to address issues of the indigenous peoples as a whole .....	119
6.1.1.8	Capacity funding .....	120
6.1.2	Collaborative Environmental Management .....	120
6.1.2.1	Knowledge integration .....	120
6.1.2.2	Community is actively involved in decision-making.....	121
6.1.2.3	Rights and responsibilities are clearly defined.....	122
6.1.2.4	Mechanisms for conflict resolution and debate.....	123
6.1.2.5	Recognition of shared values and a responsibility to act .....	124
6.1.2.6	Community is well-defined and cohesive .....	124
6.1.2.7	Resources are well-defined .....	125
6.1.2.8	Mechanisms for monitoring exist.....	126
6.1.2.9	Mechanisms for graduated sanctions .....	126
6.1.2.10	Opportunities for new interactions to build trust .....	127
6.1.2.11	Opportunities to experiment and adapt the management .....	127
6.1.2.12	Communities receive support and resources .....	128
6.1.2.13	Process is applied to the local conditions.....	128
6.1.2.14	Collaboration occurs early and at several stages in the process.....	129
6.1.2.15	Nested enterprises .....	130
6.1.2.16	Effective and time-sensitive .....	131
6.2	EIA Legislation in Labrador, Canada .....	131
6.2.1	<i>ILO Convention No. 169</i> .....	132
6.2.1.1	Recognition of indigenous peoples as having rights related to their culture, history and values .....	132
6.2.1.2	Self-identification as an indigenous group.....	133
6.2.1.3	Governments have a responsibility to protect the rights of indigenous groups with their participation .....	133
6.2.1.4	Participation and consultation are done in good faith.....	135
6.2.1.5	Recognition of the rights of ownership and possession to traditional territory	137
6.2.1.6	Recognition of the rights to participate in the use, management and conservation of resources.....	138
6.2.1.7	Transboundary consideration to address issues of the indigenous peoples as a whole .....	139
6.2.1.8	Capacity funding .....	140
6.2.2	Collaborative Environmental Management .....	142
6.2.2.1	Knowledge integration .....	142
6.2.2.2	Community is actively involved in decision-making.....	143
6.2.2.3	Rights and responsibilities are clearly defined.....	145
6.2.2.4	Mechanisms for conflict resolution and debate.....	145
6.2.2.5	Recognition of shared values and a responsibility to act .....	146

6.2.2.6	Community is well-defined and cohesive .....	146
6.2.2.7	Resources are well-defined .....	147
6.2.2.8	Mechanisms for monitoring exist.....	147
6.2.2.9	Mechanisms for graduated sanctions .....	148
6.2.2.10	Opportunities for new interactions to build trust .....	148
6.2.2.11	Opportunities to experiment and adapt the management .....	149
6.2.2.12	Communities receive support and resources .....	150
6.2.2.13	Process is applied to the local conditions .....	151
6.2.2.14	Collaboration occurs early and at several stages in the process.....	152
6.2.2.15	Nested enterprise .....	153
6.2.2.16	Effective and time-sensitive .....	153
7.	Reflections and Future Directions .....	155
7.1	Opportunities to Learn between Jurisdictions and Recommendations for EIA	
	Legislation .....	155
7.1.1	<i>ILO Convention No. 169</i> .....	156
7.1.2	Collaborative Environmental Management .....	161
7.2	Limitations and Future Research.....	169
8.	Conclusion .....	171
9.	References.....	176

# 1. INTRODUCTION

---

## 1.1 Statement of Importance

Due to their geographical isolation and low population densities, Arctic and sub-Arctic environments are often neglected in terms of the sustainable management of their natural resources and rural development activities for local communities. The resource reserves discovered in the Arctic have resulted in the high potential for oil and gas, mining, and hydroelectricity industries to develop over a relatively short period of time (Chance and Andreeva 1995). The danger is that these resources require destructive extraction in an area with a sensitive ecosystem that, over the course of time, has not been subject to much change (Chance and Andreeva 1995). The concern is twofold: that the natural environment will not be resilient enough to withstand these rapid changes and that the local people will lose their traditional way of life, which is closely tied to the land.

In order to manage the environmental and socioeconomic concerns associated with rapid development of industry, several environmental management tools have been employed across the world; the most prominent being environmental impact assessments (EIAs). EIAs are a valuable planning-stage tool for assessing and minimizing the impacts of development projects with the potential to significantly alter the surrounding environment (Hanna 2009). While originally focusing on the ecological environment, they now include impacts to the socioeconomic and cultural environments as well.

A crucial aspect of EIAs is public participation. Community involvement has historically been beneficial in identifying issues associated with and encouraging local support of large-scale projects (Sinclair and Diduck 2009). As a more specialized form of this community involvement, many EIA processes, especially in post-colonial countries, have separated consultation with indigenous communities from public participation in general. As was outlined internationally in the *International Labour Organisation (ILO) Convention No. 169, The Indigenous and Tribal Peoples Convention*, indigenous communities have unique concerns associated with their connection to the land and their rights as indigenous peoples (ILO 1989).



In addition to identifying environmental components of concern, the traditional ecological knowledge (TEK) of indigenous peoples can be used to evaluate and describe the existing environmental setting of a project (Menziés and Butler 2006). The long term observational data of indigenous peoples can be used in conjunction with western scientific data to provide a clearer understanding of the local environment and the potential impacts of a large-scale project (Menziés and Butler 2006). The incorporation of TEK and addressing the concerns of indigenous peoples can reduce the potential negative impacts of development (Sinclair and Diduck 2009). With the pressing issue of land claims, involving local indigenous communities in the management of natural resources is becoming ever more important in garnering local support and international acceptance of large-scale development projects (Slocombe et al. 2009).

## 1.2 Defining the Scope

This thesis will look at how Finland and Canada incorporate consultation with indigenous peoples into their EIA processes. Finland and Canada provide a valuable point of comparison because, although they have similar physical environments, the social environment and historical timeframes are very different. Finland has a relatively old history with the indigenous Sámi people cohabitating with Finns for a long time (Pennanen and Näkkäläjärvi 2000). However, it has a relatively recent history with Finland's *Act on Environmental Impact Assessment Procedures* only being introduced in 1994 to comply with European Union regulations prior to Finland becoming a member state. In contrast, Canada was only formed in 1867, so it has a recent colonial history with the indigenous people living within its borders. On the other hand, Ontario has had a provincial *Environmental Assessment Act* since 1975 and since 1984 the federal process was guided by a Cabinet order, although the *Canadian Environmental Assessment Act* was only formalized in 1995 (Doyle and Sadler 1996).

As EIA legislation is usually jurisdiction-specific, it is valuable to further narrow down the regions being compared. All of Finland falls under the *Act on Environmental Impact Assessment Procedures*, which was derived from European Union's (EU) *EIA Directive*. Consequently, Finland will be used as an example of a country with relatively new EIA legislation and international checks deriving from operations of the EU. On the other hand, Canada is governed by federal, provincial, and territorial EIA legislation so narrowing the analysis down to a specific jurisdiction helps to focus a complicated topic. Labrador was chosen as the jurisdiction because

of similarities in the physical landscape and the traditional livelihoods of indigenous peoples when compared to Finland. The Newfoundland and Labrador's *Environmental Protection Act* will be the main focus of the Canadian case study. However, the future of Aboriginal participation, in light of the 2012 changes made to the *Canadian Environmental Assessment Act*, will also be assessed. Finnish and Canadian EIA legislation will be compared with guidelines for consultation with indigenous peoples, as set out in the *ILO Convention No. 169* to provide an international point of comparison for both countries (ILO 1989). This legislation will be further analysed in terms of how well it meets the characteristics of collaborative environmental management (CEM) outlined in the scientific literature.

While many of the concepts used in this thesis can be generally applied to any local cohesive community, indigenous peoples are often well-organized and internationally supported as unique rights-holders, which make them an easily defined cohesive community. Although the Sámi people in Lapland, Finland can be divided into several groups, they have a collective government and will be treated as a cohesive group for the purposes of this research. To provide a realistic point of comparison, the Innu were chosen in Labrador, Canada. These indigenous peoples were chosen because of similarities in their sub-Arctic environments and in their traditional livelihoods, most notably the significance of *Rangifer tarandus*, L. in the form of reindeer herding and caribou hunting. However, it is important to note that one of the major differences between Lapland and Labrador, related to this topic, is the number of different indigenous peoples whose traditional territory is located in these two areas. Within the borders of Labrador are not just the Innu, but also Inuit and Métis peoples. All three of these groups have different rights under federal legislation with the Innu being legally categorized as "Indians" or First Nations. It is important to keep in mind this distinction between the regions under analysis.

There is much political debate surrounding the "politically correct" terms to use for native peoples, so the use of these terms throughout this paper warrants explanation. Where at all possible the proper name will be used for individual groups, but it is important to clarify what is meant by each of the additional collective nouns used in this paper. In Canada, the term "Aboriginal peoples" is a legal term used to describe Indians (now commonly referred to as First Nations, though many legal documents still reference Indians), Inuit and Métis (Graben 2010).

When referring to native peoples in general or both the Innu and the Sámi together, the term “indigenous peoples” will be used as it is more common in an international context.

### 1.3 Summary of Existing Literature

The concept of involving local communities in the management of natural resources is not a new one. After dropping out of a favour for a more top down approach of management, CEM or co-management was reintroduced in the 1970s (Pinkerton 2003). This method advocates that incorporating the traditional or local knowledge and addressing the concerns of local communities will make for more effective environmental management (Pinkerton 2003). It is not specific to indigenous communities, but the traditional knowledge of indigenous peoples has been suggested as valuable to provide a long-term context not seen in western scientific research (Menziez and Butler 2006). Critics of this approach claim CEM does not remedy the downfalls of traditional resource management and may cause more confusion, particularly if all groups involved are held on equal footing to western science (Luke 2002). On the other hand, CEM is also criticized for defaulting to western science if there is a discrepancy between local knowledge and scientific understanding (Brook et al. 2006).

Indigenous peoples’ right to be consulted regarding the management of natural resources has become a focal point of research. The Berger decision in 1977 sparked the inclusion of TEK into environmental impact statements in Canada. Internationally, support for the rights of indigenous peoples was discussed formally with the *ILO Convention No. 169* in 1989 (ILO 1989). Much of the literature on indigenous peoples’ rights mentions this convention, although several prominent countries, including Canada and Finland, have yet to ratify it. Another relevant international agreement came out of the *Ottawa Declaration* in 1996. The *Ottawa Declaration* came out of a meeting between Arctic nations, and established the Arctic Council as a forum to discuss issues affecting the Arctic (Ottawa Declaration 1996). It specifically recognizes “the traditional knowledge of the indigenous people of the Arctic and their communities and [takes] note of its importance and that of Arctic science and research to the collective understanding of the circumpolar Arctic” (Ottawa Declaration 1996).

There has not been a lot of research specifically on Sámi participation in EIAs, but existing research, predominately from Norway and Sweden, has looked at the use of Sámi TEK. Most of

the research involving Sámi participation in natural resource management has focused on the management of reindeer herds and finding a balance between pastoralism, conservation, and resource use. In terms of research into EIAs and the Sámi, the recent focus has been collaborative research between the three Nordic countries focusing on trans-boundary EIAs. In 1991, the *Espoo Convention on Environmental Impact Assessments in a Trans-Boundary Context* was held in Finland with Finland being the first Nordic country to ratify the agreement in 2005.

In Canada, the literature on Aboriginal peoples' involvement in EIAs has mainly focused on British Columbia and Nova Scotia. Due to differences in provincial EIA legislation and in the historical relationship between Aboriginal people and the government across Canada, it is difficult to make direct comparisons between provinces. However, at a federal level the EIA legislation and the rights of Aboriginal people is consistent across the country, which allows for some comparison as long as context is taken into consideration. There has been minimal research focused specifically on the Innu in Labrador, but some exists speaking to the TEK held by the Innu and traditional livelihoods still practiced.

No literature was found that specifically compared indigenous peoples' involvement in EIAs between Labrador and Finland. However, past comparisons have been made on this topic between Canada in general and other Nordic countries. This indicates that such a comparison would add value to the existing literature on these two parts of the world.

## **1.4 Justification**

With the increased development in sensitive Arctic and sub-Arctic ecosystems, EIAs are becoming increasingly important in the planning stages of projects with the potential to have significant impacts on the environment. EIA literature has indicated that public participation, including consultation with indigenous peoples, plays an extremely important role in collecting information (i.e. TEK) to aid decision-making, identifying stakeholders, and identifying concerns associated with the project (Sinclair and Diduck 2009). Despite the important role of public participation in projects achieving their maximum potential, this is often the most heavily criticized aspect of EIAs (Booth and Skelton 2011).

The only consensus in the literature appears to be that there is no single answer to how natural resources should be managed. The success of the management strategy depends on the context in which it is applied and the mindsets of those involved. Consequently, it is important to assess CEM against each individual context. This research will look at collaboration or public participation as a potential solution to some management problems and, by comparing the approach taken in different countries, will explore the context in which collaboration will prove valuable.

As was outlined in section 1.3, there has been little research into comparing the approaches of Canada and Finland in consulting indigenous peoples throughout the EIA process. The similar cross-national concerns associated with Arctic environments and the traditional livelihoods of indigenous groups indicate that such a comparison could be valuable at revealing potential areas where these two countries can learn from each other. Increasing international recognition of the rights of indigenous people to consultation has added a legal incentive to ensure that consultation efforts are up to an international standard. As Finland is a leader in trans-boundary EIAs and Canada was one of the first Arctic nations to adopt an EIA policy, such a comparison adds further value to the foundation of EIA literature.

## **1.5 Objectives**

This study aims to identify areas of indigenous peoples' consultation and participation in the EIA process where Canada and Finland can learn from each other to ensure sustainable levels of development take place in the Arctic and sub-Arctic.

## **1.6 Research Questions**

- 1) How does EIA legislation in Lapland, Finland and Labrador, Canada align with international guidelines on consultation as outlined in the *ILO Convention No. 169*?
- 2) How does EIA legislation in Lapland, Finland and Labrador, Canada align with the characteristics of successful CEM theoretical framework found in academic literature?

## **1.7 Research Limitations**

One limitation of this research is the use of terminology. Definitions of terms, such as involvement, participation, consultation, and collaboration, can often overlap in meaning and

have different meanings to different people or groups. The terms used in this study will be explained throughout the paper, along with a justification for why the definition was chosen. Similarly, what defines an indigenous community or person is not as straightforward as it may superficially seem. While, for ease of assessment, the legal and political definitions of the Sámi and Innu communities were chosen, it is important to note that this definition may exclude people who identify as Sámi or Innu, but are not recognized as such by their respective countries. Consequently, what defines each of these indigenous communities and who is considered a member may vary in the future.

It is important to note that this study looks at two small regions of two countries and extrapolating the findings to a more general or international context should be undertaken with consideration of this fact. Additional limitations of this study will be discussed throughout the research paper, as they arise.

## **1.8 Thesis Structure**

The following chapter will summarize the literature on EIAs, public participation, TEK and relevant international agreements. It will also provide a background on the physical environments, indigenous peoples, history, politics and cultural attitudes towards environmental management in Finland and Canada. Chapter 3 describes the methods used for data collection and analysis, including the limitations of the content analysis method. Chapter 4 will provide an overview of the theoretical framework used in the analysis of the data collected. The results found through the analysis of four pieces of regional and domestic legislation follow in Chapters 5. Once the results of the data collected in each method have been clearly outlined, Chapter 6 will include discussion and careful analysis of how the legislation is interconnected with literature on the subject and relate it back to the research questions. Chapter 7 will provide recommendations on where Canada and Finland can learn from one another, identify limitations and outline the potential for future research to add to this balance of knowledge. Finally, the conclusion will summarize the findings of this research

## **2. LITERATURE REVIEW**

---

This chapter will review the literature relevant to the two research questions;

- 1) How does environmental impact assessment legislation (EIA) legislation in Lapland, Finland and Labrador, Canada align with international guidelines on consultation as outlined in the *ILO Convention No. 169*?
- 2) How does EIA legislation in Lapland, Finland and Labrador, Canada align with the characteristics of successful collaborative environmental management (CEM) theoretical framework found in academic literature?

The literature review will start by looking at Arctic environments and will provide a description of the characteristics that make natural resource management unique in these areas. A description, history and some of the benefits and criticism will be outlined for the concepts of EIA, traditional ecological knowledge (TEK) and public participation. Subsequently, international agreements that speak to the rights of indigenous peoples and the EIA process will be introduced. As the physical environment, indigenous peoples, history, politics, and mainstream culture of a society impacts how they choose to manage their natural resources, this background will be outlined for Finland and Canada. Lastly, the key similarities and differences in context between these two countries will be summarized for the reader.

## **2.1 Arctic Environments**

The Arctic is made up of the tundra and the boreal forest, both of which are complex and far-reaching ecosystems influenced by extreme climate conditions and soil affected by permafrost (Berger 1977a; Berger 1977b; Furgal and Seguin 2006). Permafrost affects the movement of groundwater and surface water, which can influence the movement of contaminants in the environment (Berger 1977b). Arctic environments are very sensitive due to this, in combination with high demand for water and cold environments prolonging the time for contaminants to breakdown (Berger 1977b). Due in part to limited food supplies, Arctic ecosystems appear to be simple with few species and few interactions between the biotic and abiotic components of the ecosystem (Berger 1977b; Sadler 1989). The low number of species decreases the resilience of Arctic ecosystems, particularly because there are “tracts of land and water of limited size that are vital to the survival of whole populations of certain species of mammals, birds and fish at certain times of year” (Berger 1977a, xi). Arctic ecosystems are vulnerable to change as a result of all of these variables.

In order to survive in Arctic ecosystems, indigenous peoples have had to understand the topography of these vast lands as well as the distribution of plants and animals across them (Berger 1977a; Duerden and Kuhn 1998). This TEK can be extremely valuable in understanding the adaptive capacity of Arctic ecosystems and help to fill knowledge gaps that are beyond the historical context of western science (Nakashima 1990; Stevenson 1996; Wesche and Armitage 2006). Several researchers have supported the value of using TEK to anticipate the impacts of proposed development projects (Berger 1977a; Nakashima 1990; Stevenson 1996; UNESCCHR 1997; Duerden and Kuhn 1998; Roué and Nakashima 2002; Berkes 2009).

In recent years, the development of natural resources has placed increased pressure on the traditional territory of Arctic indigenous peoples (Berger 1977a; Sadler 1989; Furgal and Seguin 2006). There is a conflict between the economic interests of people living in the South and the social and cultural values of northern indigenous communities (Pushchak and Farrugia-Uhalde 2009; Mustonen et al. 2010). In addition to environmental impacts, there is evidence that the rapid development of natural resource-based industries in the Arctic has a disproportionate socio-economic impact on Arctic indigenous peoples (Berger 1977a; Berger 1977b; Wesche and Armitage 2006; Armitage 2009). The impact of an individual project in the Arctic is more far-reaching than its footprint (Berger 1977a). As Justice Berger summarized, “there is a tendency to underestimate the dimensional and cumulative aspects of human impacts on the northern landscape and to overestimate the capacity of the environment to absorb them” (Berger 1977b, 85). Without consulting with indigenous peoples and attempting to understand their values and their relationship to the land, it is impossible to understand the true impact of development in the Arctic (Berger 1977a).

There are several challenges that are unique to the management of natural resources in the Arctic. Western science has a relatively poor understanding of the northern environment and the potential indirect and long term impacts on it of widespread natural resource development activities (Berger 1977a; Duerden and Kuhn 1998; Pennanen and Näkkäläjärvi 2000). There has historically been very little alteration of the landscape by man through which the impacts can be assessed (Berger 1977a; Pennanen and Näkkäläjärvi 2000). Another challenge is limited participation in the EIA process by indigenous peoples (Armitage 2009). The literature shows that there are several factors that contribute to this limited participation, including both the



physical and linguistic accessibility of documents, the complexity of the administrative process and its potential to conflict with the values and traditions of indigenous peoples, difficulty building relationships of trust with indigenous communities due to remoteness and turnover in government representatives, and the capacity in terms of time, money, and expertise of indigenous communities to participate in the process (Armitage 2009; Rusk et al. 2009; Slocombe et al. 2009).

Along with these challenges, there are opportunities to improve the management of Arctic resources. Since indigenous peoples have a long history of residing in the Arctic, they can provide valuable knowledge for understanding potential impacts (Rusk et al. 2009). There is also an existing process for managing environmental changes in northern communities, the value of which should be recognized when developing a government-led administrative process (Berger 1977a; Armitage 2009). Relationship building can be strengthened by having indigenous peoples represented in government and by incorporating informal communications to build trust (Armitage 2009). In areas where land claims have not been settled, this process has the potential to help clearly define the roles and responsibilities of both government and indigenous peoples (Slocombe et al. 2009).

The harsh conditions of Arctic environments bring to life the importance of TEK. It would be impossible to survive the harsh winters and lack of resources in the winter months without a clear understanding of the environment, of adaptations to a changing environment, of old traditions, and of oral history. The long history of indigenous peoples in Arctic environments both in Canada and in Finland provides valuable insight into these seemingly barren ecosystems that are poorly understood by western science (Pennanen and Näkkäläjärvi 2000). This can be accompanied by local-level research, as this is where the impacts are felt and where it is most effective to incorporate TEK (Wesche and Armitage 2006). However, it is important to bear in mind Berger's observation, "there is a myth that terms and conditions that will protect the environment can be imposed, no matter how large a project is proposed. There is a feeling that, with enough studies and reports, and once enough evidence is accumulated, somehow all will be well. It is an assumption that implies the choice we intend to make. It is an assumption that does not hold in the North" (Berger 1977a, xi).

## 2.2 Environmental Impact Assessments

Environmental Impact Assessment (EIA) is a management tool that involves the systematic assessment of the potential impacts, both positive and negative, of a development project (Formby 1990). It originated as a management tool in the United States during the 1970s (Sadler 1996; Pinkerton 2003). EIAs involve a study of the environment and the proposed project with the goal of improving the quality of decision making (Hrezo and Hrezo 1984; Formby 1990; Sadler 1996). This is a social process, as “all changes to the natural environment are inherently social as well” (Pushchak and Farrugia-Uhlade 2009, 131).

The nature of EIAs has changed over time. In the 1980s, the EIA process was expanded to include the potential socio-economic and cultural impacts of a project in the form of a social impact assessment (SIA), and then further expanded to the assessment of policies and legislation with strategic impact assessments (Burdge and Vanclay 1995; Sadler 1996; Pushchak and Farrugia-Uhlade 2009). The large number of variables involved and the dynamic nature of social systems makes social impacts difficult to predict (Pushchak and Farrugia-Uhlade 2009). The current methods used to measure potential social impacts include: a technical approach using demographic statistics, public participation through observation of behaviour, and direct questioning of people who have been informed of the proposed activity (Pushchak and Farrugia-Uhlade 2009). The standard for assessing the impacts on indigenous communities was set by the Berger report (Pushchak and Farrugia-Uhlade 2009).

EIAs are an effective management tool due, in part, to their focus on understanding the potential impacts of a proposed project before approval or development of the project (Burdge and Vanclay 1995). Major planning or environmental disasters and the costs associated with them can be avoided by preparing for them at the planning stages (Burdge and Vanclay 1995). Ensuring appropriate mitigation measures are implemented early on increases the chances the project will have a low impact (Burdge and Vanclay 1995; Sadler 1996). EIAs are meant to be adapted to fit the project, geographic location and context of the time (Sadler 1996). The local community can help this adaptation by providing location-specific knowledge that can increase the accuracy of the assessment of potential impacts (Burdge and Vanclay 1995). Also, resistance to and the uncertainty and stress caused by the project can be reduced and the community can be empowered (Formby 1990; Burdge and Vanclay 1995; Sadler 1996; Pölönen et al. 2011). For

example, public scoping hearings have increased the success of SIAs, especially in the North where intercultural conflicts with development are common (Pushchak and Farrugia-Uhlade 2009).

Despite the widespread use of EIAs, there have been several criticisms of the EIA process. These criticisms can be grouped into two main categories: those that are a result of poor or insufficient implementation of the theoretical EIA process, and those that are inherent to the EIA process. Challenges that are associated with the implementation of EIAs are as follows:

- EIAs are treated as a requirement to be completed or to support an existing decision and not properly incorporated into the planning process, as when they occur too late (Hrezo and Hrezo 1984; Formby 1990; Burdge and Vanclay 1995; Ortolano and Shepherd 1995; Roué and Nakashima 2002).
- Guidelines are often unclear and inconsistent (Burdge and Vanclay 1995; Sadler 1996; Stevenson 1996; Booth and Skelton 2011).
- There are not enough strategic EIAs done for programs and policies (Ortolano and Shepherd 1995).
- Attempts to increase the efficiency of the EIA process have resulted in a decrease in the efficacy, particularly when it comes to the public participation aspect of the process (Hanna 2009).
- The importance of public involvement in the EIA process is often underestimated (Burdge and Vanclay 1995; Sadler 1996).
- Due to the high uncertainty of social impacts, they are not thoroughly assessed through the EIA process (Ortolano and Shepherd 1995).
- The environmental impacts of a project can result in social impacts and vice versa, but this cascading effect is not usually considered as part of the EIA process (Burdge and Vanclay 1995).
- EIAs are often implemented poorly with inexperienced people performing the EIA, poor data, and inconsistent methods resulting in the complexity being underestimated and the results being misunderstood (Burdge and Vanclay 1995; Sadler 1996).
- The results of an EIA depend on how the impacts are weighted and, thus, may not result in an environmentally sound decision (Burdge and Vanclay 1995; Ortolano and Shepherd

1995). As one article put it “southern economic interests came into conflict with northern social and cultural values” (Pushchak and Farrugia-Uhlade 2009, 132).

- The ultimate decision to come out of an EIA can be influenced by political pressure in addition to the impacts that were assessed, and there is no mechanism to adapt the EIA process to this reality (Formby 1990; Burdge and Vanclay 1995; Pölonen et al. 2011).
- There is little follow-up or enforcement of mitigations, and monitoring to determine the accuracy of the EIAs predictions (Burdge and Vanclay 1995; Ortolano and Shepherd 1995; Sadler 1996).

The criticisms of EIAs that look at inherent deficiencies in the process are:

- EIAs are project-specific and do not consider the cumulative impacts of multiple projects on a landscape (Berger 1977b; Burdge and Vanclay 1995; Ortolano and Shepherd 1995; Sadler 1996).
- Project proponents are required to consider the impacts of their project on community health and well-being, although this is ultimately the government’s responsibility and an individual proponent would not likely have much power to mitigate these kinds of impacts (Graben 2010; Booth and Skelton 2011).
- Pre-development impacts of anticipating a project are not considered through the EIA process (Burdge and Vanclay 1995).
- It is difficult to define an “affected community”, as project impacts can often reach beyond the footprint and those affected may change over the project lifetime (Burdge and Vanclay 1995; Pushchak and Farrugia-Uhlade 2009)
- Effective public participation is heavily dependent on the knowledge base and the capacity of the affected communities (Burdge and Vanclay 1995; Sadler 1996).
- EIAs incorporate information between disciplines and from groups with multiple ways of knowing, which can result in communication challenges (Burdge and Vanclay 1995)
- The EIA process is very costly in terms of time and resources if it is to be done well (Hrezo and Hrezo 1984; Burdge and Vanclay 1995; Sadler 1996)
- EIAs function under the assumption that enough studies, reports and mitigation can be implemented to decrease or eliminate concerns related to a project (Berger 1977a)

Despite criticisms, EIA is commonly used to inform development throughout the western world and is becoming increasingly popular in developing countries (Sadler 1996; Hanna 2009). Its popularity has resulted in a wide range literature that makes many recommendations on how to overcome the challenges. For example, public involvement should occur both at the planning stage and throughout the EIA process itself (Hanna 2009; Pushchak and Farrugia-Uhlade 2009). Some literature suggests ensuring materials are well-organized, guidance is provided by an independent EIA coordinator, and guidance on the level of public participation based on past participation should be included to improve the scoping process (Hrezo and Hrezo 1984; Sadler 1996). The goal is not to reject development, but to ensure that all potential environmental consequences are considered when making decisions about development (Hanna 2009). For this process to be effective, it requires a lot of integration between the proponent, regulatory bodies, the general public and specific stakeholder groups to ensure that as complete a picture as possible is created (Formby 1990; Hanna 2009). Timing the EIA early in the planning process, clear directions on the EIA process, good quality information, and receptive decision-makers are key components of ensuring the EIA process is effective (Sadler 1996). Sadler (1996) described effective EIAs as demonstrating five principles: a strong legislative foundation, procedures that suit the context, incentives to encourage public involvement, orientation towards problem-solving and decision-making, and the incorporation of a monitoring and follow-up mechanisms. This research looks at the principle of public participation, specifically participation of indigenous peoples, as outlined in the existing legislation.

### ***2.2.1 Public Participation in Environmental Impact Assessments***

*“The idea of citizen participation is a little like eating spinach: no one is against it in principle because it is good for you...” (Arnstein 1969, 216)*

Though appearing simple at first glance, the term public participation is difficult to define. This general concept is defined as an approach to problem solving that incorporates interested parties external to the decision-maker (Roberts 1995; Raitio 2008). However, there are varying levels of this involvement or power between the public and the decision-making body that are included under this general concept, which will be explored further below. The difficulty comes in when you break this concept into its parts. The term “public” encompasses a very diverse group of people with potentially competing interests and concerns (Roberts 1995). The term

“participation” does not specify the level to which the interested public is involved or how much power they wield to influence the decision (Arnstein 1969; Roberts 1995; Raitio 2008). Throughout the literature, the terms public, stakeholder or citizen, and participation, involvement, collaboration, consultation, or engagement are used interchangeably for the concept of public participation. The most commonly used term in regards to the EIA process is public participation, which will be used throughout this study.

Public participation has been touted as an important part of environmental policy since the 1970s and became common in the 1990s (Appelstrand 2002). Arnstein’s seminal article from 1969 divided “citizen participation” into eight levels with the power of citizens increasing at each level: manipulation, therapy, informing, consultation, placation, partnership, delegated power, and citizen control. Citizen participation is a spectrum with infinite levels between the ones that have been defined (Arnstein 1969). Since then, other researchers have reiterated the importance of identifying the levels of involvement, using different terms to categorize levels of participation: persuasion, education, information feedback, consultation, joint planning or shared decision-making, delegated authority, and self-determination (Roberts 1995). Some research shows that in order for public participation with indigenous peoples to reach a partnership level, the parties involved need to reach an ethical space, where they understand and respect each other’s worldviews (Hotain 2006).

The literature demonstrates numerous benefits of involving the interested public in the EIA process, including better decision-making (Ortolano and Shepherd 1995; Sinclair and Diduck 2009). One benefit is that the concerns and values of the public can be identified and incorporated into decision making, resulting in new perspectives and solutions (Ortolano and Shepherd 1995; Sinclair and Diduck 2009; Kangas et al. 2010). Local and traditional knowledge on potential economic, environmental and social impacts can be used to inform decision-making and to add resources to the information gathering process (Ortolano and Shepherd 1995; Appelstrand 2002; Sinclair and Diduck 2009). The information sharing can go both ways with the public participation process serving to inform the public about proposed projects or policies and their potential impacts (Ortolano and Shepherd 1995; Sinclair and Diduck 2009; Kangas et al. 2010). By involving those affected in the planning process, communities and individuals are empowered and can better ensure that projects will actually meet their needs (Arnstein 1969;

Sinclair and Diduck 2009; Kangas et al. 2010). The argument has also been made that public participation in environmental management is a fundamental human right or a key part of the democratic process (Appelstrand 2002). Lastly, public participation can decrease the controversy and increase the legitimacy of proposed projects by ensuring accountability for decisions, decreasing the potential for litigation, avoiding the EIA process becoming a regulatory checkbox, and aligning the project with democratic principles and ethics (Ortolano and Shepherd 1995; Appelstrand 2002; Sinclair and Diduck 2009; Kangas et al. 2010; Pölönen et al. 2011). These benefits assume that the conditions for public participation are ideal in terms of being transparent, honest and the public having knowledge and access to the resources necessary to participate (Appelstrand 2002; Kangas et al. 2010).

While the literature is relatively cohesive when it discusses the benefits and goals of public participation, it is critical of how public participation is implemented in reality (Kangas et al. 2010; Hurlbert and Gupta 2015).

- There is a lack of participation at the early planning stages where public input can easily be incorporated before political input and resources have been invested (Sinclair and Diduck 2009).
- In some cases, there needs to be clarity on whose interests a representative is representing and recognition that any community will be made up of individuals with their own opinions (Roberts 1995; Graben 2010).
- There are deficiencies in how information is provided to the public due to physical inaccessibility of information, the stage at which public input is solicited, and use of technical language that the general public may not understand (Roberts 1995; Sinclair and Diduck 2009; Graben 2010; Kangas et al. 2010).
- Expected timelines often reflect that the complexity of the public participation process is underestimated, both in terms of the time given for public participation and the time for the decision-maker to review and consider the results (Roberts 1995; Sinclair and Diduck 2009).
- Insufficient time, monetary and technical resources for the public to engage in this process can result in important voices not being heard or unbalanced representation in the feedback resulting from public participation (Roberts 1995; Sinclair and Diduck 2009).

- The process needs to be more transparent because there is a perception that the results of western science will supersede public perception and traditional or local knowledge (Roberts 1995; Appelstrand 2002; Raitio 2008; Kangas et al. 2010).
- There is often no redistribution of power between the parties involved and the ultimate decision still rests with the decision-making authority rather than being shared with the public (Roberts 1995; Appelstrand 2002; Sinclair and Diduck 2009; Graben 2010).
- A more fundamental criticism brings up the concern that the EIA process of identifying and balancing concerns with benefits assumes that the variables are negotiable and that development can be balanced with the land and traditional uses of indigenous peoples (Graben 2010). It assumes that the EIA process is compatible with culture (Roberts 1995).
- Follow-up to determine the efficacy of an EIA is a key component of the process, but when this stage actually occurs, there is rarely public participation involved (Roberts 1995; Sinclair and Diduck 2009).

Originally SIAs involved expert testimony rather than input from locals, but this process was unable to account for the values of locals (Roberts 1995). It is now recognized that a successful EIA is tied to public participation, though this does not always occur smoothly (Graben 2010). Some criticisms of public participation in the EIA process specifically are that it is considered a stage of the process rather than occurring continuously throughout it, community concerns are not given enough weight as they can be refuted or mitigated by the decision-making authority, and the process puts undue pressure on communities (Graben 2010).

### ***2.2.2 Traditional Ecological Knowledge***

Western scientific knowledge is a knowledge system originating in Europe that involves the systematic collection and analysis of information based on observations and controlled experiments (Gilligan et al. 2006). It is important to note that while traditional ecological knowledge (TEK) and western science can clash, they are both based on empirical evidence that is systematically collected (Menzies and Butler 2006). Western science is often described as being culturally unbiased and neutral, thus creating the perception that it is superior to other knowledge systems which must gain legitimacy by being corroborated by western scientific



knowledge (Gilligan et al. 2006; McGoodwin 2006; Snively 2006). Western science is criticized for not considering the values of local people in natural resource management, resulting in damage to environmental and social systems (Gilligan et al. 2006; Snively 2006). There is a new trend in western science that recognizes the role of culture in framing western science and the importance of holistic research that looks at the big picture, thus moving western science to be more in line with the existing characteristics of TEK (Roué and Nakashima 2002; Brook et al. 2006; Griffith 2006; Snively 2006).

TEK is a knowledge system used by indigenous peoples that consists of traditional methods of learning about the environment and passing on knowledge to the next generation (Gilligan et al. 2006; Berkes 2009). Although TEK is very diverse as a knowledge system, it has several key characteristics. TEK accumulates over long periods of time and is often transferred through the oral tradition of storytelling (Duerden and Kuhn 1998; Furgal and Seguin 2006; Menzies and Butler 2006; Leon 2012). The long-term nature of TEK offers a historical understanding of changes over time to create a better understanding of the present and potential futures (Nakashima 1990; Brown 2006; Furgal and Seguin 2006; Menzies 2006; Menzies and Butler 2006). It is systematically structured following a scientific process of identifying a problem, gathering information based on observations over time and an understanding of the specific circumstances, and analysing the information (Roué and Nakashima 2002). In addition to being systematic, TEK is also iterative or dynamic adapting to changing times and new information as it develops (Stevenson 1996; Menzies 2006; Menzies and Butler 2006; Berkes 2009). TEK provides a holistic and interdisciplinary perception of nature where all aspects are interconnected (Roué and Nakashima 2002; Menzies and Butler 2006; Berkes 2009; Squetimkin-Anquoe 2012).

TEK is local in nature and tied specifically to an ecosystem or place emerging through practical experience and interaction with the environment (Nakashima 1990; Roué and Nakashima 2002; Brown 2006; Menzies and Butler 2006; Snively 2006). This is often reflected in the specific language used to describe characteristics of the ecosystem (Nakashima 1990; Roué and Nakashima 2002; Mustonen et al. 2010). It is inherently embedded in culture and language, and tied to a specific worldview, all of which is connected to the land (Nakashima 1990; Stevenson 1996; Roué and Nakashima 2002; Gilligan et al. 2006; Griffith 2006; Menzies and Butler 2006; McLeod 2012; Squetimkin-Anquoe 2012). TEK is comprised of knowledge transferred through

the generations, practice of interacting with the land through livelihood activities, and belief in the spiritual aspect of the environment (Nakashima 1990; Duerden and Kuhn 1998; Brown 2006; Furgal and Seguin 2006; Gilligan et al. 2006; Menzies 2006; Berkes 2009). TEK is often associated with having a strong moral and spiritual component with humans having an ethical responsibility to behave as stewards of the land (Stevenson 1996; Roué and Nakashima 2002; Menzies and Butler 2006).

TEK is often incorporated into natural resource management in the same manner as local knowledge, but there are some key differences between these two knowledge systems. Similar to TEK, local knowledge is knowledge specific to a group or community of people, often ones that share livelihoods, and collected from systematic observations of a specific place over time (Gilligan et al. 2006; Griffith 2006). Local knowledge is often holistic, benefitting from multiple livelihood activities and a view of the big picture (Griffith 2006). The main differences are that local knowledge is not necessarily embedded in the culture of a community to the same extent, often the timeframe within which the knowledge was generated is shorter, and it does not have the same moral or spiritual component (Gilligan et al. 2006).

TEK originated as a result of a need to understand the environment that sustained a community's life and livelihoods (Stevenson 1996; Furgal and Seguin 2006; Turner and Clifton 2006). Methods of obtaining food had to be adapted to specific locations, seasons, and species in a manner that ensured a continuous food supply from year to year (Langdon 2006). While a western scientific understanding of a phenomena or behaviour may not have been known, the manifestation of the phenomena was known, as well as the impacts of human intervention on the system and how the elements of an ecosystem are connected (Roué and Nakashima 2002; Turner and Clifton 2006). This knowledge reveals itself in cultural and spiritual taboos, and oral histories that often consider multiple perspectives (Roué and Nakashima 2002; Langdon 2006; Turner and Clifton 2006). As the people and circumstances change (i.e. with inclusion into the wage economy), TEK adapts in the same manner it always has to fit the needs of the community (Menzies 2006; Berkes 2009; Mustonen et al. 2010). Therefore, it is important to pay attention to the context within which TEK is generated to fully understand its value (Duerden and Kuhn 1998; Menzies and Butler 2006; Booth and Skelton 2011).

“In a world in which ecological concerns are accelerating and faith in technological fixes is collapsing, TEK is held up as a beacon of hope” (Menzies 2006, 87). One of the benefits of TEK is that it is very specific and provides detailed information about the local ecosystem, which can complement western science by providing a geographically and culturally specific case study (Nakashima 1990; Menzies and Butler 2006; Berkes 2009). The long history of TEK gives a context not possible with the short timeframe of western science and can aid in developing an understanding of how current management has impacted the environment (Nakashima 1990; Butler 2006). It is holistic; recognizing the interconnections between different elements of the environment (Roué and Nakashima 2002; Berkes 2009), which gives TEK considerable predictive power (Roué and Nakashima 2002; Pushchak and Farrugia-Uhlade 2009). The storytelling aspect of TEK allows for adjustment of the elements of a story to fit the context and develops a relationship with the listener (Kenny 2012). This reflects the iterative process of developing TEK and using it to resolve natural resource management problems or uncertainties (Gilmour 2013). In cases where there are few resources available for data collection or research, TEK can be a valuable resource for understanding the potential impacts of a project or natural resource management plan and provides a new perspective to consider (Nakashima 1990; Gilligan et al. 2006; McGoodwin 2006).

As indicated by the benefits identified above, TEK has a place in natural resource management. However, this is still an under-used tool and has faced several implementation challenges (Brook et al. 2006; Nadasdy 2006). With globalization, many of the small details of TEK that are most valuable are being lost (Turner and Clifton 2006). There has been a disruption in knowledge transfer between generations and in indigenous resource use as a result of colonization, which is why it is important to look at the context within which TEK has developed (Stevenson 1996; Furgal and Seguin 2006; McGoodwin 2006; Butler 2006; Berkes 2009; Cheney 2012). In some communities, only certain individuals have authority to speak about the land or resources (Menzies and Butler 2006). The process of collecting TEK often puts too much pressure on indigenous communities that may not have the resources to handle such requests (Graben 2010). Overall, there is a lack of clear guidelines regarding how to collect and use TEK to inform management (Menzies and Butler 2006).

The process of linking TEK with western science is complicated and not straightforward (Nakashima 1990; Menzies 2006; Berkes 2009). As TEK is specific to a location and a culture, its application is limited to a specific situation and should be considered within that context (Duerden and Kuhn 1998; Gilligan et al. 2006; Menzies and Butler 2006; Berkes 2009). The different temporal and geographic scales that provide the value of integrating TEK and western science also create one of the challenges of integration (Brook et al. 2006; Nadasdy 2006). In some cases, the intention of recognizing the value in both knowledge systems and integrating the two is disregarded in favour of arguing about which one is better (Nadasdy 2006). Trust in the source of knowledge and the relationship between government, industry and indigenous peoples are big issues when it comes to TEK and are influenced by power dynamics (Nakashima 1990; Nadasdy 2006; Gilmour 2013). Intellectual property rights have been proposed as a solution to this, but this changes the nature of TEK into a commodity and could inhibit academic findings and debate (Gilligan et al. 2006). Even the act of writing down or documenting a knowledge system like TEK alters it and removes power from the knowledge holders (Duerden and Kuhn 1998; Nadasdy 1999; Brook et al. 2006). The act of gathering TEK for the purposes of informing management has ethical concerns. It forces the community to rank cultural resources, decontextualizes the TEK by making it fit into a western scientific framework, and often minimizes the research priorities of the community (Menzies 2006; Menzies and Butler 2006). There is also criticism that the act of integrating TEK with western science takes western science as a given and transforms TEK in a manner that could be considered an act of colonization (Nadasdy 1999; Butler 2006; Gilligan et al. 2006; Nadasdy 2006). There is a political aspect to the use of TEK where sharing TEK can contribute to land claims and increase opportunities for participation, but can also result in less control over a community's traditional territory (Sadler 1989; Nadasdy 1999; Butler 2006; Menzies and Butler 2006).

The debate about whether TEK should be included in EIAs began around 1974 with the Berger Inquiry (Berger 1977a). Justice Thomas Berger held public consultation with 35 indigenous villages in Canada's Mackenzie River Valley on a proposed pipeline project (Roué and Nakashima 2002). The communities expressed concerns that including TEK in the EIA process would decrease the strength of their land claims, so the project was delayed for 10 years as the land claims were negotiated (Roué and Nakashima 2002). In recent years, international agreements have indicated that the incorporation of TEK and consideration of the concerns of

indigenous peoples in the EIA process is considered a right of indigenous peoples (Booth and Skelton 2011). The process of incorporating TEK into EIAs should emphasize the importance of remaining true to the values and origins of TEK (Nadasdy 1999; Cheney 2012).

Based on the challenges observed, the literature offers several recommendations on how the incorporation of TEK into the EIA process can be improved. Several of these recommendations suggest a shift in perspective, such as appreciating the commonalities between TEK and western science, accepting the co-existence of two worldviews, and forgiving the past and looking towards the future with optimism (Stevenson 1996; Menzies 2006; Menzies and Butler 2006; Snively 2006; Berkes 2009). It is important to recognize mutual goals and a shared responsibility for balancing values (Kenny 2012). The literature recommends that research with indigenous peoples be respectful, ethical, sympathetic and useful, and that the individuals undertaking the research have an understanding of the community's culture and language (Brook et al. 2006; Berkes 2009; Kenny 2012). Involving the community in research both in terms of educating them about the project and incorporating their priorities in the decision-making process can help improve decision-making and garner support from the community (Brook et al. 2006). Lastly, follow-up should be assured, involving the community in review of any challenges and to identify areas that could be improved (Brook et al. 2006). Despite the difficulties in incorporating TEK into the EIA process, the literature suggests that it is still worth undertaking (Menzies 2006).

### **2.3 International Agreements**

Since the 1950s, indigenous peoples' rights have gained attention on the international stage. In 1957, the International Labour Organisation (ILO) wrote *Convention No. 107: The Indigenous and Tribal Populations Convention* and its accompanying *Recommendation No. 104* with the goal of recognizing and protecting the rights of indigenous and tribal populations (ILO 1957). This convention was deemed to be outdated and was revised to be inclusive, among other things, of the right to participate in how natural resources were managed in the 1989 *ILO Convention No. 169, The Indigenous and Tribal Peoples Convention* (ILO 1989). This convention dealt with indigenous peoples as a collective group to overcome the difficulty that international law can only give the subjects of the law rights through the state (Joonas and Joonas 2011).

The *ILO Convention No. 169* is legally binding on countries that have ratified it and was the precursor to the current *United Nation's Declaration on the Rights of Indigenous Peoples* (UNDRIP) adopted in 2007 (ILO 1989; UN 2007). UNDRIP was written by the United Nations (UN) and took into consideration the 1977 proposed *Declaration of Principles for the Defence of the Indigenous Nations and Peoples of the Western Hemisphere*, which was drafted by indigenous leaders from the Americas (NGO Conference 1977). There have also been several international agreements that speak indirectly to indigenous peoples' rights, such as the 1992 *UN Declaration on the Rights of Persons Belonging to National or Ethnic, Linguistic and Religious Minorities* (UN 1992b; Horn 1996; Stevenson 1996). In the realm of international law, conventions are typically more detailed and enforceable than declarations. The major differences between the *ILO Convention No. 169* and UNDRIP will be described in more detail in Chapter 3.

While an international framework for the rights of indigenous peoples was being developed, there were also international agreements that looked at the value of TEK, particularly in the EIA process. In 1987, the *Brundtland Commission* acknowledged the potential of TEK to provide insight into biodiversity conservation (Roué and Nakashima 2002; Menzies and Butler 2006). In 1992, the *Convention on Biological Diversity* recognized the value of indigenous and local knowledge in conserving biodiversity and a subsequent work programme adopted by its Conference of the Parties in 2000 recommended EIAs as a method of considering indigenous knowledge (Roué and Nakashima 2002). Use of public participation, EIAs, and TEK in environmental management were points of discussion at the 1992 Rio Earth Summit and reiterated in the resulting UN's *Rio Declaration on Environment and Development's* Principles 10, 17, and 22 respectively (UN 1992a; Sadler 1996; Roué and Nakashima 2002; MacKay 2006; Raitio 2008).

With the intention of recognizing the responsibility of a nation to consider impacts of a project that may occur outside its borders and to consult with those countries that might be affected, the *Convention on Environmental Impact Assessments in a Transboundary Context* was adopted in Espoo, Finland in 1991 (Sadler 1996; MacKay 2006; Fitzpatrick and Sinclair 2009). In 1996, the Arctic Council was established as a result of a meeting between representatives from Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, the United States of America, and several participant indigenous organizations, the results of which are known as the *Ottawa Declaration*

or *Declaration on the Establishment of the Arctic Council*. The Arctic Council is an intergovernmental forum and was formed with an appreciation for the uniqueness of Arctic ecosystems, the importance of indigenous peoples' knowledge and participation in managing the environment, and the importance of collaboration between nations to ensure sustainable development (Arctic Council 1996). Shortly following the formation of the Arctic Council, an Arctic-specific document that looked at transboundary EIAs was created in 1997 called the *Guidelines for Environmental Impact Assessment (EIA) in the Arctic* (FMOE 1997). This arctic environmental protection strategy was led by Finland's Ministry of the Environment in collaboration with representatives from each Arctic country and several indigenous organizations (FMOE 1997). Unfortunately, a study into the Guidelines in 2008 found that they were not widely used by EIA professionals in the Arctic and many did not know that it existed (Bastmeijer and Koivurova 2008).

It is clear that both the scientific literature and international agreements support the message that the consideration of indigenous peoples' knowledge and concerns add value to the EIA process. However, there has been dissatisfaction with how this message is implemented.

## **2.4 The Context in Lapland, Finland**

### ***2.4.1 Physical Environment and Demographics of Lapland***

Finland is a country in northern Europe with an area of 303,900km<sup>2</sup> and a 2015 population of 5,487,308 people (OSF 2016). This gives it a population density of approximately 18 people per km<sup>2</sup> (OSF 2016). Lapland is a region in the northernmost part of Finland with an area of 92,667km<sup>2</sup> and population of 180,858 people for a density of approximately 2 people per km<sup>2</sup> (OSF 2016). The majority of the population lives in a few small urban centers (EU 2015).

The high latitude of Lapland, which is located at and continues north of the Arctic Circle, greatly affects the climate of this region. Finland has four distinct seasons and is affected by annual extremes in temperature (FMI 2016). In Lapland winter lasts roughly 200 days from around mid-October to April or May, and is characterized by mean daily temperatures below freezing and as cold as -50°C, many months of permanent snow cover and roughly 50 days where the sun does not rise above the horizon (FMI 2016). The spring growing season begins once the mean daily temperature is above 5°C and the snow has melted, which is approximately June in Lapland

(FMI 2016). Summer is short in the Arctic, usually lasting from late June to mid-August and is characterized by roughly 70 polar days where the sun does not set at all (FMI 2016). In a given year, there may be extreme heat reaching around 30°C (FMI 2016). The growing season of between 100 and 140 days ends around the end of September, with the first snowfall occurring shortly after (FMI 2016).

The landscape of Lapland is composed of boreal coniferous and mixed coniferous and deciduous forests (EU 2015). As you move further north, the trees become smaller and in the most northerly portion, the landscape is dominated by Arctic and temperate montane scrub (EU 2015). Throughout the region, there are many lakes and rivers with smaller areas of wetlands in the form of aapa, palsa and transition mires (Mustonen et al. 2010; EU 2015). The main industries in Lapland are forestry, tourism, mining for minerals and oil and gas reserves (Heikka et al. 2013). The land is extremely rich in subsurface mineral resources and exploitation of these resources is only just beginning in earnest (Heikka et al. 2013).

#### ***2.4.2 Indigenous People and their Traditional Livelihoods***

The Sámi, also spelled Sami or Saami, are the only indigenous peoples in northern Europe with their traditional territory, known as Sápmi, spanning across the northern regions of Norway, Sweden, Finland and western Russia (UNESCCHR 1997; Mustonen et al. 2010; Sámi Parliament 2014b). While population estimates are not consistently measured between the countries, estimates indicate that there are over 75,000 Sámi living within these four countries, with the majority of them living in Norway (Sámi Parliament 2014b). In Finland, there are approximately 9,000 Sámi people, or 0.15% of the general population, with 60% of them living outside their traditional territory or in urban centers (Sámi Parliament 2014b). They were recognized as an indigenous people in the Finnish constitution in 1995 and given specific rights according to this status (FMJ 1999; Sámi Parliament 2014b). These rights include the right “to maintain and develop their own language and culture” (Section 17) and to “linguistic and cultural self-government within their native region” (Section 121) (FMJ 1999).

Sámi was made into an official language under the 2004 revision of the *Sámi Language Act* (Sámi Parliament 2014a). As of 2015, 1,957 people in Finland speak one of the Sámi languages (OSF 2016). In Finland, there are three Sámi languages spoken: North Sámi, Inari or lake Sámi,



and Skolt Sámi (Sámi Parliament 2014a). The Kemi Sámi who speak the Inari and Skolt Sámi language, traditionally hunted wild reindeer in the fall and late winter, hunted beaver and traded in the winter, and hunted fowl, fished and herded domesticated reindeer in the spring (Pennanen and Näkkäljärvi 2000). The Torne Sámi who speak North Sámi were best known for their reindeer herding (Pennanen and Näkkäljärvi 2000). In 1760, two thirds of the reindeer population were hit by an epidemic and many Torne Sámi immigrated to Norway to fish for food (Pennanen and Näkkäljärvi 2000). The Sámi and Finnish languages each developed independently from the Proto-Uralic language of central Russia, thus making Finland culturally distinct from other Nordic countries whose people were populated from Europe (Pennanen and Näkkäljärvi 2000).

All of Finnish Lapland was settled as of 7300 BC by nomadic people that came from central Russia (Pennanen and Näkkäljärvi 2000). These Proto-Sámi people traded with the rest of Europe and in the late 700s AD the Sámi started to develop reindeer herding, started to be taxed by neighbouring societies, and a border zone developed between the Sámi and the Finns at around the 62<sup>nd</sup> parallel (Pennanen and Näkkäljärvi 2000). Between 800 and 1300 AD, the Sámi underwent a cultural manifestation, becoming more settled in villages and moving into timber kotas and log cabins (Pennanen and Näkkäljärvi 2000). Historically there were often migrations between Sámi communities, but when Russia closed the Finnish borders with Norway in 1852 and with Sweden in 1889 they cut off the traditional migration routes of the Sámi and decreased the area available for reindeer herding (Pennanen and Näkkäljärvi 2000; Mustonen et al. 2010; Joonas and Joonas 2011).

The traditional livelihoods of the Sámi consisted of coastal fishing for salmon, herring and coalfish, inland fishing often using cross weirs and ice fishing for whitefish, pike and perch, fur trapping, extracting the cambium layer from pine trees to be ground into flour, gathering eggs from waterfowl nests, and berries and plants for food and medicine, sheep herding, and semi-nomadic reindeer herding (UNESCCHR 1997; Pennanen and Näkkäljärvi 2000; Joonas and Joonas 2011). The Sámi were nomadic, moving between summer and winter homes, with migration routes based on the fishing cycle for Skolt Sámi who divided catch equally between their members (Pennanen and Näkkäljärvi 2000). Communities owned specific fishing grounds and rented their fishing rights to communities that did not have access to a big river or coastal

fishing spots (Pennanen and Näkkäljärvi 2000). These traditional livelihoods have become threatened in recent years due to climate change and increased development, particularly from hydroelectricity and forestry (Mustonen et al. 2010).

Reindeer herding played an important role in Sámi culture, as represented by over 2000 words related to reindeer, *Rangifer tarandus*, in the Sámi language (Pennanen and Näkkäljärvi 2000). The reindeer were owned by individuals, but the responsibility for herding them was shared and the land was used by the community according to Sámi customary law (Mustonen et al. 2010). Reindeer were identified by their owner through distinct earmarks, smoke was used to protect them from mosquitoes, the smell of urine was used to attract them, and herds were tended to in the winter (Pennanen and Näkkäljärvi 2000). Over time, reindeer herding has come under threat due to changes in local climate, forestry, hydroelectric dams, national border controls, government imposed reindeer herding cooperatives, forced settlement to promote agriculture, forced relocation of Sámi outside of their traditional territory, and reduced traditional knowledge transfer between generations arising from European Union (EU) subsidies on reindeer herding (Pennanen and Näkkäljärvi 2000; Mustonen et al. 2010).

The social structure of the Sámi people was traditionally organized by *siidas* or local communities: the land was collectively owned by the *siida* and the families were given rights to use the area (UNESCCHR 1997; Pennanen and Näkkäljärvi 2000; Joonas and Joonas 2011). This land was not ceded to the Finnish government and is today being used as an argument for ownership (UNESCCHR 1997; Mustonen et al. 2010). Each *siida* was unique, consisting of enough area for the members of the community to conduct their traditional livelihoods and move with the seasons (Pennanen and Näkkäljärvi 2000). Every day decisions were made and justice was carried out at *siida* meetings between the heads of different families, who made sure to consider both the rights and concerns of individuals and the community as a whole (Pennanen and Näkkäljärvi 2000). From the late 1620s onward, when problems could not be solved at the *siida* level, the State would get involved (Pennanen and Näkkäljärvi 2000). By the late 1800s, the creation of national borders, relocation of the Sámi people to agricultural land, and the state claiming ownership of communally-held lands with the *Forest Act* of 1886 resulted in the disruption of the *siida* system (Pennanen and Näkkäljärvi 2000).

Today, there is a lot of overlap between the Finnish and Sámi lifestyles in Lapland. The Sámi population began to assimilate with the Finnish population in the 1600s as a result of the Lapland Placards, tax and military exemptions used to incentivize non-Sámi settlers to move to Lapland (Pennanen and Näkkäljärvi 2000; Mustonen et al. 2010). Although the State attempted to protect Sámi livelihood by prohibiting the burning of woodlands for cultivation, this resulted in Finnish settlers reindeer herding or hunting wild reindeer and trapping beavers in order to survive (Pennanen and Näkkäljärvi 2000). As the siidas lost control of the area, the Sámi began to adopt the agricultural lifestyle of the Finns and began to lose their distinct language and traditions (Pennanen and Näkkäljärvi 2000; Mustonen et al. 2010). The introduction of Christianity also played a role in these changes (Mustonen et al. 2010). A 1749 regulation allowed for the establishment of farms on areas being used for hunting, which further jeopardised Sámi livelihoods and pushed them off their traditional territory (Pennanen and Näkkäljärvi 2000). Reindeer herding cooperatives (RHCs) were established beginning in 1898 and stopped the migration between winter and summer pastures (Pennanen and Näkkäljärvi 2000). Today, both Finns and Sámi in Lapland practice the traditional livelihoods of the Sámi, such as reindeer herding, and typically a whole family will be employed by a single livelihood, such as agriculture (Pennanen and Näkkäljärvi 2000).

### ***2.4.3 History of EIAs and Sámi Participation in Resource Management***

Although the taxation system for siidas was abolished in 1925, the damage to the TEK of the Sámi was already done in terms of disrupting knowledge transfer between generations and separating them from their traditional livelihoods (Pennanen and Näkkäljärvi 2000). In the 1930s, the Finnish government forced Sámi children to attend schools where they were not allowed to use their language (Mustonen et al. 2010). In the 1960s, the Sámi became dependent on new technologies and government subsidies to maintain agriculture in Lapland (Pennanen and Näkkäljärvi 2000). Two laws passed in 1969 and 1984 attempted to renew the traditional livelihoods of the Sámi by promoting the creation of Sámi communities where people could make a living off of traditional livelihoods (Pennanen and Näkkäljärvi 2000; Joonas and Joonas 2011). Both these laws were ineffective, as they were based on the Finnish model of municipal planning and did not take into consideration the traditional siida system of the Sámi (Pennanen and Näkkäljärvi 2000).

Not all TEK of the Sámi was lost with the move to a more sedentary, agricultural lifestyle. The remote nature of their traditional territory has allowed the Sámi to keep the basic structure of their culture and incorporate beneficial aspects of European culture adapted to the North (Pennanen and Näkkäljärvi 2000). Part of the reason that Finns were able to move to Lapland successfully was that they adopted some of the livelihoods and traditions of the Sámi (Pennanen and Näkkäljärvi 2000). Starting around the 1960s, new media sources have allowed for more cultural exchange between the Sámi and Finns and between the Sámi across the four national borders (Pennanen and Näkkäljärvi 2000). One of the challenges with little distinction between Sámi and northern Finnish cultures is that some Finns have become suspicious that the Sámi are receiving unfair compensation solely due to their ancestry, though this is rarely the case in reality (Pennanen and Näkkäljärvi 2000). In the early 1970s, the Sámi began to more actively defend their culture through the Sámi Radio Station and eventually the development of the Sámi Parliament (Pennanen and Näkkäljärvi 2000).

With the increase in Sámi researchers and the development of Sámi research facilities, such as the Nordic Sámi Institute, there is a growing appreciation for Sámi TEK and the value of incorporating it into social planning (Pennanen and Näkkäljärvi 2000). There are still challenges associated with this process. Where it is incorporated, TEK typically must be validated by western science and subsequently looks at Sámi life in isolated pieces (Pennanen and Näkkäljärvi 2000). Despite the challenges, the value of TEK is still recognized, particularly in the ability of the Sámi to adapt to harsh natural environments (Pennanen and Näkkäljärvi 2000).

For the Sámi people as a whole, the Alta River dam in Norway in the 1980s was crucial to having their concerns heard and TEK considered in a proposed development project (Pennanen and Näkkäljärvi 2000). The plan was to flood a river valley, which would leave an entire village under water, similar to what had occurred in Sompio, Finland in the 1960s and 1970s (Pennanen and Näkkäljärvi 2000; Mustonen et al. 2010). The Sámi organized protests and raised awareness worldwide (Pennanen and Näkkäljärvi 2000). Although the dam was built in the end, the controversy resulted in court cases that strengthened cultural and linguistic rights of the Sámi and emphasized the importance of addressing their concerns with development projects (Pennanen and Näkkäljärvi 2000). Typically, these concerns are raised through the EIA process.

Historically, there has been controversy around the State forestry organization, Metsähallitus' dual responsibilities of upholding societal tasks and improving business opportunities (Raitio 2008). *The Wilderness Act* was established in 1990 in an attempt to reduce conflict between forestry and the local people in Inari by establishing wilderness areas (Raitio 2008). In 1994 there was a UN court case between Sallivaara Reindeer Herding Cooperative and Metsähallitus (*Sara et al. v Finland* No. 431/1990), which was the first and only lawsuit to favour the Sámi over forestry and resulted in the prohibition of planned forestry activities (Raitio 2008). Stakeholder input is often considered based on how aligned it is with the views of Metsähallitus, with the Sámi and environmental groups being able to affect the timing of harvest, but not stop it altogether (Raitio 2008). The 1996 Finnish *Forest Act* directs the forestry center to collaborate with forestry companies and stakeholder groups when working in non-industrial private forests (Leskinen 2003). From 1997 to 2001, Landscape Ecological Plans were used as a tool to assess impacts of natural resource use on reindeer herding (Raitio 2008).

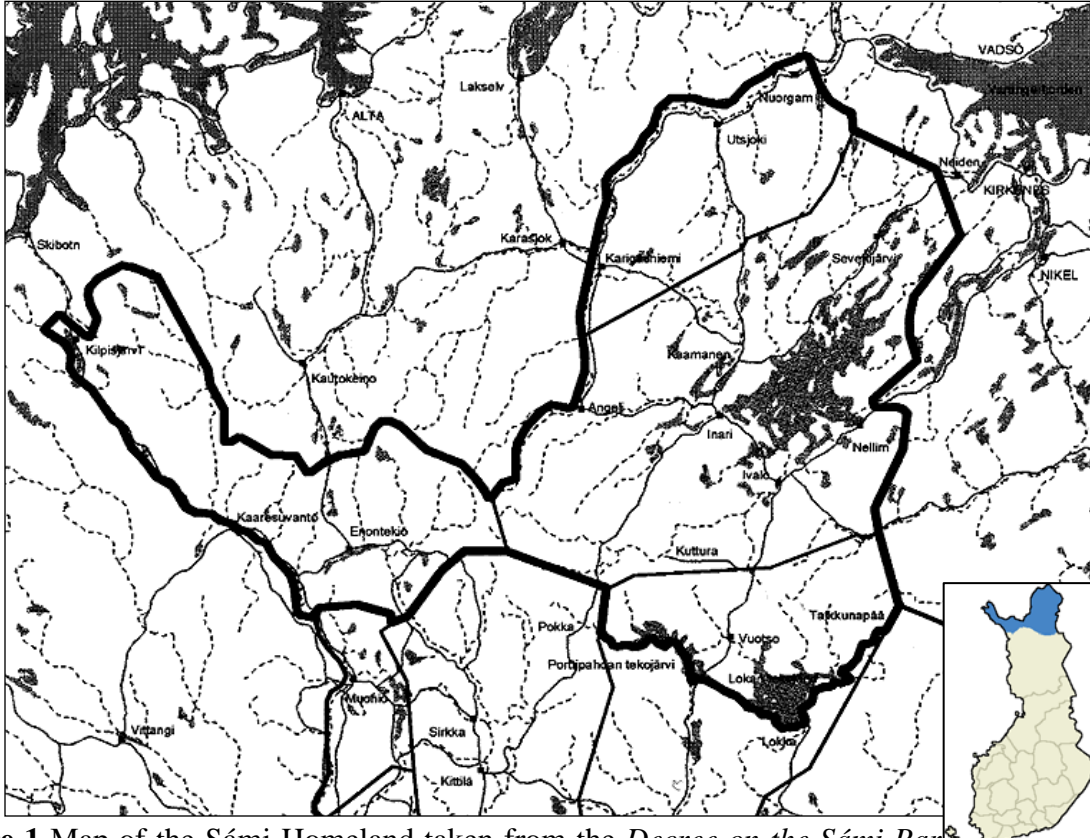
The EIA process in Finland has a relatively short history with formal legislation coming into effect in 1994 just prior to Finland joining the EU (Pölönen et al. 2011). In the late 1990s, Finland adopted the participatory planning approach to forest management that it uses today, which includes consulting with stakeholder groups (Raitio 2008). This was in response to conflict between the government's forest management body, Metsähallitus, and private forest owners over how forests should be managed and the rights of locals (Raitio 2008). Metsähallitus was originally created to control forest use by locals, though today it is in charge of profitable forestry and nature conservation (Raitio 2008). Some of the challenges facing public participation in Finnish forest management include: participant disengagement since they are unable to see how their input influences decisions; a time-consuming process; participants unable to see how the process applies to them; and a failure to understand what information participants need to be able to access (Kangas et al. 2010). The introduction of EIA legislation in Finland is thought to have increased the amount of public participation that occurred regarding natural resource management (Pölönen et al. 2011).

#### ***2.4.4 Political Status of Sámi Participation in Finland***

The 1995 *Act on the Sámi Parliament* identified who is considered Sámi by the Finnish government, identified the traditional homeland of the Sámi and granted the Sámi a parliament to

manage tasks related to their linguistic and cultural autonomy, known as Sámediggi (FMJ 1995a). The Finnish government considers someone to be a Sámi if they self-identify as Sámi and either they, their parents or grandparents speak Sámi as a first language, they are descended from someone registered as a “mountain, forest or fishing Lapp”, or at least one of their parents has registered to vote in the Sámi Parliament (FMJ 1995a). Essentially, an individual must register on the Sámi Parliament electoral roll in order to be considered legally Sámi (Joonas and Joonas 2011). Unlike in Norway, Sweden and Russia, there does not seem to be any assumption that there could be more Sámi than are on the electoral roll (Joonas and Joonas 2011).

According to the *Act on the Sámi Parliament*, the Sámi Homeland consists of the municipalities of Enontekiö, Inari and Utsjoki, and the reindeer owner’s association of Lapland in Sodankylä, as indicated in Figure 1 (FMJ 1995a). This Act gave the Sámi Parliament administrative control over language and culture of the Sámi, but exclusively within the Sámi Homeland (Joonas and Joonas 2011). It did not take into consideration the historical range of the Sámi’s traditional territory, which is thought to have expanded further into southern Finland (Joonas and Joonas 2011). There is historical evidence that individual families within a siida were considered the land owners, not the collective itself (Pennanen and Näkkäläjärvi 2000). The Sámi were considered land owners until the mid-18<sup>th</sup> century although the *Forest Statue* in 1693 declared State control over unclaimed land, including the traditional territory of the nomadic Sámi (UNESCCHR 1997; Joonas and Joonas 2011).



**Figure 1** Map of the Sámi Homeland taken from the *Decree on the Sámi Parliament*. The dark outline indicates the municipalities of Enontekiö, Inari and Utsjoki, and the reindeer owner's association of Lapland in Sodankylä in the northernmost part of Lapland (FMJ 1995b; inset Wikipedia 2013)

Finland's *Act on Environmental Impact Assessment Procedure*, 1994 makes a point of considering the trans-boundary impacts of proposed projects for which an EIA is required, likely as a result of sharing borders with Russia, Sweden and Norway in Lapland. Another factor that may influence this emphasis is the EU's attempt to standardize policies across its member states (Fitzpatrick and Sinclair 2009). The UN's Aarhus Convention, ratified by Finland, emphasizes the value of public involvement in environmental management and outlines standards for public participation, including the right to access environmental information, the right to participate in decision-making, and the right to challenge public decisions (Raitio 2008; Fitzpatrick and Sinclair 2009; European Commission 2016). Due to controversy surrounding the Lokka and Porttipahti hydroelectric dams in Sompio, it was recommended that a longer time be given to considering the potential technical, economic, and societal impacts of development (Mustonen et al. 2010).

The *Act on the Sámi Parliament* lays out the Finnish government's responsibility to "negotiate with the Sámi Parliament in all far-reaching and important measures which may directly and in a specific way affect the status of the Sámi as indigenous people and which concern...(1) community planning; (2) the management, use, leasing and assignment of state lands, conservation areas and wilderness areas; (3) applications for licences to stake mineral mine claims or file mining patents" and other decisions that may impact language or culture within the Sámi Homeland (FMJ 1995a, Section 9). The government fulfills this obligation by allowing the Sámi the opportunity to be heard and discuss the matter (FMJ 1995a). If there is no response to this opportunity, the government may proceed with its decision (FMJ 1995a).

#### ***2.4.5 Cultural Values Related to the Environment in Finland***

There is a long history of valuing nature in Finland that is founded in the tradition of forest ownership and living close to the land (Leskinen 2003). For the Sámi, this relationship is tied to their traditional livelihoods and a spiritual connection to the land, and for the Finns it is tied to the land holdings and the development of strong forest owners' associations (Niskanen et al. 2007; Mustonen et al. 2010). Although today forestry is often viewed as subsidiary work, the benefits of forest management are viewed as being passed down between the generations (Leskinen 2003). This relationship with the land plays an important role in how natural resources are managed, as it emphasizes long term management and the importance of public participation.

One way in which this value of nature is manifested is with *jokamiehen oikeus* or Everyman's Right. Everyman's Right gives anyone the right to collect non-timber forest products, such as mushrooms and berries, and to camp anywhere in Finland (Saastamoinen 1999). This includes public and private land, although some restrictions apply regarding proximity to a residence and agricultural land (Saastamoinen 1999). Unlimited public access to non-timber forest products has not led to a tragedy of the commons situation in Finland and there have even been government incentives to encourage exploitation of these natural resources (Saastamoinen 1999). This is thought to be a result of low population pressure and the public only harvesting the annual growth (Saastamoinen 1999). It should be noted that Everyman's Right and other Finnish legislation gives rights to the general public that are consistent with traditional livelihoods of the Sámi and decreases the differences between the Finnish and Sámi lifestyles (UNESCCHR 1997).



## 2.5 The Context in Labrador, Canada

### 2.5.1 *Physical Environment and Demographics of Labrador*

Canada covers 9,984,670km<sup>2</sup> of northern North America, with a 2015 population of 35,848,600 people, for a density of approximately 3.5 people per km<sup>2</sup> (Statistics Canada 2005; Statistics Canada 2016). Newfoundland and Labrador is a province in eastern Canada with an area of 405,212km<sup>2</sup> and a 2015 population of 528,700 people for a density of approximately 1.3 people per km<sup>2</sup> (Statistics Canada 2005; Statistics Canada 2016). Labrador is the mainland portion of the province of Newfoundland and Labrador. According to preliminary demographic data for 2015, Labrador has an area of 294,330km<sup>2</sup>, a population of 27,810 people, with approximately 0.1 people per km<sup>2</sup> (GNL 2015; NLSA 2016).

The climate of Labrador can be divided into three zones (NLHWP 1999a). The northern portion is a tundra climate with short summers, low precipitation and lots of regional variation due to the mountainous terrain (NLHWP 1999a). The coast has high precipitation, extremes in temperature in the winter and summer, and stormy weather due to the influence of the cold currents of the Labrador Sea (NLHWP 1999a). The interior of Labrador has more consistent and sunny weather with long cold winters characterized by deep snow cover (NLHWP 1999a). Winters typically last from November to April, with an average daily temperature below freezing and as low as -30°C and continuous snow cover (NLHWP 1999b). The spring arrives between April or May with low clouds, fog and an overall reduction in the amount of precipitation and wind (NLHWP 1999b). Summer temperatures can be as high as 30°C and can be very wet in Labrador, which is on the summer cyclone track (NLHWP 1999b). Precipitation and strong winds increase throughout the fall until temperatures drop below freezing in November or December (NLHWP 1999b).

Based on the Canadian ecozone classification system, Labrador is divided into three ecozones (ESWG 1996). The Arctic Cordillera ecozone is located at the northern tip of Labrador in the Torngat Mountains (ESWG 1996). This region is characterized by sparse alpine vegetation and barren rock and tundra with continuous permafrost on the western side of the mountains and extensive, but discontinuous permafrost on the eastern side (ESWG 1996). Most of Labrador is made up of the Taiga Shield ecozone (ESWG 1996). The landscape in the Taiga Shield is composed of boreal forests, wetlands, and open meadows with low subarctic vegetation (ESWG

1996). This region has less consistent permafrost and is populated by a larger number of fauna species than are found in the Arctic Cordillera (ESWG 1996). The maritime influence means that the Boreal Shield ecozone found along the coast has a milder climate than the rest of Labrador (ESWG 1996). This results in a greater diversity of wildlife and plant species with boreal forests and wetlands dominating the landscape (ESWG 1996). Caribou, *Rangifer tarandus* L., are found throughout Labrador and are a species of cultural significance to many indigenous peoples in the area (ESWG 1996; Hiebert 2006). They are currently listed as a threatened species by the Committee on the Status of Endangered Wildlife in Canada, largely as a result of habitat loss due to their avoidance of industrial disturbance, increased energy costs to travel due to habitat fragmentation, and alterations in predator-prey relationships (Hiebert 2006).

### ***2.5.2 Indigenous People and their Traditional Livelihoods***

Canada is home to over 600 different First Nation or Indian bands, plus Inuit and Métis groups. Labrador is within the traditional territory of the Sheshatshiu Innu First Nation, Mushuau Innu First Nation, Labrador Inuit and NunatuKavut or the Labrador Métis Nation (Higgins 2008; Turner et al. 2013). The traditional territory of each of these groups extends outside of the province as well, with the Innu First Nations extending into the neighbouring province of Quebec (Higgins 2008). There are 17,000 Innu living in 12 different communities, 10 of which are in Quebec and the other two located in Labrador (CHIN 2005). Based on 2011 census data, there were 2,050 people in Labrador that spoke the Innu language, *Innu-aimun*, as their mother tongue and another 685 aboriginal people in Labrador that spoke Inuktitut (CHIN 2005; Statistics Canada 2012).

*The Constitution of Canada*, 1982 recognizes the aboriginal and treaty or land claim rights of aboriginal people, which includes Indian, Inuit and Métis peoples (GC 1982). “Indians and land reserved for the Indians” are under the jurisdiction of the federal government of Canada (GC 1982). The rights laid out in *The Canadian Charter of Rights and Freedoms*, do not negate the rights of aboriginal people in Canada that are outlined in *The Royal Proclamation*, 7 October 1763 and any treaty or land claim agreements (GC 1982). Section 35 of *The Constitution of Canada* also indicates that if there is to be any change in the constitutional rights of aboriginal people, representatives of the aboriginal people will be invited to participate in the discussion of the change (GC 1982).

The Innu Nation, originally formed in 1976 under the Nakapi Montagnais Innu Association, is the governing body of the Sheshatshiu and Mushuau Innu First Nations (Higgins 2008). The Innu were recognized as an Indian band in 2002 and are currently negotiating a land claim with the federal and provincial governments (Higgins 2008; Innu of Labrador et al. 2011; Hall 2015). There has been a trend in Canada of developing comprehensive land claims with non-treaty aboriginal groups (Slocombe et al. 2009). In 2013, the province of Newfoundland and Labrador developed an aboriginal consultation policy outlining how they will consult with the Innu until the land claim agreement has been ratified, which would replace the policy for the Innu (GNL 2013).

The remote location of Labrador meant that at the time of Confederation in 1949, the government of Newfoundland and Labrador did not have a formal way of dealing with aboriginal people, including treaties or a reserve system (Tanner 1998; Higgins 2008). After Confederation, there was confusion about which jurisdiction was responsible for them and what rights they would have (Tanner 1998). Instead of including them under the *Indian Act*, which would have taken away their right to vote, the Canadian government gave money to the province to fund the Innu, once agreements were signed in 1954 and 1965 (Higgins 2008). The provincial government used this funding to build schools and required Innu children to attend them, which forced families to remain in communities year-round and give up their traditional seasonal migrations, affecting their connection with the land and creating social problems (Tanner 1998; Higgins 2008). The increase in industrial development that followed Confederation affected the traditional livelihoods and lifestyle of the Innu, most notably the Upper Churchill Falls Hydroelectric Project (Higgins 2008). Due to past conflicts regarding flooding of Innu lands for hydroelectricity dams, the *Labrador Innu Land Claims Agreement-in-Principle* includes the commitment not to flood any Labrador Innu Lands without the consent of the Innu Nation (Innu of Labrador et al. 2011). The Agreement-in-Principle also outlines an environmental assessment process for projects with the potential to affect the Labrador Innu Lands (Innu of Labrador et al. 2011).

Of the indigenous peoples of Labrador, the Innu were predominantly an inland people who seasonally migrated to the coast to fish and trade with the Inuit (Tanner 1998; CHIN 2005). Many Innu had converted to the Catholic religion at the time of Confederation, but due to

minimal contact with outsiders, their culture and language are largely intact (Tanner 1998). The caribou were very important to the Innu as a source of food, clothing, shelter, tools, and for spiritual purposes (CHIN 2005). The Innu's traditional livelihoods consist of fishing, hunting and trapping wildlife including caribou, moose and migratory birds, harvesting of plants for medicine and food, carving soapstone and other forms of traditional artwork, and the processing and sale of furs (Innu of Labrador et al. 2011). Some of the greatest threats to Labrador traditional livelihoods and culture are global climate change, social problems, and resource development in their traditional territory (Tanner 1998; CHIN 2005; Furgal and Seguin 2006; Thinley 2010). *The Innu Land Claims Agreement-in-Principle* also recognizes non-indigenous Canadians that have traditionally and historically harvested wildlife and plants in Labrador, and gives them continued access with a permit from the Innu Nation if no reasonable alternative is available to them (Innu of Labrador et al. 2011).

### ***2.5.3 History of EIAs and Innu Participation in Resource Management***

No land cessation treaties were signed with any aboriginal group in Newfoundland and Labrador and the Royal Proclamation of 1773 declared Labrador "Indian Territory" setting the stage for land claim negotiations today (Tanner 1998; Hall 2015). The Innu started treaty negotiations in 1996 due to the proposed development of nickel deposits in the Voisey's Bay region (Tanner 1998). Similarly, the Inuit land claim in Labrador began following concerns that the Inuit would lose their traditional rights in the Torngat Mountains if their land claim was not settled prior to the establishment of the Torngat National Park and the concern that, without the establishment of a park, mining development would occur (Thinley 2010). The desperate need for economic development in remote regions of Canada has meant that potential environmental costs are often given less weight (Hanna 2009). It is clear that the history of land claims, aboriginal rights, and environmental protection in Labrador have been closely tied to the management of natural resources.

As a result of the lack of alternative means to settle disputes with the Crown, there have been several court cases initiated by individual bands in the last few decades that have clarified aspects of aboriginal rights (Booth and Skelton 2011). The 1990 court case *R v. Sparrow* set out the test to determine whether an aboriginal right exists (i.e. it imposes undue hardship on the First Nation, it is considered unreasonable, and it prevents the rights-holder from exercising the

right) and whether infringement of it is justified (i.e. infringement serves a valid legislative objective, there is as little infringement as possible, fair compensation is provided, and the aboriginal community was consulted or informed) (Salomons and Hanson 2016). The 1997 *Delgamuukw v. British Columbia* case clarified that aboriginal title exists where the land was occupied before sovereignty, occupation has been continuous since before sovereignty, and occupation has been exclusive (Osler 2014).

In 2004, the *Haida Nation v. British Columbia* and *Taku River Tlingit First Nation v. British Columbia* cases recognized that the duty to consult exists even when asserted aboriginal rights or title have not yet been proven and that the scope of that duty is proportional to the potential impact of the Crown decision being made, that the ultimate duty to consult and accommodate rests with the Crown, though procedural aspects of consultation may be delegated to industry, and that the government can set out the process for consultation provided that it reasonably considers aboriginal rights (Olynyk 2005). *West Moberly First Nation v. British Columbia* concluded in 2011 that the Crown did not reasonably accommodate West Moberly First Nation's concerns regarding the impact of a proposed project on caribou used for food and cultural reasons (Booth and Skelton 2011). The *Tshilqot'n* Decision in 2014 marked the first time aboriginal title was recognized in Canada and indicated that for the government to infringe on title requires consent of the aboriginal community or justification of the decision (Osler 2014).

EIA as a management tool was first introduced to Canada as policy in 1973 and as formal legislation in Ontario two years later (Mitchell 2009). Since then, it has been one of the most consistent aspects of environmental policy in Canada moving towards a proactive approach to natural resource management and consideration for broader cultural and spiritual concerns (Gibson and Hanna 2009). In 1992, the *Canadian Environmental Assessment Act* received legislative approval and came into force in 1995, thus formalizing the process (Gibson and Hanna 2009). At the time, it defined the environment narrowly, although over time the EIA process has become more comprehensive, mandatory, widely applied, inclusive of greater levels of public participation, and accepting of different kinds of environmental knowledge (Gibson and Hanna 2009).

Important Canadian contributions to the EIA process were the incorporation of TEK and partnering with local and aboriginal communities to ensure the process meets their needs (Berger 1977a; Mitchell 2009). The first claims-based EIA process in Canada began in 1975 with the James Bay and Northern Quebec Agreement between Canada, Quebec, Cree and Inuit Nations (Gibson and Hanna 2009). The Berger report in 1977 outlined expectations of what the EIA process should look like and encouraged early engagement with the public and aboriginal communities, and the incorporation of TEK into the EIA process (Berger 1977a; Armitage 2009; Gibson and Hanna 2009). Beanlands and Duinker published a report in 1983 that encouraged recognition of the value of local knowledge in assessing environmental impacts and a federal EIA discussion paper in 1987 considered the possibility of providing funding to facilitate the engagement of affected members of the public (Gibson and Hanna 2009). A review of the *Canadian Environmental Assessment Act* from 1999-2001 looked at public involvement in the EIA process and resulted in an amendment in 2003 to include recognition of community knowledge and TEK (Gibson and Hanna 2009). In 2007 a proposed mine in the province of British Columbia was rejected because of the effects on aboriginal communities revealed through the EIA process (Gibson and Hanna 2009). As a result of this long history, Canada is often considered a leader regarding public participation in the EIA process (Sinclair and Diduck 2009).

The Canadian EIA process has also contributed to an understanding of issues specific to Arctic environments and inter-jurisdictional issues between overlapping levels of government (Mitchell 2009). In Nunavut, the 2004 Inuit Knowledge Project was created to ensure the integration of Inuit TEK into the management of national parks in Nunavut (Gagnon and Berteaux 2006). Furthermore, the creation of the Nunavut Impact Review Board has resulted in the *Canadian Environmental Assessment Act* no longer applying to proposed projects in Nunavut, although the federal government retains the power to override decisions by the review board (Rusk et al. 2009). The 1997 proposed nickel development project in Voisey's Bay, Newfoundland and Labrador was assessed using a joint EIA run by the federal government, the provincial government, the Inuit and the Innu First Nation (Gibson and Hanna 2009).

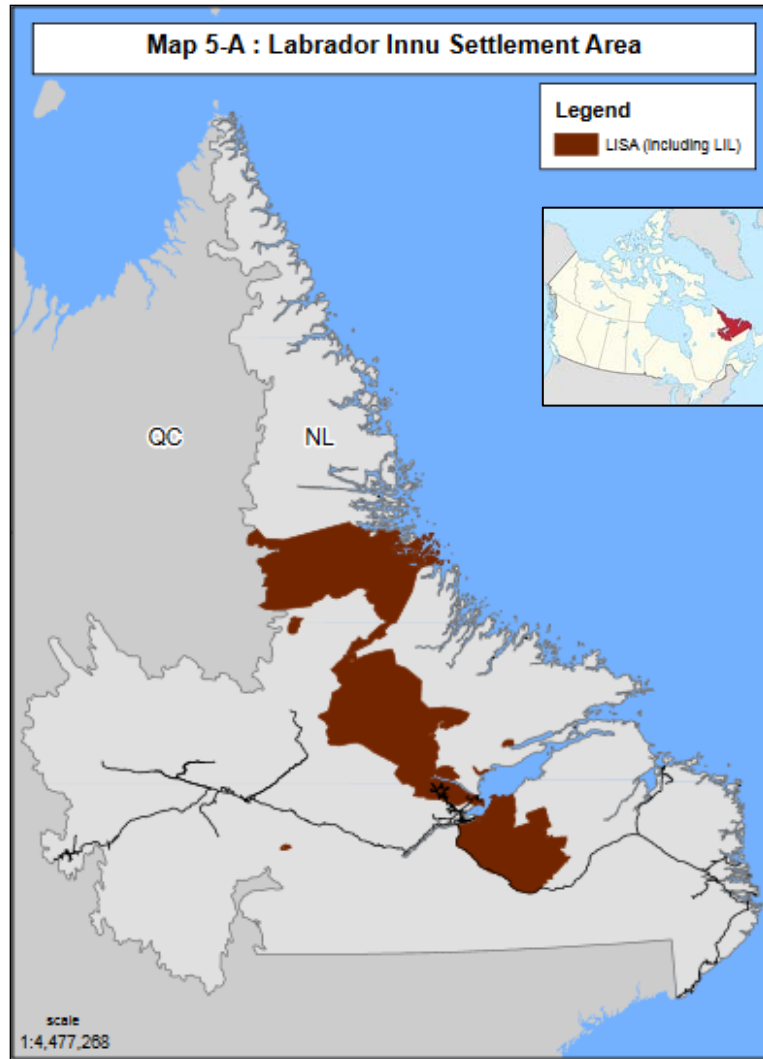
Newfoundland and Labrador was the first jurisdiction in Atlantic Canada that formally created EIA legislation in the form of the *Environmental Assessment Act*, 1980 (Hanna 2009). Although it favoured a balance between issues and cooperation, it focused on environmental protection

over assessment of the effects of development and had a weak public participation component (Hanna 2009). In 2002, the *Environmental Assessment Act* was updated to become the *Environmental Protection Act* in an attempt to improve enforcement and accountability by enabling the provincial government to reject projects that are not in the public interest, attach conditions at any stage, allow more time for public review, harmonize the federal and provincial processes, and increase penalties associated with infractions (Hanna 2009).

Although there have been generally positive trends in the EIA process in Canada, the progress has been relatively slow and often the result of concern over inefficiencies in the process and court cases (Gibson and Hanna 2009). The EIA process in practice does not contain all the elements of an effective EIA process in theory, and has been inconsistent over time and across the different jurisdictions in Canada (Gibson and Hanna 2009).

#### ***2.5.4 Political Status of Innu Participation in Canada***

According to the *Labrador Innu Land Claim Agreement-in-Principle*, an individual is considered Innu if they are a Canadian citizen or permanent resident, and registered as a member, accepted as a member by or the descendent of a member of the Mashuau Innu First Nation or Sheshatshiu Innu First Nation (Innu of Labrador et al. 2011). The *Labrador Innu Land Claims Agreement-in-Principle* outlines the consultation obligations of the federal and provincial governments independent of those already outlined in existing legislation, which will be in effect once the agreement itself is signed and ratified (Innu of Labrador et al. 2011). Consulting is defined as providing notice in sufficient form and detail and as early as possible, providing sufficient time to prepare their views, considering the views presented, providing written response to the views that were not incorporated, and accommodating the concerns based on the severity of negative effects (Innu of Labrador et al. 2011).

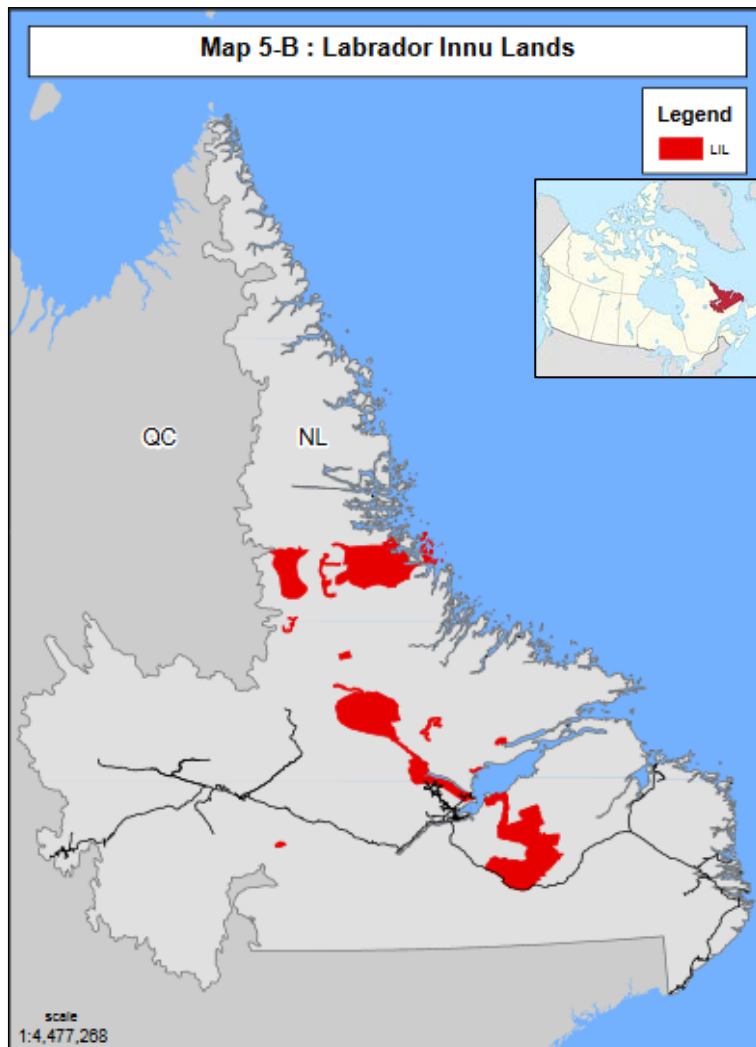


**Figure 2** Map of the traditional territory of the Labrador Innu taken from the Labrador Innu Land Claims Agreement-in-Principle. The Labrador Innu Lands (Figure 3) are within the Labrador Innu Settlement Area (Innu of Labrador et al. 2011; inset Wikipedia 2017)

Although there are other areas to which the Innu can exercise certain rights as considered in the land claims process, the Labrador Innu Settlement Area is 36,260km<sup>2</sup> and its location is indicated in Figure 2 (Innu of Labrador et al. 2011). The Labrador Innu Land to which the Innu would have something similar to fee simple title is 12,950km<sup>2</sup> and its location is shown in Figure 3 (Innu of Labrador et al. 2011). Within the Labrador Innu Lands, the provincial government has a responsibility to consult with the Innu Nation regarding natural resource development activities (Innu of Labrador et al. 2011). The amount of a certain species that could be harvested by the Innu in a given year within the Labrador Innu Settlement Area would be reached based on



consultation with the Innu and incorporation of their TEK, in addition to other relevant information (Innu of Labrador et al. 2011).



**Figure 3** Map of the Labrador Innu Lands taken from the Labrador Innu Land Claims Agreement-in-Principle. (Innu of Labrador et al. 2011; inset Wikipedia 2017)

In 2012, two omnibus bills Bill C-38 and C-45 resulted in changes to the *Canadian Environmental Assessment Act*. Where the 1992 *Canadian Environmental Assessment Act* included a preamble that outlined a commitment to public participation and providing access to information, the 2012 revision of the *Canadian Environmental Assessment Act* did not include a preamble outlining the foundations of the legislation (Sinclair and Diduck 2009). Both Acts indicate that public participation must be meaningful, which is defined as an active and critical exchange of ideas and information between parties (Sinclair and Diduck 2009; Booth and Skelton 2011). Given criticism of the lack of consultation with the changes in 2012, the

*Canadian Environmental Assessment Act* underwent a review in 2016-2017 to ensure the EIA process is fair, based in science, respects the rights of indigenous peoples and supports the economy (GC 2016c). The current EIA process requires a lot of time and monetary resources from aboriginal communities in Canada in order to meaningfully engage in the process (Burdge and Vanclay 1995; Graben 2010).

One of the challenges with EIAs in Canada is that the Canadian constitution gives authority over different aspects of the environment to both the federal and provincial governments, which requires coordination between the two levels of government (Fitzpatrick and Sinclair 2009). Jurisdictions work together in a process known as harmonization to ensure only one review is required for any given project (Fitzpatrick and Sinclair 2009). In 1998, the *Canada-wide Accord on Environmental Harmonization* was signed, which led to the development of a 2005 draft bilateral agreement with Newfoundland and Labrador to harmonize their EIA processes (GC and GNL 2005; Fitzpatrick and Sinclair 2009). The impact of the harmonization process on the levels of public involvement varies depending on which jurisdictions are involved (Fitzpatrick and Sinclair 2009). The requirement to meet the standards of both jurisdictions can improve the EIA process, but access to information can become challenging with more parties involved (Fitzpatrick and Sinclair 2009). International agreements to reconcile environmental impacts that span national borders have also been signed, such as *The North American Agreement on Environmental Cooperation* (MacKay 2006).

### ***2.5.5 Cultural Values Related to the Environment in Canada***

In his report, Justice Berger recognized the “deeply felt, and perhaps deeply Canadian, concern with the environment for its own sake” (Berger 1977a, 29). Canadian culture is deeply connected with the environment, as the country was founded on the exploitation and export of its natural resources (DuWors et al. 1999). In addition to being employed in natural resource sectors, the majority of Canadians participate in leisure activities that are directly involved in nature (DuWors et al. 1999). Residents of Newfoundland and Labrador, excluding those that live on Indian reserves, participated in nature related activities at a rate of 82.7%, slightly less than the national average, though certain activities like camping, gathering non-timber forest products, snowmobiling, recreational fishing, and hunting were higher than the national average (DuWors et al. 1999).

For the aboriginal people of Canada, this connection is even stronger and damage to the environment directly affects their way of life and spiritual relationship with the land (Berger 1977a; Roué and Nakashima 2002). The destruction of the earth was considered akin to the destruction of human wellbeing (Roué and Nakashima 2002). There has also been a spiritual disconnect with traditional aboriginal views of nature as being a spiritual place given Christian spirituality that was introduced to the Labrador Inuit in 1771 (Thinley 2010).

Per capita, Canada has the most natural resources of anywhere in the world (DuWors et al. 1999). With the abundance of natural resources came the mindset that these resources could not be over-exploited; a mindset that favoured industrial development over environmental protection (Berger 1977a). This has been slowly changing (DuWors et al. 1999), although in recent years, the legislative and funding changes introduced by the Harper Conservative government tended to promote economic development over environmental concerns (Mitchell 2009). One argument in response has been that informing the public of natural resource use and impact on the environment will lead to a more effective public participation process (DuWors et al. 1999).

## **2.6 Comparison of Lapland, Finland and Labrador, Canada**

Several factors outside of the benefits and deficiencies identified in the literature influence the level of indigenous peoples' participation in the EIA process. The implementation of policy is what happens between when the policy is developed and when it is put into action (O'Toole Jr 2000). A description of the current and historical context in Canada and Finland is necessary because differences in the existing legislation between countries or how it is implemented in practice may be explained by regionally unique characteristics or issues (Raitio 2008).

Compared to national population densities, the population of Lapland and Labrador are very low with Labrador having the lower population density of the two. On the other hand, both regions have a higher percentage of indigenous people compared to their national average. The physical environments of Lapland and Labrador are both influenced by their northern latitudes creating long cold winters, short growing seasons and extremes in the amount of daylight in winter compared to summer. Labrador has a more mountainous and coastal terrain than Lapland, which gives it a wetter climate that is more prone to extreme weather events, like storms and cyclones.

The Sámi and the Innu both rely heavily on the natural resources available to them to survive these harsh sub-Arctic environments. They share similar traditional livelihood activities, such as hunting, fishing, trapping, and gathering plants. The species *Rangifer tarandus* L., caribou in Canada and reindeer in Finland, plays an important cultural and spiritual role to both indigenous peoples. Although the rights of indigenous peoples in Canada were recognized in 1982, 13 years earlier than in Finland, the recognition of the Innu as an indigenous people did not occur until 2002. Furthermore, the traditional territory of both peoples is thought to be much larger historically than what is recognized by the Finnish and Canadian governments today, and in both cases, their territories were not formally ceded to the government (Mustonen et al. 2010; Innu of Labrador et al. 2011).

Historically, both the Innu and the Sámi were displaced from their land and had their complex social structures disrupted through government interventions. For the Innu, this is a relatively recent history, as they did not have regular interaction with colonizers until Newfoundland and Labrador joined the Canadian Confederation in 1949. The Sámi have had more interaction with their colonizers with regular interaction going back to the 1600s. The settlement of Lapland and Labrador has resulted in conflict between the traditional livelihoods and lifestyles of indigenous peoples and the development of natural resources, such as forestry, hydroelectricity dams, and more recently subsurface mineral and oil resources (Mustonen et al. 2010).

The concept of public participation in natural resource management has been around since the 1990s in Finland and the 1970s in Canada, and its importance is recognized in the constitutions of both countries (GC 1982; Raitio 2008). The EIA process arose a little later with the formal legislation in both countries being introduced at roughly the same time: 1994 in Finland and 1995 in Canada. However, Canada has a longer history with EIAs than Finland, as there was a federal EIA policy as early as 1973 and Newfoundland and Labrador legislated their EIA process in 1980. The political status of an individual or a community as indigenous is ultimately decided by the national government in both Canada and Finland. In Canada, progress of the involvement of indigenous peoples in the management of natural resources has largely been motivated by court cases, whereas Finland's membership in the EU has played a role in its recognition of indigenous peoples' rights and in formalizing the EIA process.

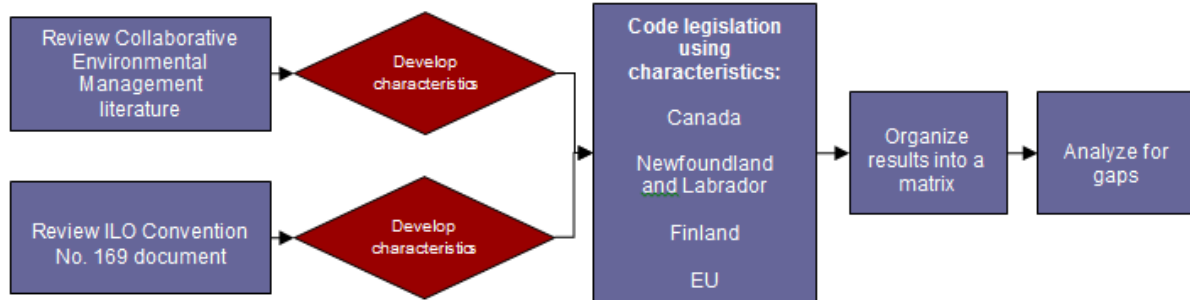
Prior to the introduction of Christianity, the residents of Canada and Finland had a significant spiritual connection to the environment, including an appreciation for its intrinsic value (Roué and Nakashima 2002). Mainstream Canadian and Finnish cultures both value the environment due to an abundance of natural resources and natural resource related industries providing a livelihood for many people. This dependence of the economy on natural resources has recently led to conflicts due to valuing economic development over the protection of natural resources, particularly in Canada since the 2008 economic downturn (Mitchell 2009).

The literature argues for the value of indigenous peoples' participation and the incorporation of their TEK in the EIA process, particularly in Arctic environments where there has been less historical development from which western science can estimate potential impacts. Despite this and the recognition of this value through international agreements, there is still much criticism of how indigenous peoples and their TEK are incorporated into the EIA process in practice. A first step to determine some of the factors that result in this dissatisfaction is to look at current EIA legislation and determine whether the foundation for enforcing effective participation is in place. The next chapter will outline the methods used to analyse EIA legislation in this study.

### **3. METHODS**

---

The research method employed in this study is a content analysis of current environmental impact assessment (EIA) legislation. Based on the literature review, political documents were identified at several levels of government, from international agreements to intergovernmental, regional, and domestic or provincial policies and legislation. As outlined in Figure 4, an international agreement on the rights of indigenous peoples and literature on collaborative environmental management (CEM) were used to create a list of characteristics that would describe an ideal scenario of indigenous peoples' participation in the EIA process. It was determined that an analysis of existing legislation against an "ideal" situation, as outlined by the international agreement and CEM theory, would be effective at identifying any gaps and areas where there is room to clarify or improve the legislation. The content analysis looked at how consistent the domestic and regional legislation is with the overarching philosophy or goals, as indicated by the international agreement and CEM theory (Bühns and Bartlett 1993).



**Figure 4** Flowchart outlining the process of analysis with blue boxes indicating the processes undertaken and red diamonds indicating the decisions made.

### 3.1 Data Collection to Identify Relevant Legislation

The development of natural resources involves cooperation between many levels of government and their guiding policies and legislation. Which political documents are relevant depends on the nature and location of the proposed project, as well as the scale and scope of its potential impact on the social, economic and natural environments. The EIA process is a commonly used environmental management tool for determining the potential impacts of a proposed natural resource development project. Although this process is similar around the world, the role of indigenous peoples in this process might vary between countries and regions. While there are many political documents involved in the EIA process, this study centers on specific EIA legislation to ensure the documents under analysis can be critiqued thoroughly and to ensure they are comparable between countries and regions.

Within Canada, the EIA process is governed by both federal EIA legislation that deals with development on federal land (including Indian reserves and the Arctic territories) and projects that span provincial boundaries, and provincial legislation that deals with proposed projects on provincial land. Development projects in Labrador, Canada may require approvals through the federal EIA legislation (*Canadian Environmental Assessment Act*, 2012) and the provincial EIA legislation (Newfoundland and Labrador's *Environmental Protection Act*, 2002) depending on their location and the nature of the proposed project.

EIA legislation in Finland was introduced in 1994 to follow the guidelines of the European Union (EU) just prior to Finland becoming a member state in 1995. Finland does not have different EIA legislation for federal and provincial jurisdictions, so the relevant legislation for Lapland, Finland is the *Act on Environmental Impact Assessment Procedure*, 1994. The only

legally binding copies of this Act are in Swedish and Finnish, thus the English translation used in this analysis is unofficial. As Finland's *Act on Environmental Impact Assessment Procedure* was based on the EU's *EIA Directive* from 1985, an English version of the EU's Directive was included as the fourth piece of legislation being analysed in this study. This was done to make up for any inconsistencies in the English translation of Finland's *Act on Environmental Impact Assessment Procedure*.

### **3.2 Characteristics of Effective Collaborative Environmental Management**

The literature review started by looking at public involvement in resource management, then public involvement in EIAs specifically, and finally the process of incorporating traditional ecological knowledge and the concerns of indigenous peoples into EIAs.

Several search engines and libraries were accessed both in Finland (Joensuu and Rovaniemi) and Canada (Fredericton, Vancouver and Edmonton). Search terms, included “traditional ecological knowledge/traditional knowledge”, “environmental impact assessment/impact assessment/environmental assessment”, “Aboriginal/indigenous peoples/First Nation”, and “involvement/participation/collaboration”. Several searches were performed using synonyms of the above terms. From these searches, it was revealed that there is decade's worth of research on this subject in general, going back to the 1960s. However, there appears to be little consistency in the terminology, with several of the above terms being used interchangeably.

The term collaborative environmental management (CEM) was chosen for this study because of its popularity in the literature. It encompasses varying levels of collaboration between the decision-making body (i.e. government) and the stakeholders (i.e. indigenous peoples) when it comes to the management of natural resources and the environment in general (Arnstein 1969; Ostrom 1990; Hurlbert and Gupta 2015). This flexibility allows for the term to cover the many situations and levels of indigenous peoples' participation that can be found in an international context, while still identifying the key components that lead to successful outcomes.

Where possible, articles that focused on Labrador, Canada or Lapland, Finland, and the Innu or Sámi were chosen. However, articles from other post-colonial countries or other regions of Canada and Finland were looked at to provide a framework for general trends in indigenous

peoples' involvement in EIAs. As the traditional territory of the Sámi spans multiple political boundaries, articles relating to the Sámi in Sweden and Norway were also included in the analysis. Although the traditional territory of the Sámi spans into Russia as well, there was no applicable research found from Russia that had been translated to English. It is important to note that a limitation of this research is the applicability of sources from outside the study areas, due to the location-specific nature of the subject matter.

From the general review of the literature, characteristics of successful CEM were identified to be used as codes in the analysis of the legislation (Bernard 2011; Wutich et al. 2015). Each component was then given a weighting from 1 (low influence) to 3 (high influence) based on the number of times it was identified in the literature and the strength with which it was deemed to influence effective participation according to the literature (Weber 1990). The components of indigenous participation outlined in the theoretical framework were used as a checklist against which the pieces of legislation were coded to determine in which areas each country is lacking and in which they excel (Stemler 2001; Bernard 2011; Wutich et al. 2015). If a piece of legislation did demonstrate the characteristic, it was given a value of 0 for that code. When a piece of legislation moderately met the component, it was given the respective weighting as its value. When it strongly met the component, it was given two times its respective weighting as its value. The values for each component were added together and the legislation with the highest total value was considered to have higher potential for effective CEM.

### ***3.3 ILO Convention No. 169 vs. United Nations Declaration on the Rights of Indigenous Peoples***

During the literature review, several international agreements were identified as relating to indigenous peoples' participation in EIAs. The most influential of these included the *ILO Convention No. 169, Indigenous and Tribal Peoples Convention*, and the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP).

The *ILO Convention No. 169* was adopted in 1989 and implemented in 1991. This international agreement guarantees the rights of indigenous peoples, though most countries throughout the world, including both Canada and Finland, have yet to ratify it. It is a legally binding document that was developed through collaboration between representatives from government, employers



and workers, as well as co-operation with the United Nations (UN) and other international organizations, including indigenous peoples' organizations. UNDRIP is a newer document that was adopted in 2007 and implemented in 2011, which was developed with the participation of indigenous peoples and the States in which they live. While UNDRIP is not a legally binding agreement, both Canada and Finland have declared their support of it within the framework of their existing legal systems.

Both are broad texts that cover several issues relating to the rights of indigenous peoples. For the purposes of this study, only the Articles that related to the management of natural resources and had the potential to directly influence the EIA process were considered. While the language used in each of these international agreements differs, there is a lot of overlap in the indigenous peoples' rights identified, in terms of the management of natural resources within their traditional territories.

As the legally binding of the two international agreements, the wording used in the *ILO Convention No. 169* was chosen for the purposes of this study. It outlines characteristics of consultation and participation that are integral to the EIA process, and it grants indigenous communities the right to decide priorities for development. Despite the lack of domestic commitment to follow this international agreement, the *ILO Convention No. 169* was used as the international standard or ideal against which the domestic and regional EIA legislation will be critiqued throughout this study. The *ILO Convention No. 169* was chosen over UNDRIP because it is legally binding, written with input of a variety of different groups, and is an older more foundational document.

### **3.4 Content Analysis of Legislation**

While there is overlap between the characteristics of successful CEM and the *ILO Convention No. 169*, it was decided to keep them separate to differentiate between the standard from the perspective of the scientific community compared to the standard from the perspective of the international political community, respectively. The four pieces of domestic and regional EIA legislation were systematically reviewed and coded by the same researcher using the characteristics outlined in the *ILO Convention No. 169* and the CEM framework (Stemler 2001; Bernard 2011; Wutich et al. 2015).

The legislation was further categorized by which directions are legally enforced compared to those that were recommended. Language such as *can/may* and *shall/must* indicated low and high levels of legal responsibility to enforce the direction, respectively. The level of public involvement in EIA legislation was also looked at as an alternative route to involvement for indigenous peoples. The legislation was considered to meet the component if it could be reasonably argued that it met the component under question, rather than if it had found the ideal way to address the component. Each component was given a value of 0 if it was not met in the legislation, 1 if it was moderately met, and 2 if it was strongly met (Wutich et al. 2015). Component of successful CEM were given their respective weighting multiplied by this value for a more representative value (Weber 1990).

The components of the *ILO Convention No. 169* and CEM were each organized in a matrix against the four pieces of EIA legislation to ease comparison and reveal trends in the data. This allowed for identification of gaps between each piece of legislation individually and the components of the *ILO Convention No. 169* and successful CEM, as well as how the legislation compared with one another and between countries.

### **3.5 Expected Challenges and Mitigations**

Throughout this paper, any observed limitations of the methods of data collection and uncertainties associated with any conclusions were identified. The nature of this area of research is such that it can vary depending on the point of view of stakeholders and, thus, has a certain level of subjectivity inherent to it. To address this subjectivity, this study attempted to outline research methods transparently, including identifying any limitations and conflicting interpretations that may arise. This study hopes to push past this subjectivity to find the underlying trends and themes spanning the involvement of indigenous peoples of two countries.

As a content analysis of existing legislation and the supporting literature, this study relies on previously published material. This method is based on the assumption that all valuable sources are available to the researcher. The terminology associated with this research topic varies quite widely. This means that there could be valuable sources that were overlooked or missed altogether based on the search terms used. Due to the wide variety of terms that are used interchangeably regarding this topic (i.e. consultation, involvement, participation) care was taken

to determine how each legislative body defines these terms prior to taking them as synonyms for the purpose of the analysis (Weber 1990; Stemler 2001).

Another significant source of error was the availability of articles on Sámi involvement in EIAs that were translated to English. Throughout the search process, several titles were found that looked to be valuable sources of information, but resources were not available to have them translated to English. Consequently, the list of sources used to produce the literature review and used as supporting documents in the discussion is skewed toward research in Canada. In terms of articles related to Sámi involvement in EIAs, most of the literature in English came from Norway and Sweden. Due to the prevalence of research in Finland into trans-boundary EIAs, these articles provide insight into how the Sámi may be incorporated into the EIA process in Finland. However, it is important to bear in mind that this international research is not specific to Finland.

The most prominent limitation of this content analysis is that the Finnish legislation analysed is an unofficial translation from the original. Consequently, it does not have the same meticulous legal language that can be found in the Canadian or international equivalents. However, Finland's *Act on Environmental Impact Assessment Procedure* was written to comply with the EU's *EIA Directive* from 1985, so by considering the wording of the EU document, any translation errors can be limited. Points on which Finland's *Act on Environmental Impact Assessment Procedure* differs from the EU's *EIA Directive* were noted in Chapter 6.

Government legislation is often written in a way that acts as a guide, but leaves room for the practical interpretations of those involved in its implementation (Yanow 1993; Yanow 1995). A piece of legislation may be interpreted in different ways depending on the interests of the party doing the interpreting. As a result, what is written in legislation from one reader's perspective may not translate directly to what is happening on the ground. Due to the complicated nature of this relationship, the potential for this discrepancy is considered outside of the scope of this study. The assumption made in this study is that, if the legislation meets the criteria of CEM and the *ILO Convention No. 169*, it has the potential to be interpreted in a way that can lead to successful co-management and align with the rights of indigenous peoples. Further research would be required to determine if the translation from legislation to action limits or encourages successful participation of indigenous peoples.

A potential limitation that applies to research involving one researcher's interpretation of data is confirmation bias, which indicates that the researcher may look for data to back up what was thought prior to the research commencing (Turner and Turner 2009; Bernard 2011; Wutich et al. 2015). To reduce the potential for confirmation bias, contradictions between the data collected in the content analysis and existing literature on the topic were analysed in the discussion chapter of this paper, in addition to any similarities in the findings. A brief introduction to the researcher was included in the Foreword in an attempt to reveal potential sources of bias resulting from the lens through which this data was collected and analysed.

Another criticism that applies to research in general is more of a warning not to view the results as an absolute truth (Fielding and Fielding 1986). As one article put it, it is naïve to think that there is one account of the social world, but social science research can help increase the understanding of the complexity of the social world (GEF 2010). The goal of this study is not to reveal a black and white understanding or single answer for all regions facing the issue of indigenous engagement in EIAs, but to gain a better understanding of the influential factors. Researchers could spend their entire career interpreting a single piece of legislation; this research simply adds a small voice to a nuanced conversation.

### **3.6 Alternative Methods Considered**

In order to account for the complexities of comparing the level of indigenous peoples' involvement in the EIA processes of both Canada and Finland, multiple methods were considered throughout the development of this study. Before deciding on a comparative content analysis of existing legislation, the other methods of study considered were interviews with both government and indigenous community members involved in the consultation process, and case studies of actual consultation on proposed development projects that required an EIA.

A study like this could involve the triangulation method to link the results of all three proposed methods. Triangulation is used to cross reference between multiple methods to overcome the limitations of one method alone and ensure the most accurate results are found (GEF 2010). Due to the infeasibility of using interviews and case studies, as discussed in greater detail below, this paper was unable to include a triangulation of multiple methods and focused only on the content analysis of legislation.

It is recommended that future studies could involve interviews or case studies, potentially incorporating the findings of this study using the triangulation method.

### *3.6.1 Interviews*

The way legislation is written may not directly translate into how that document is interpreted and how it is implemented on the ground, for a variety of reasons (Yanow 1993; Yanow 1995; Sutton 1999; Goel 2014). One benefit of including interviews in this type of research is that it connects what is written in the legislation with what happens on the ground.

The original intention of this study was to perform open interviews with Innu and Sámi community members involved in the consultation process and their government counterparts. The interviews would then be coded using the same two frameworks described above. The results of this would be compared with the results of the content analysis and case studies in an attempt to reduce the error associated with each method on its own. However, throughout the process of developing interviews, several challenges arose.

Many indigenous communities are approached by researchers with several requests throughout any given year and have little incentive to participate in all research projects. They may not have a good history with research done in their communities or there may be an inherent mistrust of outsiders (Menziés 2001). In order to effectively work with indigenous communities, it is crucial to develop relationships and a sense of trust prior to the work itself (Menziés 2001). In attempting to set up interviews with Sámi and Innu community members, no contacts within these communities were made prior to attempting to organize the interviews. Consequently, it was challenging to find people within these communities that were interested in participating in this research and available to do so. Another challenge was the availability of financial resources to perform interviews in person in these remote communities. Since the time and financial resources to develop relationships in Innu and Sámi communities were unavailable, interviews proved to be infeasible.

It is recommended that future researchers interested in performing interviews within remote indigenous communities, either work in communities where they have an already established relationship or develop a relationship and build trust prior to conducting a study. Directly

involving the community in the research and in determining what kind of research would be of benefit to the community would also be more effective overall (Menzies 2001).

### *3.6.2 Case Studies*

The benefit of using case study analysis is that it gives context-specific information, which is where human nature is revealed (Raitio 2008). However, it is important to note that population-wide generalizations should not be made from this context-specific data (Raitio 2008). The difficulty in comparing the Finnish and Canadian case studies is that they each deal with varying temporal and spatial scales, thus reducing the opportunity for direct comparison. However, the context-specific data gathered throughout the case study would help to create the framework for indirect comparison.

Another limitation of the case study analysis is in the difficulty of comparing the two indigenous peoples, regions and historical conditions that have influenced the intergovernmental relationship between indigenous peoples and nation states. Even the definition of indigenous peoples varies widely depending on the perspective through which one looks. Case studies in general have limited use in terms of making accurate predictions and should not be used to determine cause and effect (Yin 2009). Underlying biases of the researcher can result in biased information being highlighted to emphasize underlying expectations (Yin 2009).

Due to the challenges associated with case studies, it was important to find an example from both Finland and Canada that could be reasonably compared to one another. Unfortunately, there were a limited number of case studies related to Finland with enough information available in English to be reasonably compared to its Canadian counterpart. This lack of information available to the researcher was the main reason a content analysis was chosen over a case study analysis. For future studies of this kind, it would be valuable to have someone who is fluent in both English and Finnish analyze the data to ensure that the most comparable case studies are chosen.

## **4. THEORETICAL FRAMEWORK**

---

This chapter is divided into two major sections corresponding with the development of two theoretical frameworks against which the environmental impact assessment (EIA) legislation will

be analysed in Chapter 5. In the first section, the *International Labour Organisation (ILO) Convention No. 169* is analysed to identify key aspects of the rights of indigenous peoples that relate to the management of natural resources. The next section provides a literature review of collaborative environmental management (CEM) and identifies key characteristics of successful CEM based on this literature.

#### **4.1 *ILO Convention No. 169***

The *ILO Convention No. 169* is a legally-binding international convention written with the participation of indigenous representatives (ILO 2003). It recognizes “the aspirations of these peoples to exercise control over their own institutions, ways of life and economic development and to maintain and develop their identities, languages and religions, within the framework of the States in which they live” (ILO 1989, para 6). It outlines the rights of indigenous peoples and the responsibilities of government to protect those rights (ILSD 2013). Through this convention, the ILO set a minimum standard and brought international recognition to the rights of indigenous people, including the right to participate in the management of natural resources on their traditional territory (ILSD 2013; ILO 2017). As of June 2017, only 22 countries have ratified the convention making it legally binding to those countries, a list which excludes Canada and Finland, though its influence extends beyond the number of countries that have ratified the convention (ILO 2003; ILO 2010). For the purposes of this paper, the *ILO Convention No. 169* outlines an internationally recognized minimum standard of indigenous peoples’ involvement in the management of natural resources.

The Convention notes that indigenous peoples in many parts of the world are “unable to enjoy their fundamental human rights to the same degree as the rest of the population of the States within which they live, and that their laws, values, customs and perspectives have often been eroded” (ILO 1989, para 7). Article 5 establishes that governments must recognize and protect the values of indigenous peoples, and respect the integrity of these values, their practices and their institutions (ILO 2017). The *ILO Convention No. 169 Handbook* clarifies that “indigenous peoples’ rights are not ‘special’ rights, but are articulations of universal human rights, as they apply to indigenous peoples” (ILSD 2013, 13). As a result of existing discriminatory practices and recognizing their collective nature, the rights of indigenous peoples as a unique group need to be articulated and protected using special measures (ILO 2003; ILSD 2013).

The *ILO Convention No. 169* has an inclusive definition of indigenous people, indicating that “self-identification as indigenous or tribal shall be regarded as a fundamental criterion for determining the groups to which the provisions of this Convention apply” (ILO 1989, 1(2)). Groups must have “social, cultural and economic conditions [that] distinguish them from other sections of the national community” and have retained “some or all of their own social, economic, cultural and political institutions” (ILO 1989, 1(1)). Objectively, indigenous peoples are those who are descended from a population who inhabited that geographical area at the time of colonisation (ILSD 2013).

The Convention places the responsibility on governments to develop, “with the participation of the peoples concerned, co-ordinated and systematic action to protect the rights of these people and to guarantee respect for their integrity” (ILO 1989, 2(1)). Participation is considered to go further than just consultation, towards indigenous groups being able to identify their priorities and having ownership in the development of policy from the beginning (ISLD 2013). This is elaborated upon in Article 4, which indicates that special measures should be taken to safeguard the environment and culture, among other aspects, of the peoples concerned and re-iterates that these safeguards “shall not be contrary to the freely-expressed wishes of the peoples concerned” (ILO 1989, 4(2); ILO 2017). These Articles demonstrate governments’ responsibility under the Convention to protect the rights of indigenous peoples, including the protection of their environment and culture, and the importance of involving indigenous groups themselves in this process.

Throughout the Convention, the States that have ratified the Convention are directed to take various actions “with the participation and co-operation of the peoples affected” (ILO 1989, 5(c)). Participation and consultation are key components of the Convention, which aim to address discriminatory practices affecting indigenous peoples and give them a voice when decisions are made that affect their lives (ILSD 2013). The right to participation and consultation are considered “fundamental principles of democratic governance” and, while not a right given to indigenous peoples exclusively, their inclusion reaffirms the importance of consulting with indigenous groups specifically (ISLD 2013, 21). Article 6 requires that governments consult indigenous peoples when considering a decision that may affect them directly (ILO 2017). This includes the Government’s responsibility to carry out studies to assess the potential impacts of a



planned development activity and “to protect and preserve the environment of the territories they inhabit” (ILO 1989, 7(4)).

For the purposes of consultation and participation, indigenous peoples are to be contacted through their representative institutions, as determined by the indigenous people themselves, and an intercultural dialogue should be established (ILSD 2013). Article 6 elaborates that “consultations carried out in application of this Convention shall be undertaken, in good faith and in a form appropriate to the circumstances, with the objective of achieving agreement or consent to the proposed measures” (ILO 1989, 6(2)). As it is the intention and not a requirement for both parties to reach a consensus, indigenous peoples are not granted a veto power though the expectation is that they have some ability to influence decision-making and may use their rights as bargaining tools in negotiating environmental protection measures, reclamation plans and compensation with the company (ILO 2003; ILSD 2013). The importance of coming to an agreement or consent is increased when the risk to an indigenous group’s culture and livelihood is greater, such as when considering relocation from their traditional lands (ILSD 2013). Although not a requirement, the ILO encourages ratified countries to consult with indigenous peoples when writing their status report for the ILO every five years (ILSD 2013).

The Convention emphasizes the importance of respecting the significance of the relationship between indigenous peoples and their traditional territory (ILO 2017). Part II of the Convention focuses on this relationship, stating that “the rights of ownership and possession of the peoples concerned over the lands which they traditionally occupy shall be recognised” (ILO 1989, 14(1)). These land rights are to be established based on traditional occupation and use, both as individuals and the collective (ILSD 2013). The territory considered is inclusive of the land, rivers, and coastal sea (ILO 2003). The Convention puts the onus on governments to identify these lands and guarantee effective protection of those rights, and to establish procedures to settle land claims from within the national legal system (ILO 1989; ILSD 2013; ILO 2017).

Related to the natural resources within their traditional territory is “the right of these peoples to participate in the use, management and conservation of these resources” (ILO 1989, 15(1)) including the right to be consulted regarding exploration and exploitation of surface and subsurface resources owned by the State (ILSD 2013). The Convention does provide for

conditions where the indigenous peoples may be removed from their territory, but specifies that this must only occur with their “free and informed consent” or “following appropriate procedures”, and they shall be “fully compensated” (ILO 1989, 16(2) and 16(5)). Additionally, the State should respect the internal processes developed by the community to transfer land rights among its members and prevent non-members from taking advantage of these processes (ILO 1989).

For the purposes of this paper, the above articles suggest that as part of the environmental impact assessment legislation, indigenous peoples should be identified as a unique group that should be consulted during the EIA process and the results of the impact assessment should be considered in the decision-making process (ILSD 2013).

Article 32 of the Convention addresses indigenous peoples whose traditional territory spans geopolitical borders. It indicates that, where good relationships exist between States, “Governments shall take appropriate measures, including by means of international agreements, to facilitate contacts and co-operation between indigenous and tribal peoples across borders” (ILO 1989, 32). The presence of EIA legislation that considers trans-boundary impacts will indicate that this component of the Convention has been met.

As part of the rights of indigenous peoples outlined in the Convention, it is the State’s responsibility to “ensure that agencies or other appropriate mechanisms exist to administer the programmes affecting the peoples concerned, and shall ensure they have the means necessary for the proper fulfillment of the functions assigned to them” (ILO 1989, 33(1)). Since these programmes need to be executed “in co-operation with the peoples concerned”, this suggests that capacity funding should be available to enable indigenous communities to participate to the best of their ability in the management of natural resources found within their territory (ILO 1989, 33(2)(a)).

The eight main components of the Convention that directly relate to the involvement of indigenous peoples in the EIA process are indicated in Table 1. Each piece of EIA legislation will be evaluated to determine how well it complies with the international standard laid out in the *ILO Convention No. 169* framework. In recognition of the importance of developing an implementation strategy that is specific to the circumstances in the country, the Convention uses

broad language to give flexibility to the ratifying countries (ILSD 2013; ILO 2017). One of the criticisms of the use of flexible language is that it makes the obligations of each country vague (ILO 2017). The framework tries to take into consideration this inclusive language, but it is important to note that this is not a legal interpretation of the Convention.

**Table 1** Framework of *ILO Convention No. 169* with key components relating to natural resource management

#	<i>ILO Convention No. 169</i> Component
1	Recognition of indigenous peoples as having rights related to their culture, history and values
2	Self-identification as an indigenous group
3	Governments have a responsibility to protect the rights of indigenous groups with their participation
4	Participation and consultation are done in good faith
5	Recognition of the rights of ownership and possession to traditional territory
6	Recognition of the rights to participate in the use, management and conservation of resources
7	Transboundary consideration to address issues of the indigenous peoples as a whole
8	Capacity funding

## 4.2 Collaborative Environmental Management

### 4.2.1 Background

The literature contains many theories as to how common areas should be managed. Mancur Olson's *Logic of Collective Action* in 1965 set out to challenge group theory, which argued that "individuals with common interests will voluntarily act so as to try to further those interests" (Ostrom 1990, 4). Olson (1965) argued that if individuals automatically receive the benefits of a collective good, they have no incentive to maintain the provision of it, unless the group is very small and their actions would be noticed. Garrett Hardin's *The Tragedy of the Commons* (1968) was another influential theory. *The Tragedy of the Commons* explains resource degradation as the natural result when a limited resource is open to the collective for use. In 1973, Robyn Dawes formed Hardin's theory as a prisoner's dilemma game, which explained that when two rational-thinking players pick their best strategy, the result is everyone's third best strategy. Each of these theories mirrors common thinking of resource management at the time, which was concerned that without the ability to regulate use of the collective, individuals will take advantage of the efforts of others (Ostrom 1990; Gilmour 2013). Current policy prescriptions are

based on the image evoked by these three theories of helpless individuals destroying their resources (Ostrom 1990).

Government control and privatization have been the main policy solutions employed to overcome the assumption of the above theories that individuals have limited capacity to reason, figure out the structure of complex environments and cooperate to protect them (Ostrom 1990; Gilmour 2013). Government control incentivizes individuals to cooperate because they would be penalized for not doing so (Ostrom 1990; Dubbink and van Vliet 1996). Privatization, on the other hand, makes several assumptions regarding the nature of the resource, the relationship between the parties involved, and any external sources, as well as rarely taking into consideration social needs (Ostrom 1990; Graben 2010). Both policy solutions assume that any change to how a collective resource is managed has to be imposed from the outside, and that the primary beneficiaries of this change will be the relevant government or private owner (Ostrom 1990). However, colonial history also suggested that monitoring resource use and imposing sanctions was largely ineffective at excluding individuals from the commons and required a lot of resources to enforce (Gilmour 2013).

Collaborative environmental management (CEM), co-management, and other related theories arose in the 1970s as a critique of earlier theories (Pinkerton 2003). CEM was posed as a solution to problems with current resource management, mistrust between the parties involved, a decreased sense of responsibility by those involved in management, and the need to come up with a practical solution to environmental issues (Wondolleck and Yaffee 2000). This literature argues that resource management needs to operate on varying geographic and temporal scales, to deal with complexity, uncertainty and change, to acknowledge and make sense of community interests, to decentralize decision-making, and to provide images of success as a source of motivation (Wondolleck and Yaffee 2000).

By the 1990s, the majority of the literature supported community-based management as an effective means of achieving sustainable development of natural resources (Thinley 2010). Several approaches were proposed with varying levels and means of community involvement, and the discussion turned to the factors leading to successful community collaboration (Ostrom 1990). Elinor Ostrom argued that “communities of individuals have relied on institutions

resembling neither the state nor the market to govern some resource system with reasonable degrees of success over long periods of time” (Ostrom 1990, 1). There are examples in the literature of successful co-management (Jentoft and Kristofferson 1989) as well as failed attempts (Béné and Neiland 2006), but a closer analysis of the context of these examples can reveal the characteristics that led to each outcome. Ostrom suggested that there is not one absolute solution to natural resource management and that it is important to consider context in determining which approaches may be effective (Ostrom 1990; Wondolleck and Yaffee 2000).

#### **4.2.2 What is the theory?**

The alternative to top-down management explored by Elinor Ostrom in *Governing the Commons* (1990) was a cooperative set up by the user groups to manage the commons. In this case, the commons referred to common-pool resources that are large enough to make it costly to exclude potential resource users from the benefits of the commons, and can be degraded as a result. This differs from what are known as collective goods, which have a high cost of exclusion, but use of the resource does not take away from the resource itself (Ostrom 1990). Due to the informal nature of the internally enforced agreements, the cooperative can be mistaken for a lack of enforcement of natural resource management (Ostrom 1990). In practice, however, this informal nature has led to well-defined property rights as long as periodic modifications are incorporated to develop an effective system (Ostrom 1990).

Theories of cooperative natural resource management vary in terms of the level of involvement of resource users. Ostrom described a cooperative where decision-making authority and knowledge of the environment was held completely by the resource users. Other authors have described co-management as shared decision-making or knowledge-sharing between resource users and the management authority (Berkes 1994; Goodwin 2006; Graben 2010; Gilmour 2013). The relationship between resource users and the management authority varies across cases from a relationship where resource users are informed of management activities to the devolution of power where resource users are the final decision-makers on how the natural resources will be managed. Kyllönen et al. (2006) viewed co-management as a method of conflict management leading to sustainable resource use. CEM is a similar theory that encourages the exploration of underlying differences in values relating to natural resource management and recognizes the potential for joint values to emerge (Raitio 2008).

The goal of co-management is to increase the participation of marginalized stakeholder groups in the decision-making process by integrating their values and knowledge into the management process (Graben 2010). In contrast to co-management, the theory of new governance “advocates for the creation of rules by stakeholders through a bottom-up process premised on decentralization, adaptive learning, participation, and public-private collaboration” (Graben 2010, 4). New governance anticipates participation in the regulatory process through knowledge-sharing and developing a participant agreement (Graben 2010). Both of these systems are part of a larger movement of the rights of indigenous peoples to self-governance (Graben 2010). What all of the variations of collaboration have in common is a holistic and dynamic approach to resolving the challenges of natural resource management with the goal of integrating traditional or local knowledge with western science-based knowledge, and incorporating the concerns of local peoples (Graben 2010).

The term co-management originated with US Treaty tribes in western Washington State based on the *US v. Washington* (1974) court case, though at the time Judge Boldt called it “concurrent management” (Pinkerton 2003). The co-management described by Judge Boldt involved shared data collection to manage salmon stocks along the West coast of the United States and saw the government as an engaged partner rather than a delegator (Pinkerton 2003). Some of the characteristics necessary for co-management as described by the Boldt decision were trust within and between stakeholders, the power to exclude others from a defined territory, and clearly defined collective rights of the group (Pinkerton 2003). A distinction was made between communities of interest, made up of those who share a common interest, as compared to communities of place, made up of individuals connected to the same physical location. The literature indicates that communities of place have more direct incentives for co-management and will likely be more successful as a result (Pinkerton 2003).

### **4.2.3 Benefits**

As Ostrom pointed out, there is no one answer to all natural resource management problems and it is important to keep in mind the context in which the management is taking place. However, as one of the solutions, collective action shows an increase in the total net benefits when compared to a system of disorganization (Ostrom 1990). These benefits include conflict management, decreased monitoring and enforcement costs, increased knowledge that can be used in decision-

making, empowerment of local communities, and the promotion of adaptive and trans-boundary resource management.

Natural resource management has a high potential for conflicts. To overcome potential conflicts, dispute resolution has been suggested as a form of collaborative problem solving (Wondolleck and Yaffee 2000). Potential conflicts can be predicted by knowing people's values and how their beliefs regarding a project are linked to those values (Hrezo and Hrezo 1984). These values shape the attitudes and actions of individuals toward an issue, such as environmental management (Hrezo and Hrezo 1984). The idea of rational action explains that an individual's behaviour depends, not only on their previously held values, but also on how they learn about the problem, how they view the cost/benefit of acting, and what they perceive the outcome of their action to be (Popper 1967). Consequently, an increased understanding of the concerns and values held by a stakeholder group can reduce the potential for conflict that may result from natural resource management, thus leading to the long-term success of management (Ostrom 1990; Wondolleck and Yaffee 2000; Thinley 2010).

A reduction in conflict between resource users and the management authority decreases the costs associated with monitoring and enforcing management regulations (Gilmour 2013). Limited resources have resulted in collaboration becoming a necessary part of natural resource management, even increasing the use of volunteer organizations (Wondolleck and Yaffee 2000). The collaboration process helps to foster a sense of respect and trust between the parties involved (Ostrom 1990; ILSD 2013).

Another benefit of CEM is increased access to information, which enables better decision-making (Wondolleck and Yaffee 2000; Thinley 2010). Government is no longer seen as the best or only source of information (Wondolleck and Yaffee 2000). As Hrezo and Hrezo explained, "to ignore another's perspective because it seems strange or overly theoretical causes the loss of valuable insights and information" (1984, 137). With the blending of scientific and traditional or local sources of information, the overall lack of knowledge regarding the influence of natural resource management will decrease over time (Ostrom 1990). A fuller understanding of the information available leads to management that can be specifically tailored to local conditions

and ensures that as many potential concerns as possible are addressed early on (Jentoft 2000; Thinley 2010; Gilmour 2013)

By incorporating traditional or local knowledge and concerns into the decision-making process, people and communities are empowered and made to feel an increased sense of responsibility towards how natural resources are managed (Thinley 2010). It has also been argued that involving communities in the management of local natural resources is more democratic or ethical (Leskinen 2003; Gilmour 2013). Thus, the literature has demonstrated that there are social benefits to co-management, in addition to the better management of natural resources.

Collaboration is an essential element of the increasingly popular trans-boundary natural resource management, where the goal is to manage ecosystem instead of political boundaries (Wondolleck and Yaffee 2000). It allows for agencies, organisations, and communities to evolve and adapt to changing socioeconomic, political and environmental circumstances (Wondolleck and Yaffee 2000). As Thinley indicated, it provides an opportunity to “integrate environmental and social concerns into decision-making processes and support sustainable development” (2010, 22). By allowing for the analysis of a management plan to take place at multiple levels, managers are given a holistic view of the ecosystem being managed (Ostrom 1990).

#### *4.2.4 Challenges*

Despite the many benefits of CEM, there are several challenges associated with this management system. The primary challenge is that a management system founded on people rather than formal institutions relies partially on the ability to understand human behaviour. If knowledge of the management area and decision is accurate and individuals understand this information, it is likely to predict individual behaviour, but this is rarely the case in practice (Ostrom 1990). The problem is that humans will behave reasonably under some circumstances, but not others (S. Kaplan 1984). CEM overcomes this challenge by putting emphasis on the circumstances in which management is taking place and determining whether collaboration is a good solution.

Another challenge of CEM is barriers to collaboration due to the attitudes of those involved. There is often mistrust between the public and the government with the public being concerned that positive changes are just empty promises (Wondolleck and Yaffee 2000). Differences in



organizational norms and cultures can make it difficult for the parties involved to work together, which could be emphasized by a fear that to compromise would result in a dilution of a group's values on the part of the public (Wondolleck and Yaffee 2000). An overall concern is that if one side is perceived to lack faith or support in the collaboration process, it can cause others to lose faith in the process as well due to its integrated nature (Wondolleck and Yaffee 2000).

In addition to challenges associated with the individuals and groups involved in CEM, there are challenges associated with the process itself. The emphasis on top-down management in recent history, has led to unfamiliarity with a collaborative process (Wondolleck and Yaffee 2000). As a result, those involved might underestimate the amount of time necessary for the process to be effective, and the importance of communication (Wondolleck and Yaffee 2000). Unfamiliarity with the process also means that those involved need to be trained in how to ensure effective collaboration is taking place and that there may be few available individuals with experience in this department (Wondolleck and Yaffee 2000).

#### **4.2.5 Criticisms**

The modern world, particularly in North America, has tended to promote self-interest through competition, which can be a significant obstacle to the promotion of CEM (Wondolleck and Yaffee 2000). In order to overcome this barrier, it is important to recognize that collaboration can best satisfy self-interest (Wondolleck and Yaffee 2000). In the same vein of recognizing an alternative view of self-interest, the future needs to be valued compared to the present in order to promote collaboration with future benefits in mind (Ostrom 1990; Wondolleck and Yaffee 2000).

Kaplan indicates that having a system dependent on people assumes that the individuals involved in management understand what they are told, know what they want, and want to participate in the process (S. Kaplan 1984). In terms of individuals understanding what they are told, Kaplan argues that the difficulty is often with how the information is presented, rather than peoples' ability to manage the information (S. Kaplan 1984). While Kaplan concedes that it is often difficult for people to indicate what they want, it is far easier for them to indicate preference or likes and dislikes, which demonstrates an evaluation of the possible scenarios (S. Kaplan 1984). Lastly, Kaplan explains the apparent discrepancy between people wanting to participate in the

process, but not actively doing so when given the opportunity (S. Kaplan 1984). Based on psychological research, people do not want to participate in a process that is overwhelming or confusing, and tend to resort to the “us vs. them” paradigm as a result (S. Kaplan 1984).

Many other concerns have been documented by Wondolleck and Yaffee (2000). For example, if the management authority gives some decision-making power to the resource users, there will not be an individual body accountable for the outcomes of management; groups not involved in collaboration will become excluded from using public resources. Further, the idea of accountability is founded on a system of mistrust and does not allow for the flexibility necessary when conditions are not as predicted, which is often the case in managing natural resources. The building of trust between parties involved in management is a key aspect of collaboration. Through relationship-building and having more people involved and watching, it is possible to reach a higher level of accountability. However, it is important to monitor and evaluate the efficacy of decisions, provide opportunities for decisions to be appealed, and ensure all affected groups are able to participate in the CEM process. (Wondolleck and Yaffee 2000)

The co-management process requires a high level of support from the management authority, and assumes that the community stakeholder is a single, unified entity capable of and desiring to share their knowledge (Ostrom 1990; Graben 2010). This view can be problematic, as a community is not a homogenous entity with consistent views and values (Goodwin 2006; Graben 2010). Graben (2010) suggests that the community is a unit of local government and, as such, should not be viewed as representing the values of each community member individually, but being representative of the community’s own majority.

Horn (1996) questioned whether minorities should have special treatment to remain a distinct group and whether it was even necessary to involve everyday citizens in politics. The concern is that with co-management, the majority involved in decision-making is very different from the majority of the nation as a whole, thus disempowering the majority in favour of the minority (Wondolleck and Yaffee 2000). However, the subsidiary principle suggests that decisions should be made by those who will be most affected by them (Horn 1996).

A major criticism of co-management is that the collaboration is often superficial, as the management authority still holds the ultimate power to determine whether an argument by the

community is reasonable (Graben 2010). For indigenous communities, whether or not they are able to participate in co-management activities often depends on if their indigenous rights are recognized by the management authority (Graben 2010). If the management authority does not recognize a community's right to participate in the process or does not agree with the viewpoint of a community, it has the power to ignore community wishes. This can be seen where the traditional knowledge held by the community does not parallel the knowledge provided by the scientific community, who may be considered more credible (Wondolleck and Yaffee 2000; Gilmour 2013). While this is often the case when co-management is used within an existing management system, it is only one end of the spectrum of co-management and not representative of every level of collaboration. The overall goal is to build trust between those groups involved in CEM in order to promote true knowledge-sharing and collaborative decision-making (Gilmour 2013).

“The transnational proliferation of co-management arrangements makes it a global phenomenon which invites generalizations” (Graben 2010, 12). Critics of co-management have tended to find fault with the theory as it applies to natural resource management as a whole, rather than looking at it on a case-by-case basis. The benefit of a co-management system is in its ability to adapt the system to the specific social, ecological, cultural, and economic environment being managed. However, it is important to note that collaboration will not always be the optimal solution and managers should use the strategy most suited to their context.

#### ***4.2.6 CEM in the context of indigenous peoples' involvement in EIAs***

The recognition of indigenous peoples' rights as stakeholders in natural resource management through international agreements and domestic court cases has increased the applicability of CEM theory (Graben 2010). CEM provides a means through which stakeholders can actively participate in the decision-making process of natural resource management (Graben 2010).

The involvement of local communities and stakeholders in natural resource management decisions comes, in part, from the communities themselves noting the need for their input at each stage of the management process (Graben 2010). The rationalization comes from them having unique insights due to their close relationship with the environment and from a high potential for conflicts (Graben 2010). By involving local communities in the management process as

stakeholders they develop more of a vested interest in the outcome of management compared to if they were excluded from the process (Berry 2001). The theory of CEM identifies characteristics of the community that are likely to result in successful collaboration and natural resource management.

It is important to apply the theory of co-management to the involvement of indigenous peoples in natural resource management because existing legislation involving this integration often does not take into account the dynamic nature of communities and differences between them (Graben 2010). There are many challenges facing indigenous communities that can affect their ability to effectively participate in a CEM process, such as inequality within the community, a hesitance to share traditional knowledge due to an uncertain legal standing, and economic circumstances within the community (Graben 2010). The aspects of a healthy community tie in directly to that community's ability to effectively participate in CEM (Graben 2010).

Some of the key characteristics and outcomes of CEM are aspects that are currently lacking in indigenous peoples' involvement. Research has shown that the trust and shared knowledge crucial to effective management are improved by actively involving stakeholders in the conversation and decision-making (Gilmour 2013). Differences in power between stakeholder groups and between stakeholders and the management authority can hinder the process of building trust and a bank of shared knowledge (Gilmour 2013). While it can be difficult to achieve due to differences in values and language, as well as the political environment of indigenous rights, the collection of knowledge from a multitude of sources is another aspect of effective collaboration (Connick and Innes 2003). One study observed that First Nation consensus building tools were more effective in the current context than Western ideas of facilitation, which suggests that only small groups can come to a consensus (Cheney 2012). The tools used helped build trust between the individuals involved in management, as one participant put "all people had shared their stories, and everyone had listened and heard" (Cheney 2012, 157). Despite differences between those involved in collaboration, the group needs to see that their core values are the same (Cheney 2012).

One of the main goals of environmental impact assessments (EIAs) is to collect information that can be used to develop informed decisions about a specific project (Hrezo and Hrezo 1984).

However, EIAs have been criticized as being used to justify a decision rather than inform one (Hrezo and Hrezo 1984). By involving people in every stage of the process, the goal of developing an extensive knowledge base can be met along with the avoidance of controversy resulting from poor communication (Hrezo and Hrezo 1984). In Finland, public participation in forest management has two main goals: at the regional level it promotes communication, and at the local level it gathers information (Leskinen 2003). Leskinen (2003) argues that participation is most effective when the goal is communication, rather than information gathering, but acknowledges that successful participation will consist of learning, relationship-building, sharing knowledge, and interest representation. For effective involvement, participants need to understand the situation in which management is taking place, to understand what is expected of them, and to be able to see the result of their input in the final outcome (R. Kaplan 1984).

By applying the components of successful CEM to specific cases of indigenous peoples' involvement in EIAs, it is possible to identify circumstances that are more conducive to collaboration and instances where collaboration is not the optimal management method.

#### ***4.2.7 CEM Framework***

To apply the theory of CEM in assessing the level of involvement of indigenous peoples in the EIA processes in Labrador, Canada and Lapland, Finland, a list of the characteristics of effective CEM found throughout the literature was compiled (Table 2). There were some characteristics that arose more frequently in the literature or were identified by the literature as being more influential than others. To take this into consideration a weighting system was employed that provided a value to each characteristic. The higher the overall value, the more likely the CEM system was to be successful. For each of the case studies Ostrom (1990) analysed with an unsuccessful outcome no more than three of the characteristics were met, so the number of components met overall will be considered. The list of weighted components was applied to the information gathered from the content analysis. Where components cannot be assessed based on the nature of legislation, they will be noted in Chapter 5.

**Table 2** Characteristics of co-management and their corresponding weighting based on the literature (Ostrom 1990; Wondolleck and Yaffee 2000; Pinkerton 2003; Moller et al. 2004; Gilmour 2013)

#	CEM components	Weight
1	Knowledge integration	3
2	Community is actively involved in decision-making	3
3	Rights and responsibilities are clearly defined	3
4	Mechanisms for conflict resolution and debate	3
5	All parties perceive a responsibility to act and recognize their shared values	3
6	Co-management participants trust one another	3
7	Community is well-defined and cohesive	2
8	Resources are well-defined	2
9	Mechanisms for monitoring	2
10	Mechanisms for graduated sanctions that are enforced	2
11	Opportunities for new interactions to build trust	2
12	Opportunities to experiment and adapt the management	2
13	Communities receive support and resources	2
14	Applied to the local conditions	2
15	Collaboration occurs early and at several stages in the process	1
16	Nested enterprises	1
17	Effective and time-sensitive	1
18	Self-sustaining and endures over time	1
19	Solve the problem, not any underlying conflict	1
20	Small-scale; low number of decision makers and preferably within 1 country's borders	1
21	Community is heavily dependent on the resources	1
22	Rate of discounting the future over the present is low	1

## 5. RESULTS

---

Chapter 5 focuses on identifying and describing the results of the content analysis. The wording in the legislation that either supports or discourages the components of the *ILO Convention No. 169* and the collaborative environmental management (CEM) framework is identified. Once relevant wording from the legislation is identified, the author's interpretation of how it aligns with the specific component is described. These results will be organized in two tables and any trends in the data will be summarized.

## 5.1 *ILO Convention No. 169*

### 5.1.1 *Recognition of indigenous peoples as having rights related to their culture, history and values*

One of the first steps in the environmental impact assessment (EIA) process is to identify stakeholders that may be affected by the proposed development and thus should be included in the EIA process. The *ILO Convention No. 169* recognizes indigenous peoples as being a unique rights-holder group, which require special measures to safeguard their individual and collective rights as a result of injustices and prejudices that have inhibited their access to universal human rights (ILSD 2013).

The EU's *EIA Directive* puts the responsibility to identify stakeholders on its Member States depending on the characteristics of the project (EU 1985). It does specify in Annex III that “a description of the aspects of the environment likely to be significantly affected by the proposed project” be sent to the affected parties, including potential impacts to archaeological heritage (EU 1985, Annex III). The EU's *EIA Directive* does not directly meet this component, but it does not prohibit Member States from recognizing indigenous peoples as a distinct group. Finland's *Act on the Environmental Impact Assessment Procedure* makes no reference to the Sámi as being a distinctly affected member of the public, nor does it provide any unique direction for potential impacts to their culture, history or livelihoods.

Throughout the *Canadian Environmental Assessment Act, 2012*, aboriginal people are mentioned specifically, which demonstrates recognition of them as a distinct group. However, the onus is placed on the responsible authority to determine if an individual or group will be affected by a proposed project and considered an “interested party”, thereby allowed to participate in the EIA process (GC 2012, 2(2)). The responsible authority is also required to consult with an affected aboriginal band if the project falls within their jurisdiction, likely reserve land (GC 2012). An example of the *Canadian Environmental Assessment Act, 2012* meeting the first component of the *ILO Convention No. 169* is in the description of environmental effects. The Act defines environmental effects with respect to aboriginal peoples as “an effect occurring in Canada of any change that may be caused to the environment on (i) health and socio-economic conditions, (ii) physical and cultural heritage, (iii) the current use of lands and resources for traditional purposes,

or (iv) any structure, site or thing that is of historical, archaeological, paleontological or architectural significance” (GC 2012, 5(1)c). While not a requirement under the Act, EIAs may take into consideration community knowledge and aboriginal traditional knowledge (GC 2012, 19(3)). Based on this information, the *Canadian Environmental Assessment Act, 2012* does recognize aboriginal groups as distinct rights-holders.

Newfoundland and Labrador’s *Environmental Protection Act* specifies that it “shall be read and applied in conjunction with the *Labrador Inuit Land Claims Agreement Act*” and that where there are inconsistencies or conflicts between the two documents, “the *Labrador Inuit Land Claims Agreement Act* shall have precedence” (GNL 2002, 4(5)). This recognizes the unique rights of indigenous peoples where a land claim has been settled. The definition of environment includes: “the social, economic, recreational, cultural and aesthetic conditions and factors that influence the life of humans or a community” (GNL 2002, 2(m)iii). This provides the opportunity to consider an aboriginal group, with whom no land claim agreement exists, as a distinct community as well, though it is not explicitly stated. Based on these two factors, Newfoundland and Labrador’s *Environmental Protection Act* meets this component.

### ***5.1.2 Self-identification as an indigenous group***

The *ILO Convention No. 169* indicates that self-identification as indigenous is a crucial aspect of being considered a rights-holder under the Convention. In practice, indigenous peoples for the purposes of the Convention are those regarded as indigenous at the time the State boundaries were laid out (Joonas and Joonas 2011; ILSD 2013). The EU’s *EIA Directive* and Finland’s *Act on the Environmental Impact Assessment Procedure* do not mention indigenous peoples specifically and thus do not provide a description of who would be considered a member of an indigenous peoples.

While the *Canadian Environmental Assessment Act, 2012* does not specifically discuss how to determine membership within an indigenous group, it does consider an Indian self-governing body that has responsibilities relating to the assessment of environmental effects of a designated project under its definition of jurisdiction (GC 2012). Based on this definition, a body responsible for the self-government of Indians, such as a band council, could be delegated responsibilities related to the EIA process as identified in the *Canadian Environmental*



*Assessment Act, 2012*. As the Indian governing body that falls under this definition of jurisdiction “is established under legislation”, it does not align with the component of self-identification as an indigenous group (GC 2012, 2(1) jurisdiction *f*).

Newfoundland and Labrador’s *Environmental Protection Act* does not mention indigenous peoples specifically, other than the Labrador Inuit in reference to their land claims agreement (GNL 2002). It does not provide a description of who would be considered a member of an indigenous group for the purpose of the EIA process.

The second component laid out in the ILO Convention of self-identification as an indigenous group has not been clearly met by any of the legislation analysed. Alignment with this component may be addressed outside of the EIA process in other legislation.

### ***5.1.3 Governments have a responsibility to protect the rights of indigenous groups with their participation***

The Convention outlines the different rights or duties of the parties involved in protecting the rights of indigenous peoples, though how to do this is ultimately left up to the discretion of the State government (Joonas and Joonas 2011).

The EU’s *EIA Directive* does not directly address how governments are to protect the rights of indigenous peoples with their participation, but does identify the requirement to “inform the public concerned of: the content of the decision and any considerations attached thereto; the reasons and considerations on which the decision is based” (EU 1985, 9). The rationale must include consideration of the public input. This only moderately meets the third component of the ILO Convention because there is no requirement to have the public participate in the decision, just to inform them of the decision and rationale after it has been made.

Finland’s *Act on the Environmental Impact Assessment Procedure* does not specify how public input collected during the EIA process will be considered, though the EIA decision needs to be considered in the final approval. The Act does provide the opportunity to appeal a decision after the fact provided there is evidence that an EIA was not carried out or not carried out adequately (FMOE 1994).

The *Canadian Environmental Assessment Act, 2012* outlines the creation of the Canadian Environmental Assessment Agency, which has the objective “to engage in consultation with Aboriginal peoples on policy issues related to this Act” (GC 2012, 105g). This very clearly meets the third criteria of recognizing government’s responsibility to protect the rights of indigenous peoples with their participation.

Newfoundland and Labrador’s *Environmental Protection Act* identifies that one of the purposes of its EIA section is to “protect the environment and quality of life of the people of the province” (GNL 2002, 46a). In the assessment of a proposed project, the Minister appoints “an assessment committee for the purpose of advising him or her on scientific and technical matters” with representatives from interested government departments (GNL 2002, 52(1)). The Minister is also required to develop a procedure for public involvement and contact with the proponent of the proposed project (GNL 2002). Where it is determined that a project is not in the public interest, the EIA can be halted and the proponent must be informed of the reasons (GNL 2002). The responsibilities of government to protect the environment and quality of life of the general public and to develop a process for public participation provide an avenue through which aboriginal peoples can participate in the process and have their rights protected as a member of the general public. While not met specifically, this has the potential to fulfill the third component of the ILO Convention.

#### ***5.1.4 Participation and consultation are done in good faith***

For the purposes of EIAs, the Convention indicates that participation and consultation must be done in good faith with consideration given to the input of affected indigenous peoples.

The EU’s *EIA Directive* requires that a request for approval and information gathered during the EIA are made available to the public and that “the public concerned is given the opportunity to express an opinion before the project is initiated” (EU 1985, 6(2)). In addition to an opportunity to express their concerns, the information gathered during the EIA must be considered in the process of providing consent to continue with the project to the developer (EU 1985). Therefore, affected indigenous peoples would be able to have their concerns heard and considered through the public consultation process, which moderately meets the fourth component.

One of the goals of Finland's *Act on the Environmental Impact Assessment Procedure* is "to increase the information available to citizens and their opportunities to participate" (FMOE 1994, 1). Participation in the EIA process is described as an interaction between the developer, authorities, and any party "whose circumstances or interests may be affected by the project" (FMOE 1994, 2(7)). Within the definition of an EIA procedure is the intention that the views of "those parties whose circumstances or interests may be affected by the project...are heard" (FMOE 1994, 2(2)). The public must be notified of the proposed EIA process and given the opportunity to provide opinions on the EIA process for a given project once it has been determined that an EIA is required (FMOE 1994). Based on this feedback the coordinating authority must determine how the process needs to be revised, if necessary, and outlines "how public notification and hearings will be arranged" (FMOE 1994, 9(1)). The same process of public notice and opportunity to express opinions occurs once the EIA report has been published (FMOE 1994). In cases where the proposed project may have a transboundary environmental impact, the coordinating authority shall ensure notification is given to the other state and they are provided with an opportunity to express opinions (FMOE 1994). It would be the responsibility of the other state to determine if indigenous peoples within their borders should be notified and consulted. This meets the fourth component to the same extent as the EU's *EIA Directive*.

Two of the purposes of the *Canadian Environmental Assessment Act, 2012* are "to promote communication and cooperation with aboriginal peoples with respect to environmental assessment" and "to ensure that opportunities are provided for meaningful public participation during an environmental assessment" (GC 2012, 4(1)d-e). The *Canadian Environmental Assessment Act, 2012* indicates that an EIA "must take into account... (c) comments from the public" (GC 2012, 19(1)). The EIA may, though it is not a requirement, "take into account community knowledge and Aboriginal traditional knowledge" (GC 2012, 19(3)).

Under the *Canadian Environmental Assessment Act, 2012*, the "responsible authority must ensure that the public is provided with an opportunity to participate in the environmental assessment" and given a reasonable amount of time to comment (GC 2012, 24). Any time limits associated with the public notice periods must be made clear in the notices (GC 2012). A website and project files called the Canadian Environmental Assessment Registry was created to facilitate timely public access to EIA records (GC 2012). Regulations around the management of

the online Registry can be made by the Minister of the Environment (GC 2012). A project file must be created, which includes any comments received from the general public (GC 2012). Any project where an EIA was excluded due to an emergency must be posted to the website, although projects excluded due to national security will not be posted (GC 2012). To notify the public of the commencement of an EIA, a notice must be posted to a designated website (GC 2012). Even when the decision is that no EIA is required because the “project is not likely to cause significant or adverse environmental effects or [adverse effects] are justified in the circumstances”, there is a requirement to notify the general public through posting the decision on a website (GC 2012, 7b). If an EIA is required, a copy of the draft report and an invitation to provide comments must be posted to the website and otherwise made available to the public (GC 2012). These comments need to be taken into consideration when the report is finalized and, once the final decision has been made, this must also be posted on the website (GC 2012).

Part or all of the EIA and preparation of the EIA report can be delegated to another jurisdiction, including a recognized band council (GC 2012). If part or all of an EIA is delegated to another jurisdiction, this must be made clear on the public notices (GC 2012). An EIA conducted by the National Energy Board or a joint review panel must meet all the same requirements outlined above (GC 2012). A hearing by a review panel must be made public, unless information from a witness would substantially harm the witness or cause specific harm to the environment (GC 2012). Any activities on federal land or using federal funding outside of Canada that did not trigger an EIA must be reported to the public annually (GC 2012). If a study on the environmental impacts of development in a region is conducted, the report must be made available to the public (GC 2012).

Based on this information, the *Canadian Environmental Assessment Act, 2012* provides a lot of detail in how the public should be consulted throughout the EIA process. It enables indigenous peoples to be consulted as a member of the general public, but also indicates that areas where they are treated as a unique group, such as with the recognition of distinct aboriginal traditional knowledge. Therefore, the *Canadian Environmental Assessment Act, 2012* meets the fourth component of the *ILO Convention No. 169*.

A requirement of an environmental impact statement under Newfoundland and Labrador's *Environmental Protection Act* is that it includes "a proposed program of public information" (GNL 2002, 57*i*), including: "An opportunity for interested members of the public to meet with the proponent at a place adjacent to or in the geographical area of the undertaking" as part of the preparation of environmental impact statement (GNL 2002, 58(1)). At this event, the local community is provided with information about the project and given the opportunity to have their concerns recorded and answered (GNL 2002). In cases where the minister responsible for this act "believes there is a strong public interest in an undertaking for which an environmental impact statement is required," a public hearing may be ordered and a board appointed to conduct it (GNL 2002, 63(1)). The board will submit to the minister "a written report containing the (a) proceedings of a public hearing; (b) recommendations made at a public hearing; and (c) recommendations of the board" (GNL 2002, 65). The authority may create regulations to outline procedures for public involvement in the EIA process (GNL 2002). This meets the fourth component to the same extent as the EU's *EIA Directive*.

### ***5.1.5 Recognition of the rights of ownership and possession to traditional territory***

In most cases, formal recognition of the rights of indigenous groups to ownership and possession of their traditional territory would occur outside of the EIA process and therefore may not be covered in detail in EIA legislation. For example, Finland's *Act on the Environmental Impact Assessment Procedure* does not mention the traditional territory of indigenous groups as being recognized or having different rules when it comes to EIAs.

In the EU's *EIA Directive*, the proponent of a project needs to include aspects of archaeological heritage and landscape that may be affected by the proposed project in the information submitted to the Member State (EU 1985). However, this does not indicate recognition of the rights to ownership of areas that include archaeological features of the indigenous groups who traditionally occupied that area.

In its definition of federal land, the *Canadian Environmental Assessment Act, 2012* includes "reserves, surrendered lands and any other lands that are set apart for the use and benefit of a band and that are subject to the *Indian Act*, and all waters on and airspace above those reserves

or lands” (GC 2012, 2(1) federal lands c). This indicates that some lands are set aside for the use of certain recognized indigenous peoples, but categorizes them as ultimately being owned by the federal government and these lands may not encompass the territory which these indigenous peoples traditionally occupy. Based on this information, the fifth component of the *ILO Convention No. 169* is not clearly met by these three pieces of EIA legislation.

Newfoundland and Labrador’s *Environmental Protection Act* mentions the existence of the *Labrador Inuit Land Claims Agreement Act*, which recognizes the traditional territory of the Labrador Inuit (GNL 2002). The rest of the *Environmental Protection Act* does not mention the traditional territory of other indigenous peoples in the province, so this component is only moderately met.

### ***5.1.6 Recognition of the rights to participate in the use, management and conservation of resources***

As one of the goals of EIAs is to effectively and responsibly manage natural resources, it could be expected that the role of indigenous peoples in this process would be considered as part of EIA legislation. Finland’s *Act on the Environmental Impact Assessment Procedure* does not mention the right of indigenous groups to participate in the management of natural resources specifically. However, they are able to have their input heard as a member of the general public, which moderately meets this component.

In the EU’s *EIA Directive*, the proponent of a project needs to include “a description of the aspects of the environment likely to be significantly affected by the proposed project, including, in particular, population, fauna, flora, soil, water, air, climatic factors” in the information submitted to the Member State (EU 1985, Annex III). Impacts to these factors are to be considered as part of the EIA process along with public input into these potential impacts. Indigenous peoples are not mentioned as a specific rights-holder group when it comes to the management of natural resources, but are able to participate as a member of the general public.

Within the *Canadian Environmental Assessment Act, 2012*, the environmental effects that are to be considered during the EIA include “with respect to aboriginal peoples, an effect occurring in Canada of any change that may be caused to the environment on... (iii) the current use of lands and resources for traditional purposes” (GC 2012, 5(1)c). This wording recognizes the rights of

aboriginal peoples to participate in the traditional use of lands and resources, which meets the sixth component of the *ILO Convention No. 169*.

Newfoundland and Labrador's *Environmental Protection Act* recognizes the authority of the *Labrador Inuit Land Claims Agreement Act*, which enables the Labrador Inuit to participate in the management of the natural resources they traditionally use (GNL 2002). No further mention is made of the rights to participate in the management of natural resources for other indigenous peoples. Indigenous peoples do have the right to have their input into the management of natural resources heard as a member of the general public (GNL 2002). Therefore, this component is met to a moderate extent.

### ***5.1.7 Transboundary consideration to address issues of the indigenous peoples as a whole***

Some projects for which an EIA is required may have the potential to cause impacts that span political borders, similarly indigenous peoples' traditional territory does not necessarily follow political borders. The EU's *EIA Directive* acknowledges this nature by requiring Member States to inform other Member States of a project that requires an EIA where the project has the potential to affect the other Member State and use that information for any consultations required in a bilateral relationship between these countries (EU 1985). There is also a requirement to inform the other Member State of the final decision that comes out of the EIA process (EU 1985). This does not guarantee that indigenous peoples whose traditional territory spans borders will be provided with the same opportunities on either side of the border, but does create the possibility of a more holistic response to indigenous peoples' rights.

Chapter 3 of Finland's *Act on the Environmental Impact Assessment Procedure* is entirely devoted to transboundary environmental impacts. This chapter outlines an international obligation to provide a state that may be affected by a proposed project with information on the project, the EIA process, any potential impacts, and the time period to express an interest in participating in the process (FMOE 1994). If they express an interest, the members and representatives of the affected jurisdiction must provide them with an opportunity to participate in the EIA process (FMOE 1994).

If the EIA process of another jurisdiction would be an appropriate substitute for the EIA process in the *Canadian Environmental Assessment Act, 2012*, the substitution may be approved and notice of it posted on the registry website (GC 2012). Within its definition of jurisdiction, the *Canadian Environmental Assessment Act, 2012* includes “(g) a government of a foreign state or of a subdivision of a foreign state, or an institution of such a government; and (h) an international organization of states or any institution of such an organization” (GC 2012, 2(1) jurisdiction). An equivalent provincial assessment may be done in cases where a project triggers both provincial and federal EIAs (GC 2012). Under a substitution, the public is still given an opportunity to participate in the EIA, and access records and the final report (GC 2012). When an EIA is to be conducted by a review panel or a regional study is to be conducted, a review panel or committee may be established jointly with the participation of affected jurisdictions (GC 2012).

In cases where an EIA is triggered both under the Newfoundland and Labrador’s *Environmental Protection Act* and the EIA legislation of Canada or another province or territory, the EIA may be conducted uniformly across the jurisdictions or an agreement of how the EIA should proceed will be established (GNL 2002). Similarly, a joint review panel could be established across the affected jurisdictions (GNL 2002). In all four EIA legislations, indigenous peoples in a transboundary context are provided with the opportunity to participate in a transboundary EIA as members of the general public.

### **5.1.8 Capacity funding**

The ability for indigenous peoples to effectively participate in the EIA process is dependent on their capacity to use resources for that purpose. The inclusion of funding in EIA legislation either to improve the capacity of indigenous peoples or the public to participate in the EIA process, or to develop programmes for effective participation of indigenous peoples indicates that this component has been met.

The EU’s *EIA Directive* makes no mention of capacity funding as a requirement of the EIA legislation of its Member States. Finland’s *Act on the Environmental Impact Assessment Procedure* puts the responsibility for funding “public notification, hearings and studies of environmental impact, and for the cost of translations needed in the assessment of transboundary



impact” on the developer (FMOE 1994, 4(22)). There is no mention in this Act of funding to the public for their participation in the process.

Under the *Canadian Environmental Assessment Act, 2012* it is a requirement that “a participant funding program to facilitate the participation of the public in the environmental assessment” of a designated project which triggered an EIA be established unless a substitution was approved (GC 2012, 57 and 58). Regulations around such a participant funding program may be created by the Minister (GC 2012). Where the Canadian Environmental Assessment Agency incurs costs associated with the EIA of a designated project, the proponent must reimburse them, particularly for services incurred by a third party conducting the EIA (GC 2012). This indicates that indigenous peoples are able to access capacity funding as members of the general public, though not necessarily as a distinct group unless specified in a regulation.

The only mention of funding being provided to the public for participation in the EIA process under Newfoundland and Labrador’s *Environmental Protection Act* is in regards to an environmental assessment board that may be established. Established for a project with strong public interest, this board of two to five members must be made up of one third “residents of the geographical area of the undertaking” (GNL 2002, 63(5)). For their time, the members of this board “receive remuneration and [are] reimbursed for expenses” the details of which may be outlined in a regulation (GNL 2002, 63(6)). However, this would be a very small portion of the general public and representation from affected indigenous communities on the board is not a requirement, so it does not meet the eighth component of the *ILO Convention No. 169*.

### ***5.1.9 Summary of ILO Convention No. 169 components in the legislation***

The results of the content analysis of the selected EIA legislation with the *ILO Convention No. 169* framework are summarized below in a matrix (Table 3). The maximum value a piece of legislation can have in this analysis is 16, when each component is strongly met. The *Canadian Environmental Assessment Act, 2012* ranked the highest of the four pieces of legislation overall, as the components it met were often strongly met. Newfoundland and Labrador’s *Environmental Protection Act* was ranked second, although it met the same number of components as its federal counterpart, with six of the eight components being either moderately or strongly met. Both the EU’s *EIA Directive* and Finland’s *Act on the Environmental Impact Assessment Procedure* were

ranked the lowest with five and three components met respectively and none of the components being strongly met for either document.

When looking at each piece of legislation together, the components that were most commonly met were the recognition of indigenous peoples as having rights related to their culture, history and values, participation and consultation being done in good faith, recognition of the rights to participate in the use, management and conservation of resources, and to a lesser extent transboundary consideration to address issues of the indigenous peoples as a whole. The components that each of the four pieces of legislation struggled to meet are self-identification as an indigenous group, recognition of the rights of ownership and possession to traditional territory, and capacity funding.

**Table 3** Matrix summarizing the extent to which each component of the *ILO Convention No. 169* is met within the four pieces of environmental impact assessment legislation analysed: the European Union's *EIA Directive*, Finland's *Act on the Environmental Impact Assessment Procedure*, the *Canadian Environmental Assessment Act, 2012*, and Newfoundland and Labrador's *Environmental Protection Act* (0 = not met; 1 = moderately met; 2 = strongly met).

#	<i>ILO Convention No. 169</i> Component	European Union	Finland	Canada	Newfoundland and Labrador
1	Recognition of indigenous peoples as having rights related to their culture, history and values	1	0	2	2
2	Self-identification as an indigenous group	0	0	0	0
3	Governments have a responsibility to protect the rights of indigenous groups with their participation	1	0	2	1
4	Participation and consultation are done in good faith	1	1	2	1
5	Recognition of the rights of ownership and possession to traditional territory	0	0	0	1
6	Recognition of the rights to participate in the use, management and conservation of resources	1	1	2	1
7	Transboundary consideration to address issues of the indigenous peoples as a whole	1	1	1	1
8	Capacity funding	0	0	1	0
<b>Total</b>		<b>5</b>	<b>3</b>	<b>10</b>	<b>7</b>

## 5.2 Collaborative Environmental Management

There were six components of successful CEM that could not be evaluated due to the nature of EIA legislation and what it is intended to cover. These included co-management participants trust one another, the system is self-sustaining and endures over time, the goal is to solve the problem instead of any underlying conflict, it occurs at a small-scale, the community is heavily dependent on the resources being managed, and there is a low rate of discounting the future over the present.

The level of trust between participants could not be analysed by the four pieces of legislation, as they do not address the interpersonal relationship between parties. Similarly, alignment with the component of CEM that indicates the importance of having a long-term perspective and not discounting the future over present values would be revealed in the perspectives of the parties involved and implementation of the legislation in practice. Whether the system is able to endure over time can only be determined when looking at past cases.

Since EIA legislation focuses specifically on development projects that are included on a list of projects that may require an EIA, it could be perceived as focusing on solving the problem of assessing and minimizing the environmental impacts of those projects. However, the extent to which the component of solving the problem at hand instead of underlying conflicts is achieved depends on one's perception of the problem and underlying conflict. Therefore, it cannot be clearly determined if the EIA legislation meets this component or not.

Each EIA process is applied at a project-specific level. A project, such as a hydroelectric dam may occur at a small-scale within one jurisdiction, whereas a long pipeline project may cross a large area and affect multiple jurisdictions. While the focus of an EIA is narrowed to a specific project or activity, the project and its potential impacts may not necessarily occur at a small geographical scale. Whether or not this component is met is more dependent on the specific project than on EIA legislation, which speaks to the EIA process in general. Similarly, whether the component of the community being heavily dependent on the resources being managed is met, is determined more by the individuals affected by a specific project and their relationship to the environment that may be affected by a project than on EIA legislation.

To ensure the analysis is applicable to the context of EIA legislation, these six components of CEM were excluded from the results to follow.

### *5.2.1 Knowledge integration*

The integration of knowledge from a variety of sources, including the local or traditional knowledge of the affected communities, is an important component of CEM and the EIA process.

The EU's *EIA Directive* requires that other government bodies and the public be provided with an opportunity to express their opinions about the project, and that this information must be considered in developing the EIA process (EU 1985). In order to submit their opinions, the affected parties need to be provided with information about the proposed project, including "an indication of any difficulties (technical deficiencies or lack of know-how) encountered by the developer in compiling the required information" (EU 1985, Annex III). While the EU's *EIA Directive* requires the incorporation of public opinion into the EIA process, it does not speak directly to integration of knowledge held by the public therefore it moderately meets this component.

One of goals of Finland's *Act on the Environmental Impact Assessment Procedure* is to "increase the information available to citizens and their opportunities to participate" (FMOE 1994, 1(1)). Information that the government determines to be "clearly unnecessary" does not need to be included in the information available to the public (FMOE 1994, 2(8)a). There is no mention of integrating knowledge brought forward by the public or indigenous groups, other than a requirement to consider their opinions in the decision.

The *Canadian Environmental Assessment Act, 2012* requires that comments from the public and expert information or knowledge from other federal authorities are incorporated into the EIA of a designated project (GC 2012). While not a requirement, "the environmental assessment of a designated project may take into account community knowledge and Aboriginal traditional knowledge" (GC 2012, 19(3)). It is unclear if this is not a requirement because community knowledge and aboriginal traditional knowledge are not available for every project or because they may not be integrated if there are conflicts with western scientific knowledge. As both

interpretations are reasonable, the legislation would not need to be changed to strongly meet the first CEM component.

Newfoundland and Labrador's *Environmental Protection Act* also provides an opportunity for interested persons, including members of the public and other government ministries, to submit comments or concerns regarding the environmental effects of a proposed project (GNL 2002). In cases where there is a public hearing for a project that requires an EIA, comments and questions shall be recorded and answered, where possible, and information shall be exchanged between the proponent and the public (GNL 2002). This presumes that the information exchange between the proponent and the public can go both ways with the public providing information that is considered as part of the final decision, which has the potential to meet this CEM component.

### ***5.2.2 Community is actively involved in decision-making***

There are different levels at which the community may be involved in the decision-making process. As these four pieces of EIA legislation hold a government body in the role of a final decision maker, it is unrealistic to assume that community members would be empowered to make the final decision. Therefore, to meet this component of CEM, the community will be considered actively involved when their concerns are documented and considered in the final decision.

The EU's *EIA Directive* places the responsibility on Member States to ensure that "any request for development consent and any information gathered...are made available to the public [and] the public concerned is given the opportunity to express an opinion before the project is initiated" (EU 1985, 6(2)). It is further required that information gathered during this process is considered in the final decision, which must be made available to the public along with "the reasons and considerations on which the decision is based" (EU 1985, 9). However, in cases where a proposed project is exempt from conducting an EIA, the public may not be notified of the decision for an exemption (EU 1985). Despite not notifying the public of decisions where no EIA is required, this legislation meets the second CEM component.

Finland's *Act on the Environmental Impact Assessment Procedure* includes in the definition of EIA procedure that "those parties whose circumstances or interests may be affected by the

project...are heard” (FMOE 1994, 1(2)2). Even in a transboundary context, the public of another state is given an opportunity to raise concerns related to a proposed project (FMOE 1994). If the affected public has been heard through reporting in accordance with another act and that act meets the requirements of this one, the EIA and public consultation during it will not be duplicated (FMOE 1994). Once a decision to conduct an EIA is made, it is posted on local municipality’s notice board and electronically for 14 days (FMOE 1994). The same process occurs once an EIA procedure is developed to outline the plan for studies, public notification and hearings, and the assessment final report (FMOE 1994). At each stage, public comments are outlined in the appropriate document and may be incorporated into a revision of the document after the period allowed for expressing opinions (FMOE 1994). The final EIA decision needs to be considered in the regulatory approvals for the project, though it is not clear how public comments are incorporated into the final decision just that they must be documented (FMOE 1994).

The aspects of the *Canadian Environmental Assessment Act, 2012* that contribute to meeting this component of CEM are closely related to those that went into meeting the fourth component of the *ILO Convention No. 169*. “To ensure that opportunities are provided for meaningful public participation during an environmental assessment” is one of the purposes of the *Canadian Environmental Assessment Act, 2012* (GC 2012, 4(1)e). The key word here is that the public participation, including participation from indigenous peoples as members of the general public, needs to be meaningful. In addition to public participation in the EIA process, the Canadian Environmental Assessment Agency commits “to engage in consultation with Aboriginal peoples on policy issues related to this Act” (GC 2012, 105g).

The public is invited to provide comments on a given project at various stages of the EIA process (screening, environmental assessment report, reconsideration report, hearings, final decision) though the time period within which comments will be accepted may be only 20 days in some cases (GC 2012). Any extensions to the time limits must be posted on the website (GC 2012). These comments must be considered by the decision maker at each stage of the EIA process, although the final decision is the responsibility of the responsible authority (GC 2012). In cases where an EIA is not required, public concern over the potential environmental effects of a project can provide enough justification to require an EIA although the decision to do so is still made by

the regulatory authority (GC 2012). The Governor in Council also has the authority to make regulations to vary or exclude “any requirement set out in this Act or the regulations” for activities that occur on reserves, or land covered by land claims with an aboriginal group (GC 2012, 83*d*). This has the potential to provide a higher level of consultation with indigenous peoples, though the practical interpretation of this wording is not outlined in the legislation. Based on having a goal of meaningful public participation and creating opportunities for public comment and the incorporation of those comments at each stage of the EIA process, the *Canadian Environmental Assessment Act, 2012* meets the second CEM component.

The Newfoundland and Labrador’s *Environmental Protection Act* requires that the environmental impact statement include, as part of the plan for informing the public, an opportunity for public feedback on the project in or adjacent to the geographical area of the undertaking (GNL 2002). Where a project is of particular concern to the public, an environmental assessment board can be appointed, with at least a third of its members being residents of the geographical area of the project, to conduct public hearings, record comments from the public, and provide recommendations (GNL 2002). The ultimate decision maker is the Lieutenant-Governor in Council who can also make regulations to outline details of public participation (GNL 2002). Based on this legislation, the public is given the opportunity to have their concerns heard and a limited number of affected individuals have the opportunity to be a member of a board to provide recommendations regarding the project. However, it is not clear how public input is incorporated into the final decision, which means this CEM component is only moderately met.

### ***5.2.3 Rights and responsibilities are clearly defined***

The third component of effective CEM is that all parties have clearly defined rights and responsibilities. In the context of EIAs, legislation and any associated regulations or policies would provide the framework for outlining the rights and responsibilities of all parties involved.

The EU’s *EIA Directive* is directed towards its Member States and aims to outline requirements when developing domestic EIA legislation. Some of the responsibilities placed on the Member States are to “determine the public concerned”, “specify the way in which the public may be informed”, and “determine the manner in which the public is to be consulted” (EU 1985, 6(3)). It

also specified in Annex III, the kind of information that must be sent to the affected parties (EU 1985). This clearly outlines the responsibilities of the Member States and the right of the public to be consulted.

Finland's *Act on the Environmental Impact Assessment Procedure* outlines the responsibilities of the coordinating authority to ensure an EIA is conducted for the proposed project and the developer to submit the proposed EIA plan as early as possible in the planning of the project (FMOE 1994). It indicates that the public has the right to submit comments regarding a proposed project and the responsibility to do so within the given time period (FMOE 1994). Finland's *Act on the Environmental Impact Assessment Procedure* defines the rights and responsibilities within the EIA process broadly and indicates that further details will be outlined in decrees and regulations created to supplement this legislation, however this does meet the third CEM component.

Under the *Canadian Environmental Assessment Act, 2012* an interested party is defined as a person who "is directly affected by the carrying out of the designated project or...has relevant information or expertise" in the opinion of the responsible authority (GC 2012, 2(2)). Based on the purposes of this Act, both the responsible authority and aboriginal peoples have a responsibility to communicate and cooperate with one another. Aboriginal peoples also have the right to be included in the EIA process where they are considered an interested party who may be subjected to the environmental effects of the proposed projects (GC 2012). The proponent of the project has the responsibility to not proceed with a project until it has been determined by the responsible authority that no EIA is required or until they comply with the conditions in the decision statement (GC 2012). Similarly, other federal authorities must not proceed with any regulatory approvals related to a proposed project until a determination that no EIA is required has been made or until the project complies with the conditions of the decision statement (GC 2012). Finally, the responsible authority has the responsibility to consult with affected jurisdictions about a project whose impacts have the potential to span jurisdictions, to promote consistency across jurisdictions, and to ensure public comments are considered in the final decision. Based on this information, the *Canadian Environmental Assessment Act, 2012* clearly defines the rights and responsibilities of the parties involved in the EIA process.



Newfoundland and Labrador's *Environmental Protection Act* has similar rights and responsibilities as the *Canadian Environmental Assessment Act, 2012* regarding the right to the public to be consulted and the responsibility to provide feedback in a timely manner, the responsibility of the proponent to not proceed until they have been exempt or released under this Act, and the responsibility of the minister to make a decision based on the information and concerns raised during the EIA (GNL 2002). For projects that require an environmental preview report or an environmental impact statement, the minister has the responsibility to appoint an assessment committee for technical advice with representatives from each department of government (GNL 2002). There is also a responsibility to include residents of the geographical area of the undertaking on the environmental assessment board if one should be established (GNL 2002). This outlines that this legislation clearly outlines the rights and responsibilities of the parties involved in an EIA.

#### ***5.2.4 Mechanisms for conflict resolution and debate***

With more individuals and groups being involved in a CEM system, there is increased likelihood that opinions will differ. Therefore, an important component of CEM is that the process involves mechanisms to deal with debate and conflict resolution. The EU's *EIA Directive* does not speak to the inclusion of mechanisms to resolve conflict as a requirement of domestic EIA legislation for its Member States.

Finland's *Act on the Environmental Impact Assessment Procedure* does provide a mechanism to appeal a decision made under this Act. It states that "whoever otherwise has the right to appeal the decision can in the appeal refer to the fact that an assessment has not been carried out or that it has been carried out in a way that is inadequate in material respects" (FMOE 1994, 4(17)2). Although it does provide the opportunity to appeal a decision where there is disagreement, this Act does not specify the individuals or parties who have the right to appeal a decision, which only moderately meets this CEM component.

Once the final environmental assessment report has been submitted, including the recommendations and conditions of the responsible authority, the *Canadian Environmental Assessment Act, 2012* indicates that it is conclusive unless an order is submitted to reconsider the decision (GC 2012). This would be done by referral to the Governor in Council, the decision-

making authority, and would warrant a reconsideration of recommendations made by the responsible authority (GC 2012). The *Canadian Environmental Assessment Act, 2012* does not meet this CEM component because it does not discuss any mechanisms for dealing with conflict resolution, other than the court system (GC 2012).

Newfoundland and Labrador's *Environmental Protection Act* provides the opportunity for a person "who is aggrieved by a decision or an order made under this Act [to] appeal that decision or order to the minister by notice in writing, within 60 days of receipt of that decision or order" (GNL 2002, 107(1)). This appeal is made to the original decision maker and the decision is still in effect during the appeal process. If this appeal is dismissed, the Act relies on the court system to deal with conflict by giving a proponent or other person harmed by a decision 30 days from when the decision was made to "appeal against the order to a judge" (GNL 2002, 108(1)). This does not provide an effective mechanism to deal with conflicts that may occur with the decision-maker and therefore does not meet this component.

### ***5.2.5 Recognition of shared values and a responsibility to act***

By virtue of the fact that each of these four jurisdictions felt it was necessary to create legislation to address the EIA process, it appears that all of them recognize a responsibility to act by conducting EIAs. The EU's *EIA Directive* appears to recognize shared values in its preamble, "it is necessary to achieve one of the [European Economic] Community's objectives in the sphere of the protection of the environment and quality of life" (EU 1985). Finland's *Act on the Environmental Impact Assessment Procedure*, the *Canadian Environmental Assessment Act, 2012*, and Newfoundland and Labrador's *Environmental Protection Act* do not describe the values that motivated their creation.

### ***5.2.6 Community is well-defined and cohesive***

Each of the four pieces of legislation defines the public and groups or individuals that may be affected by the proposed project, but does not mention their sense of cohesion or community. Since the projects for which this legislation applies can be located anywhere within the jurisdiction, it is likely that the level of social cohesion would be dependent more on where the specific project is located than on the EIA process as a whole.

### 5.2.7 Resources are well-defined

The eighth CEM component describes the importance of clearly defining the resources that are to be managed collaboratively. The EU's *EIA Directive* describes the characteristics of the environment that is likely to be impacted by the proposed project as including "population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors" (EU 1985, Annex III). Within the definition of environmental impact, Finland's *Act on the Environmental Impact Assessment Procedure* includes "a) human health, living conditions and amenity; b) soil, water, air, climate, flora, organisms and biological diversity; c) the urban structure, buildings, landscape, townscape and cultural heritage; d) the utilization of natural resources, and; e) the interaction between the factors" listed above, in its description of the affected environment (FMOE 1994, 2(1)). Finland's *Act on the Environmental Impact Assessment Procedure* indicates that the cumulative impacts of multiple projects in a region will be taken into consideration when determining whether an unlisted project will require an EIA (FMOE 1994).

The *Canadian Environmental Assessment Act, 2012* has a similar definition of the environment as that in the EU and Finnish legislation. The impacts of a proposed project on aboriginal peoples, specifically, is more inclusively defined to impacts on the physical environment that affect "(i) health and socio-economic conditions, (ii) physical and cultural heritage, (iii) the current use of lands and resources for traditional purposes, or (iv) any structure, site or thing that is of historical, archaeological, paleontological or architectural significance" (GC 2012, 5(1)c). The environmental effects of malfunctions or accidents, and any cumulative environmental effects are also to be considered under this legislation.

Newfoundland and Labrador's *Environmental Protection Act* has the most inclusive definition of the environment: "(i) air, land and water, (ii) plant and animal life, including human life, (iii) the social, economic, recreational, cultural and aesthetic conditions and factors that influence the life of humans or a community, (iv) a building, structure, machine or other device or thing made by humans, (v) solid, liquid, gas, odour, heat, sound, vibration or radiation resulting directly or indirectly from the activities of humans, or (vi) a part or a combination of those things" referred to above and their interrelationships (GNL 2002, 2m). The cumulative impacts of multiple

projects are not clearly indicated as being considered through the EIA legislation for Newfoundland and Labrador. Although these four definitions cover different aspects of the environment, they all clearly define the resources and impacts the legislation is aimed to address.

### *5.2.8 Mechanisms for monitoring exist*

Monitoring programs need to be put in place to ensure that the actions taken to manage the environment are producing the expected result. In the case of EIAs, monitoring programs would include assessing whether the impacts of the project are in line with what was expected during the EIA and checking whether mitigation proposed during the EIA is effectively reducing the impact of the project as expected. Neither the EU's *EIA Directive* nor Finland's *Act on the Environmental Impact Assessment Procedure* outlines monitoring programs as a part of the EIA process.

The *Canadian Environmental Assessment Act, 2012* requires that EIAs take into account “the requirements of the follow-up program in respect of the designated project” (GC 2012, 19(1)e). Monitoring of the process is done through the follow-up program, which is used to verify “the accuracy of the environmental assessment of a designated project; and (b) [determine] the effectiveness of any mitigation measures” (GC 2012, 2(1) follow-up program). Any recommendations from the responsible authority regarding the environmental assessment report will include recommendations to the follow-up program, where changes to the program are required (GC 2012). Similarly, the conditions outlined by the decision maker must include “the implementation of a follow-up program” and the follow-up program must be included in the records related to that file (GC 2012, 53(4)b). The minister has the option of creating regulations to describe how a follow-up program should be designed (GC 2012). The level of detail involved in the mechanisms for monitoring the efficacy of an EIA and mitigation ensures that this piece of legislation meets the eighth CEM component.

Newfoundland and Labrador's *Environmental Protection Act* also includes a requirement for the environmental impact statement to include “a proposed program of study designed to monitor all substances and harmful effects that would be produced by the undertaking” (GNL 2002, 57h). At the minister's discretion, the proponent may also be required “to carry out environmental monitoring and rehabilitation studies and programs in order to determine the effectiveness of

mitigation measures” among other reasons (GNL 2002, 69). However, this is not a requirement of every project that requires an EIA. While not specifically a monitoring program, the *Environmental Protection Act* also allows for audits to ensure compliance with the Act and any terms and conditions outlined under the Act, and site assessments to determine if there has been an adverse effect on the environment (GNL 2002). Similar to the *Canadian Environmental Assessment Act, 2012*, regulations may be made to provide requirements for the design and implementation of environmental monitoring programs (GNL 2002).

### ***5.2.9 Mechanisms for graduated sanctions***

The literature on CEM indicates the importance of having mechanisms for sanctions that are graduated or change with the severity of the infraction, and that there needs to be the will and ability to actually enforce these sanctions. Since the level of enforcement is related to factors outside of the legislation itself, the legislation will be considered to have met this component if graduated sanctions are outlined in the document.

The EU’s *EIA Directive* does not include information on sanctions related to the EIA process. The only mention of a sanction in Finland’s *Act on the Environmental Impact Assessment Procedure* is in relation to a project that does not require a permit or decision under another act and is implemented before the EIA required in this act (FMOE 1994). However, it only involves a fine if the project is not halted when ordered (FMOE 1994). This does not meet the requirements of having graduated sanctions as there is only one level of sanction detailed for one specific circumstance.

A person who is in contravention of the *Canadian Environmental Assessment Act, 2012* can be ordered to stop immediately or take measures to comply or “mitigate the effects of non-compliance” (GC 2012, 94(1)b). If the person does not comply with that order within a specified timeframe, the required measure may be carried out at that person’s expense (GC 2012). The *Canadian Environmental Assessment Act, 2012* outlines several levels of fines depending on the severity of the offence and the number of times a proponent has been warned of an offence, with each day the offence continues constituting separate offences (GC 2012). While it does not directly speak to any sanctions that may be involved, the Act also notes that “a review panel has the same power to enforce the attendance of witnesses and to compel them to give evidence and

produce records and other things as is vested in a court of record” (GC 2012, 45(2)). It is one of the objectives of the Canadian Environmental Assessment Agency “to promote, monitor and facilitate compliance with this Act” (GC 2012, 105*e*). This Act clearly outlines mechanisms for graduated sanctions to address infractions.

For projects with a projected capital greater than the amount set by regulation, the proponent is required to pay a fee under Newfoundland and Labrador’s *Environmental Protection Act* to offset costs to the government (GNL 2002). When this fee is not paid, the minister may order the EIA process to stop until the minister tells the proponent they can proceed (GNL 2002). Individuals or groups can be classified as inspectors under this Act and have the authority “to determine compliance with this Act”, including following up on formal requests for investigation and collecting evidence on site (GNL 2002, 94(1)). Where it is believed that a person is in contravention of this Act, “the minister may...issue an order, in writing, requiring a person at that person’s own expense, to (a) stop or shut down an activity or an undertaking immediately, permanently, or for a specified time...; (b) do all things and take all steps necessary...to comply with this Act” among other actions (GNL 2002, 99(1)). Where a person is convicted of an offence, “the court may, having regard to the nature of the offence and the circumstances surrounding its commission”, order an action to remedy the environmental effect or pay a sanction to the court (GNL 2002, 77). The severity of the sanction varies depending on if it was committed by an individual or a corporation, increases with the number of days the infraction occurs and includes both fines and imprisonment (GNL 2002).

### ***5.2.10 Opportunities for new interactions to build trust***

For the purposes of the EIA legislation, opportunities for new interactions to build trust include any opportunity for the parties to meet in person and interact. While it is not guaranteed that an in-person interaction will build trust, it is more likely for a trusting relationship to be built where the parties involved are able to get to know one another at a more personal level. The EU’s *EIA Directive*, Finland’s *Act on the Environmental Impact Assessment Procedure*, and the *Canadian Environmental Assessment Act, 2012* do not legislate opportunities for new in-person interactions.

At both the preparation of an environmental impact statement and the public hearing stages, Newfoundland and Labrador's *Environmental Protection Act* requires that the proponent organizes an opportunity for interested members of the public to learn about the project and have their concerns heard (GNL 2002). In both cases, this opportunity must "be held within or adjacent to the geographical area of the undertaking" (GNL 2002, 64(2)). This provides an opportunity for the public to be consulted in person and in an area comfortable to them, which creates an opportunity for all parties to build a trusting relationship.

### *5.2.11 Opportunities to experiment and adapt the management*

The legislation will meet this component if there are opportunities created to experiment and adapt, such as studies and consultation to gain information about potential impacts of the project, programs to assess impacts after the project has been initiated, consideration of alternative solutions, and evidence that management is adapted as new information arises. To a certain extent, these mechanisms are inherent in the EIA process with the intention of an EIA being to assess the impacts of a proposed project and determine appropriate mitigation. To meet this component, it needs to be clearly outlined in the legislation that opportunities to experiment and adapt arise throughout the process.

The EU's *EIA Directive* outlines that information gathered, including technical difficulties and feedback from the public and other government bodies, needs to be considered in determining any conditions associated with the final decision (EU 1985). This directive does not mention how Member States will deal with knowledge gaps and assess the success of an EIA after development, nor does it propose methods for ongoing adaptation as information arises. Therefore, it does not have sufficient opportunities to experiment and adapt the management to meet this component. The same limitations are present in Finland's *Act on the Environmental Impact Assessment Procedure*, though this act does mention that studies of environmental impact can be conducted (FMOE 1994).

The *Canadian Environmental Assessment Act, 2012* includes a requirement for projects that require an EIA to have a follow-up program to verify the accuracy of the EIA and the efficacy of mitigation measures (GC 2012). An EIA must also consider "alternative means of carrying out the designated project that are technically and economically feasible and the environmental

effects of any such alternative means” (GC 2012, 19(1)g). Where the responsible authority determines there is not enough information to conduct an EIA and make a decision, it may require “the collection of any information or the undertaking of any study that...is necessary for that purpose, including requiring the proponent to collect that information or undertake that study” within a given timeframe (GC 2012, 23(2)). There are opportunities for the collection of information and conducting of further studies to occur at several points in the EIA (GC 2012). The final EIA report must outline any mitigation measures and the follow-up program to assess their efficacy, and include any rationale for the final decisions all of which must be documented (GC 2012). In addition to opportunities for study and management adapted to a proposed project, there may also be regional studies conducted to learn about the impacts of existing or future activities in a given region and studies or research activities related to EIAs in general (GC 2012). The Canadian Environmental Assessment Agency has a mandate “to promote or conduct research in matters of environmental assessment and to encourage the development of environmental assessment techniques and practices, including testing programs, alone or in cooperation with other agencies and organizations” (GC 2012, 105c).

Under Newfoundland and Labrador’s *Environmental Protection Act*, “the minister may contribute to, sponsor or undertake research that he or she considers necessary to achieve the purpose of this Act and may enter into agreements with respect to that research and development” (GNL 2002, 5(2)). In cases where not enough information is provided by the proponent in their application, the minister may require an environmental preview report to supplement the proponent’s information from readily available information sources (GNL 2002). If the environmental preview report is still deficient, the proponent may be required to conduct further work or create a more informative report (GNL 2002). This may involve conducting studies, but that is not clearly described in the Act. The environmental impact statement should include any mitigation measures in place to prevent or remedy harmful effects on the environment (GNL 2002). Where this statement is deficient, the minister may require amendments to the statement or further work, as was the case with the environmental preview report (GNL 2002). In some instances, a public hearing might be conducted to examine the information included in the environmental impact statement (GNL 2002). Finally, regulations may be created to establish “criteria for the examination of undertakings” (GNL 2002, 111(1)ff).



### *5.2.12 Communities receive support and resources*

In order to effectively participate in the EIA process, affected individuals and the general public need support from the management authority in the form of money, expertise and other resources necessary to participate.

The EU's *EIA Directive* does not outline a financial commitment to help the public participate in the EIA process. It does require the proponent to provide "a non-technical summary of the information" to describe the project, which could be considered support in the form of accessible language, but it not sufficient to meet this requirement (EU 1985, 5(2)). Finland's *Act on the Environmental Impact Assessment Procedure* puts the responsibility on the developer "for the costs of public notification, hearings and studies of environmental impact, and for the cost of translations needed in the assessment of transboundary impact" (FMOE 1994, 4(22)). There is no mention in this Act of funding to facilitate the general public participating in the EIA process and no requirement to use plain language in the project description.

The establishment of "a participant funding program to facilitate the participation of the public in the environmental assessment of designated projects", other than those where a substitution has been approved, is required by the Canadian Environmental Assessment Agency (GC 2012, 57 and 58(1)). Under the *Canadian Environmental Assessment Act, 2012*, regulations may be created to provide details on what to include within a participant funding program. The Act mentions that the proponent may be required to reimburse the Agency for any costs associated with the EIA of a designated project, though there is no mention of whether this would include the costs associated with a participant funding program (GC 2012). The existence of a participant funding program meets the requirements of this CEM component.

Under Newfoundland and Labrador's *Environmental Protection Act*, members of the environmental assessment board, which includes at least one member from the geographic region of the project, receive remuneration for their participation on the board (GNL 2002) A committee of experts from other government departments may be appointed to advise the minister on scientific and technical matters related to the project, but it is not clear that this expertise is made available to the public outside of the environmental preview report or environmental impact statement (GNL 2002). While some financial resources appear to be

available to a very small number of the affected public, this is only moderately meets this CEM component.

### ***5.2.13 Process is applied to the local conditions***

An important component of both CEM and EIAs is the flexibility to apply the process to the local conditions, including the environment and affected people. Based on this information, each of the pieces of EIA legislation should strongly meet this component to be effective EIA legislation in general. Each piece of legislation involves some level of public input, which would be able to provide the local context at a basic level. The exemption of projects from EIAs in cases of national security or emergency also implies consideration for local conditions.

The EU's *EIA Directive* describes that "the environmental impact assessment will identify, describe and assess in an appropriate manner, in the light of each individual case", the environmental impacts (EU 1985, 3). Finland's *Act on the Environmental Impact Assessment Procedure* does not directly mention that the EIA needs to occur with consideration for local conditions, but does state that "the coordinating authority, the local authority or regional council drawing up the plan and the developer shall cooperate sufficiently so that the project assessment procedure and land use planning are coordinated" (FMOE 1994, 2(5)1).

One of the purposes of the *Canadian Environmental Assessment Act, 2012* is "to encourage the study of the cumulative effects of physical activities in a region and the consideration of those study results in environmental assessments" (GC 2012, 4(1)i). A committee may be established to conduct these regional studies considering "the effects of existing or future physical activities carried out in a region" (GC 2012, 73(1) and 74(1)a). The primary role of the EIA is to assess the impacts of the project on the environment. Under this Act, the EIA must also consider any change to the project that could be caused by the environment (GC 2012). If the EIA is to be conducted by a review panel, that panel must consist of one or more members "who are unbiased and free from any conflict of interest relative to the designated project and who have knowledge or experience relevant to its anticipated environmental effects" though it is not specified that they have direct knowledge of the local conditions (GC 2012, 42(1)). Consideration of the environment's impact on the project and the possibility to conduct regional studies indicates that this CEM component is met moderately well.

Newfoundland and Labrador's *Environmental Protection Act* clearly meets this CEM component by requiring that the environmental impact statement includes “(d) a description of the (i) present environment that will be affected or that might reasonably be expected to be affected, directly or indirectly, by the undertaking, and (ii) predicted future condition of the environment that might reasonably be expected to occur within the expected life span of the undertaking, if the undertaking was not approved; (e) a description of (i) the effects that would be caused or that might reasonably be expected to be caused to the environment by the undertaking” (GNL 2002, 57). Although not outlined in the legislation, an opportunity to consider the local context may exist with the creation of regulations created to describe methods of public involvement (GNL 2002).

#### ***5.2.14 Collaboration occurs early and at several stages in the process***

The preamble of the EU's *EIA Directive* includes affirmation of “the need to take effects on the environment into account at the earliest possible stage in all the technical planning and decision-making processes” (EU 1985). Collaboration occurs early in the process with “the public concerned [being] given the opportunity to express an opinion before the project is initiated” (EU 1985, 6(2)). All information gathered in the EIA process should be considered in the development consent procedure and development consent should only be granted after the EIA has been carried out (EU 1985). Whether or not the public is invited to provide input at several stages of the EIA process is left up to the determination of the Member States, which does provide the opportunity for engagement throughout the process (EU 1985).

Finland's *Act on the Environmental Impact Assessment Procedure* requires the developer to “submit the assessment programme to the coordinating authority at the earliest possible stage of planning” (FMOE 1994, 2(8)). The EIA must occur before any environmental impact is made for the project and at least before other regulatory decisions are made (FMOE 1994). This Act outlines opportunities for the public to submit comments at several stages of the process, which aligns with this CEM component.

The *Canadian Environmental Assessment Act, 2012* instructs that the proponent “must not do any act or thing in connection with the carrying out the designated project” until a decision is made that no EIA is required or until that proponent has complied with the conditions of the

decision statement (GC 2012, 6). While there are several opportunities for the public to comment on the EIA, there is no wording to indicate that the proponent must start the EIA process as soon as possible or early in the planning stages (GC 2012).

The purpose of Newfoundland and Labrador's *Environmental Protection Act* is to wisely manage resources and protect the environment and quality of life of people through EIAs before and after the commencement of a potentially harmful undertaking (GNL 2002). It directs that a proponent cannot "proceed with an undertaking unless that undertaking has been exempted or released under this Act" (GNL 2002, 48). There is no direction on when in the planning process an EIA should occur, although several opportunities for public involvement are included at different stages in the process.

### *5.2.15 Nested enterprises*

In the context of CEM, nested enterprises refer to local management systems that are part of a broader system, where each level of management is connected to the others (Ostrom 1990). To meet this characteristic of effective CEM, the pieces of EIA legislation would need to recognize the existence of environmental management systems at different scales and outline how this legislation will be linked to them.

The EU's *EIA Directive* outlines how Member States should craft their domestic EIA legislation by describing what should be included and which aspects can be modified to meet the context of their country (EU 1985). It speaks generally about a project that "is likely to have a significant effect on the environment in another Member State" and how the two states should interact to address these issues (EU 1985, 7). However, it does not address how levels of management at the local or regional scale will be connected.

While not specifically a nested enterprise, the intention to coordinate Finland's *Act on the Environmental Impact Assessment Procedure* and other legislation is briefly described as well as how to work with other countries to consider transboundary impacts (FMOE 1994). The requirement for cooperation between the coordinating authority, the local authority or regional council and the developer in the EIA and land use planning is a better example of nested enterprises, although how this cooperation will work is not specified (FMOE 1994).

Under the *Canadian Environmental Assessment Act, 2012*, one of the objectives of the Canadian Environmental Assessment Agency is “to promote uniformity and harmonization in relation to the assessment of environmental effects across Canada at all levels of government” (GC 2012, 105*b*). Details are outlined regarding the treatment of EIAs located within multiple jurisdictions and possible techniques used to complete an EIA in that context (GC 2012). Newfoundland and Labrador’s *Environmental Protection Act* provides the option of entering into an agreement with the government of Canada or another province or territory to conduct an EIA together, though it does not discuss cooperation with other levels of government (GNL 2002).

### *5.2.16 Effective and time-sensitive*

In order for the EIA legislation to align with the effective and time-sensitive characteristic of successful CEM, it needs to set reasonable time limits for the EIA process. There should be time limits applied to the different parties for all stages the process and there should be the flexibility to change these time limits as appropriate to match the characteristics of the project.

The EU’s *EIA Directive* places the responsibility on the Member States to set appropriate timelines for the EIA process based on the particular characteristics of the project. This does not guarantee that the EIA process will be effective and time-sensitive, but does not deter this possibility either.

Under Finland’s *Act on the Environmental Impact Assessment Procedure*, a decision as to whether the coordinating authority will require an EIA must be made within a month of receipt of the application (FMOE 1994). Public notice of the planned EIA is to be posted within 14 days of the decision being made and states a specific time for the public to provide input, which would be at least 30 days and at most 60 days (FMOE 1994). This takes into consideration that the time for public input may vary depending on the circumstances of the EIA indicating that it must be reasonable and is determined “in such a way that the competitive status of the developer is not jeopardized” (FMOE 1994, 2(8)*a*4). The coordinating authority must provide a statement on the assessment programme within two months of the end of the public notice period (FMOE 1994). The timelines for the assessment report are the same as the assessment procedure outlined above (FMOE 1994). Where possible, public notice and hearings can be coordinated with the

requirements for public participation in other legislation to improve the efficiency and time necessary for these activities (FMOE 1994).

“To ensure that an environmental assessment is completed in a timely manner” is one of the purposes of the *Canadian Environmental Assessment Act, 2012* (GC 2012, 4(1)f). If the description of the designated project submitted by the proponent is insufficient, the Canadian Environmental Assessment Agency may tell the proponent they require more information within 10 days of receiving the description (GC 2012). Once a complete description is received, it will be posted on the website for public participation in the screening process for 20 days (GC 2012). The screening by the Agency must be done within 45 days of the public notice being posted (GC 2012). A proposed timeline is not specified for public comments on the draft report, but the public notice needs to specify the allowed time period to submit comments (GC 2012). The decision on the EIA must be made within 365 days of the public notice of the commencement of the EIA, though it can be extended by a maximum of three months “to take into account circumstances that are specific to the project” (GC 2012, 27(3)). Within 60 days of the notice of commencement of the EIA, it can be referred to a review panel to complete, which would involve establishing a timeline for the different steps that does not exceed 24 months, though the decision period may be extended by up to 3 months (GC 2012). The time required to conduct any study to supplement the information in the EIA is not included in these timelines (GC 2012). If the review panel does not submit its report within the allotted time period, the EIA by the review panel may be terminated and the Agency would have to finish the EIA (GC 2012). If there is an order to have this decision reconsidered, it may include a time limit within which it must be completed (GC 2012). This decision must be sent to the proponent within seven days of being made (GC 2012). This Act clearly outlines time limits for the different parties at different stages of the EIA process, which must be posted on the website, and provides the option to vary these timelines depending on the circumstances of that project.

Throughout Newfoundland and Labrador’s *Environmental Protection Act* steps are to be completed “within the time period required by regulation” (GNL 2002, 50(3)). This refers to regulations that may be created by the Lieutenant-Governor in Council to prescribe time periods (GNL 2002). The only specific timelines outlined in this Act refer to appealing an order made against an individual who is thought to have contravened this Act or a decision made under this

Act (GNL 2002). While it is not clear based on this legislation that the EIA process is effective and time-sensitive, this may be clear within the regulations.

### *5.2.17 Summary of CEM components in the legislation*

The results of the content analysis of the selected EIA legislation against the components of successful CEM is summarized below in a matrix (Table 4). The maximum cumulative value a piece of legislation can have in this analysis is 68, when each component is strongly met and weighted according to its prevalence in the literature.

The overall ranking of the EIA legislation based on the cumulative weighted totals were similar to the *ILO Convention No. 169* with the *Canadian Environmental Assessment Act, 2012* ranking the highest, followed by Newfoundland and Labrador's *Environmental Protection Act*, the EU's *EIA Directive* and lastly Finland's *Act on the Environmental Impact Assessment Procedure*. This order changes slightly when the number of components that were either moderately or strongly met is considered: the legislation from Newfoundland and Labrador (14) met the most components, followed by Canada (13), Finland (11) and the EU (9).

The components that were strongly met by each of the pieces of legislation were that there are clearly defined rights and responsibilities, and the resources are well-defined. The components that were next most commonly met were knowledge integration, community is actively involved in decision-making, there are mechanisms for graduated sanctions, the process is applied to local conditions, collaboration occurs early and at several stages of the process, there are nested enterprises, and the process is time-sensitive. The components that each of the four pieces of legislation struggled to meet are there are mechanisms for conflict resolution and debate, and the community is well-defined and cohesive. The EU and Finnish legislation did not contain mechanisms for monitoring, opportunities to experiment and adapt the management, or communities receive support and resources. Except for Finland's *Act on the Environmental Impact Assessment Procedure*, none of the legislation created opportunities for new interactions to build trust.

When the components are grouped by their weighting, it is most likely that a piece of EIA legislation meets a component with a weighting of 1 or a component that was considered the

least important in the literature. This is followed closely by components with a weighting of 3 or the most important based on the literature, and the legislation is least likely to meet components that had a weighting of 2.

**Table 4** Matrix summarizing the extent to which each component of collaborative environmental management (CEM) is met within the four pieces of environmental impact assessment legislation analysed: the European Union's *EIA Directive*, Finland's *Act on the Environmental Impact Assessment Procedure*, the *Canadian Environmental Assessment Act, 2012*, and Newfoundland and Labrador's *Environmental Protection Act*. The Value column under each piece of legislation is the value based on how well the piece of legislation met the component (0 = not met; 1 = moderately met; 2 = strongly met), the Total column indicates the Value when multiplied by the weighting as indicated in the third column.

#	CEM components	Weight	European Union		Finland		Canada		Newfoundland and Labrador	
			Value	Total	Value	Total	Value	Total	Value	Total
1	Knowledge integration	3	1	3	1	3	2	6	2	6
2	Community is actively involved in decision-making	3	2	6	1	3	2	6	1	3
3	Rights and responsibilities are clearly defined	3	2	6	2	6	2	6	2	6
4	Mechanisms for conflict resolution and debate	3	0	0	1	3	0	0	0	0
5	All parties perceive a responsibility to act and recognize their shared values	3	2	6	1	3	1	3	1	3
6	Community is well-defined and cohesive	2	0	0	0	0	0	0	0	0
7	Resources are well-defined	2	2	4	2	4	2	4	2	4
8	Mechanisms for monitoring	2	0	0	0	0	2	4	1	2
9	Mechanisms for graduated sanctions that are enforced	2	0	0	1	2	2	4	2	4
10	Opportunities for new interactions to build trust	2	0	0	0	0	0	0	2	4
11	Opportunities to experiment and adapt the management	2	0	0	0	0	2	4	1	2
12	Communities receive support and resources	2	0	0	0	0	2	4	1	2
13	Applied to the local conditions	2	2	4	1	2	1	2	2	4
14	Collaboration occurs early and at several stages in the process	1	2	2	2	2	1	1	1	1



15	Nested enterprises	1	1	1	2	2	2	2	1	1
16	Effective and time-sensitive	1	1	1	2	2	2	2	1	1
<b>Cumulative Total</b>		<b>33</b>			<b>32</b>		<b>48</b>		<b>43</b>	

### 5.3 Conclusion

Based on the information outlined in the results, the EIA legislation has the potential to be interpreted in a way that meets some of the components outlined in the *ILO Convention No. 169* and CEM frameworks. The broad language used in legislation has the potential to lead to alternative interpretations of how well these components are met. Any discrepancy between these findings and how the legislation is implemented in reality may be the result of an alternative interpretation. Where these components have been strongly met, the legislation would not necessarily have to change in order for the implementation to become more in line with the objectives of the *ILO Convention No. 169* and CEM. Literature that supports or disputes the above interpretation of the legislation and how the legislation is implemented will be considered in Chapter 6.

Due to the complex nature of natural resource management and the evolution of indigenous peoples' rights through time, it is important to note that the components identified may be met by other legislation in Canada or Finland outside of the formal EIA process. Where this is the case, the influence of other domestic legislation and policies on the components of the *ILO Convention No. 169* and the CEM framework will be discussed in Chapter 6.

## 6. EIAS BEYOND THE LEGISLATION

---

Chapter 6 will analyse the results of the two pieces of legislation for each country to create a more holistic view of the environmental impact assessment (EIA) process affecting the Sámi in Lapland, Finland and the Innu in Labrador, Canada. Since the EIA process is influenced by government policy, best practices, and the internal policies of proponents as well as legislation, this analysis will draw on guiding documents and literature to gain a better understanding of the EIA process in both of these sub-Arctic regions. The goal will be to answer the following research questions:

- 1) How does EIA legislation in Lapland, Finland and Labrador, Canada align with international guidelines on consultation as outlined in the *ILO Convention No. 169*?
- 2) How does EIA legislation in Lapland, Finland and Labrador, Canada align with the characteristics of successful collaborative environmental management (CEM) theoretical framework found in academic literature?

## 6.1 EIA Legislation in Lapland, Finland

Although the European Union's (EU) *EIA Directive* provided an outline on the establishment of Finland's *Act on the Environmental Impact Assessment Procedure*, Chapter 5 revealed that the two pieces of legislation differ in how well they meet the components of the *ILO Convention No. 169* and CEM frameworks. In the cases where the two pieces of legislation differed, the EU's *EIA Directive* was typically better able to meet the components. This was because of the broad language used in the EU's *EIA Directive*, which allowed for multiple interpretations that increased the likelihood of meeting the components. The only instances where the EU's *EIA Directive* had a lower ranking than Finland's *Act on the Environmental Impact Assessment Procedure* was in the CEM frameworks components regarding mechanisms for conflict resolution and debate, mechanisms for graduated sanctions that are enforced, nested enterprises, and effective and time-sensitive. These components required more prescriptive language to be met effectively, which was not found in the broad language of EU's *EIA Directive*.

It should be noted that a new EU EIA directive is being drafted; once this is published, the Finnish domestic EIA legislation will need to be revised to comply with it (FMEE 2014). The EU started to incorporate aspects of the Aarhus Convention, which dealt with public participation in decision-making, into their directives since it was signed in 1998 and would likely incorporate a higher standard of public participation in a revised EIA Directive as a result (Bond 1999). A study that compared mining legislation across Norway, Sweden and Finland found that Finland's *Mining Act* was the most Sámi-friendly of the three (Amatulli 2015). As Finland's *Mining Act* was created in 2011, over 15 years after Finland's *Act on the Environmental Impact Assessment Procedure*, it is possible that a revision to Finland's EIA legislation would follow the same trend and meet more of these components once it has been modernized.

### 6.1.1 ILO Convention No. 169

#### 6.1.1.1 Recognition of indigenous peoples as having rights related to their culture, history and values

Neither the EU's *EIA Directive* nor Finland's *Act on the Environmental Impact Assessment Procedure* identified indigenous people or the Sámi as a distinct group to involve in public participation. While the Sámi can participate as individuals in the public participation process of EIAs, the EIA legislation alone does not consider the historical context of the Sámi not having equal access to human rights nor their collective rights as recognized in the *ILO Convention No. 169* (Joonas and Joonas 2011; Koivurova 2015). Although the *ILO Convention No. 169* has not been ratified by Finland, there is internal and external pressure for Finland to ratify it and it currently acts as a guideline to increase the cultural and linguistic rights of the Sámi (Joonas and Joonas 2011).

A year after the creation of Finland's *Act on the Environmental Impact Assessment Procedure* in 1995 was the revision of Finland's *Act on Sámi Parliament* (FMJ 1995a). Finland's *Act on Sámi Parliament* created the Sámi Parliament to protect the rights of the Sámi to maintain their language and culture, and ensures negotiation occurs with the Sámi Parliament when proposed activities may affect the lifestyle of the Sámi (FMJ 1995a; Amatulli 2015). The right of the Sámi to maintain their language and culture, which includes their traditional livelihoods, was formally recognized in the Finnish Constitution in 1999, though these protections are not equivalent to those outlined in international law (Amatulli 2015). Sámi rights regarding the management of natural resources are under several jurisdictions, which makes it difficult to determine the government body responsible and often devolves to being managed at the local level (Raitio 2008).

While independent of the EIA legislation, these protections inform some of the informal guidelines developed for EIAs and affects how they are carried out within the area of the Sámi Homeland (RHA 2014; FMEE 2015; Koivurova 2015). As there are protections in place in Finland for the Sámi and for reindeer herding as a livelihood, Sámi reindeer herders residing within the Sámi Homeland receive the greatest protections from national legislation and policy (Koivurova 2015). Guides to the EIA process in Finland suggest incorporating the *Convention on Biological Diversity's* voluntary Akwé: Kon Guidelines in areas sacred to the Sámi and

providing material in one or more of the Sámi languages when the proposed project is within or has the potential to impact the Sámi Homeland (Ahokumpu 2013; RHA 2014; FMEE 2015; Koivurova 2015). The Akwé: Kon Guidelines provide a framework to support effective participation of indigenous peoples, incorporate concerns from indigenous groups and take into consideration traditional knowledge to integrate cultural, environmental and social impacts into one assessment process (SCBD 2004). In 2009, Finland's Ministry of the Environment set up a group to determine how the Akwé: Kon Guidelines could be applied to the Sámi Homeland, which recommended their continued use, but it is unclear in the literature if this was implemented nation-wide (Ahokumpu 2013).

While not specific to the Sámi, one of the characteristics of a project that can be used to determine whether an EIA is required in individual cases is the location of the project, particularly if it falls within "landscapes of historical, cultural or archaeological significance" (FMOE 2006, 2(7)2c). Similarly, prior to construction it should be determined if any known archaeological sites exist and, if during construction new ones are found, construction should cease and the National Board of Antiquities notified (FMEE 2015). These requirements indirectly take into consideration the history of the Sámi.

#### *6.1.1.2 Self-identification as an indigenous group*

While it can be relatively straightforward to define indigenous peoples at an international level, it is more difficult to do so when looking at individuals (Joonas and Joonas 2011). As neither the EU's *EIA Directive* nor Finland's *Act on the Environmental Impact Assessment Procedure* mentioned the Sámi specifically, they do not speak to whether self-identification is a key aspect of being considered Sámi in Finland. While not in Finland's *Act on the Environmental Impact Assessment Procedure* itself, the definition of Sámi in Finland does incorporate the concept of self-identification as a key factor. As mentioned in Chapter 2, Finland's *Act on the Sámi Parliament* outlines that in order to register on the electoral roll individuals need to self-identify as Sámi and be descended from someone who speaks a Sámi language or is registered on the electoral roll (FMJ 1995a).

It should be noted that the definition of an indigenous person in Finland is slightly narrower than the one outlined in the *ILO Convention No. 169*, which considers anyone regarded as indigenous

at the time the State borders were created (Joonaa and Joonaa 2011). Joonaa and Joonaa (2011) indicated that in Finland Sámi are individuals registered on the Sámi Parliament electoral roll and that there is no assumption that there could be more Sámi than this. However, there has been some discussion in Finland regarding the incorporation of a census to capture individuals of Sámi descent still practicing a subsistence lifestyle that may not be registered on the electoral roll (Joonaa and Joonaa 2011). If implemented, this might broaden the definition of the Sámi.

### ***6.1.1.3 Governments have a responsibility to protect the rights of indigenous groups with their participation***

As described in Chapter 5, the EU's *EIA Directive* only moderately meets this component of the *ILO Convention No. 169* by requiring public input to be incorporated into the decision and the rationale be provided to the public. This speaks to the responsibilities of government in regards to the general public, but not indigenous peoples as a unique group. Similar to the *ILO Convention No. 169*, the EU's *EIA Directive* is written broadly and leaves discretion up to its Member States, which has resulted in variations between the governments' responsibilities to the public and indigenous peoples (Joonaa and Joonaa 2011).

Finland's *Act on the Environmental Impact Assessment Procedure* does not specify how public input should be considered in the final decision. The Finnish Constitution outlines the government's responsibility to protect the right to language and culture of the Sámi, though the details of how this will be done in the context of EIAs is not included in the EIA legislation (FMJ 1999a). Finland's *Act on the Sámi Parliament* is another mechanism to protect the rights of the Sámi with their involvement, but it is funded by the State and focused on the Sámi Homeland (Amatulli 2015). This may pose a problem as there is tension between indigenous rights and the economic interests of the state (Koivurova 2015).

Documents have been created to guide the EIA process in the Sámi Homeland and within Reindeer Herding Cooperative (RHC) areas (FMEE 2014; RHA 2014; FMEE 2015). The EIA guide to mining projects was written by the government and circulated to the Sámi Council of Finland for comment, though it is unclear how comments received were incorporated (FMEE 2015). Another guide outlines the importance of assessing the impacts on Sámi language and culture "in co-operation with the Sámi Parliament" within the Sámi Homeland (FMEE 2014, 44).

The *ILO Convention No. 169* includes all traditional livelihoods in its definition of rights (Joonas and Joonas 2011). For the Sámi, this would include hunting and fishing which have fewer specific protections in Finland, in addition to reindeer herding which is not an activity exclusive to the Sámi in Finland (Joonas and Joonas 2011). Furthermore, it is unclear if these documents outline requirements of the EIA process or recommend best practices.

#### *6.1.1.4 Participation and consultation are done in good faith*

As described in Chapter 5, both the EU's *EIA Directive* and Finland's *Act on the Environmental Impact Assessment Procedure* moderately meet the component of consultation being done in good faith. The *Decree on Environmental Impact Assessment Procedure* provides more detail as to what should be in an assessment programme, which includes all alternatives to a proposed project, including not taking action (no-action alternative), and a plan for public participation at various stages of the EIA (FMOE 2006). Public notice of the assessment programme and the EIA report should clearly state all information related to the project, its location and the developer in plain language, as well as the procedure for expressing opinions and concerns related to the project (FMOE 2006; FMEE 2015). These two stages of public consultation were a point of contention when the legislation was first proposed in the 1980s, but the process was driven forward by the need to meet the EU's *EIA Directive* (Pölonen et al. 2011).

The guides created to assist proponents in the EIA process reiterate that the intention of EIA is to allow more opportunities for public participation and create a process that is open and can enable change (FMEE 2015; FMOE 2015a; FMOE 2015b). The guide to EIAs for mining projects in Finland suggests that proponents interact with stakeholders using other public participation methods outside of the public hearings required under Finland's *Act on the Environmental Impact Assessment Procedure* (FMEE 2015). They also indicate that in practice public participation happens much earlier than the EIA process, throughout the lifecycle of the proposed project, and can be combined with consultation events for other regulatory approvals (FMEE 2015). The Reindeer Herders' Association created a guide to considering reindeer husbandry in land use projects, which outlines the importance of involving the local RHC before the EIA process has begun when plans are still flexible and considering busy times of year for herders when developing participation plans (RHA 2014). Finland's Ministry of Employment and the Economy created a similar guide for projects within or able to impact the Sámi Homeland, which

requires notification given to the Sámi Parliament who will state whether or not they feel consultation is required (FMEE 2014).

It is important to remember that concerns raised in this process can have multiple dimensions and be perceived differently by different stakeholders or experts, which should be considered in the justification of whether or not they were mitigated (FMEE 2015). The impacts of proposed mitigations should also be considered (FMEE 2015). While the quality of EIA reports overall is good in Finland, consideration of the results of an EIA report at the decision-making stage is inconsistent between projects and stakeholders (Jalava 2014). The value of recording stakeholders' comments and concerns is recognized, but these are not always responded to or clearly considered in the final decision (Jalava 2014).

In Finland, there is no training of public participation facilitators which can play a role in whether the EIA process is considered successful (Raitio 2008). Whether or not consultation is successful is based on how the individuals involved perceived it and often comes down to how well people cooperated (Wondolleck and Yaffee 2000). In some cases, public participation with the goal of communication between the parties involved is more likely to result in a preferred outcome compared to public participation with the goal of information gathering (Leskinen 2003). Alternative methods to public participation in EIAs have been explored in Finland recently, including the IMPERIA project: a cooperation group made up of representatives from key stakeholder groups met with assessors at various stages of the project to share information and determine impacts based on the perspective of local peoples (FMOE 2016). This demonstrates recognition of the need to improve public participation and a desire to change how public participation is done.

#### ***6.1.1.5 Recognition of the rights of ownership and possession to traditional territory***

The EU's *EIA Directive* and Finland's *Act on the Environmental Impact Assessment Procedure* do not clearly indicate recognition of Sámi rights of ownership to the land which they traditionally occupied. The focus in Finland has been on giving the Sámi a clear administrative role in the management of natural resources rather than ownership rights (Joonas and Joonas 2011). In fact, the broad language of the *ILO Convention No. 169's* land rights section has been a big deterrent to Finland ratifying this convention as it is vague and viewed through a human

rights perspective (Joonaa and Joonaa 2011; Amatulli 2015). There have been several groups appointed by the government to look into Sámi land rights over the years, but it has remained a deterrent to ratifying the *ILO Convention No. 169* (Amatulli 2015). The Convention differentiates between the right to own the land and the right to use the natural resources on the land, includes collective and individual ownership, and suggests a balance between current and historical occupation of the land (Joonaa and Joonaa 2011; Amatulli 2015).

It is important to consider the historical context of land rights to better understand why they are a contentious subject in Finland. There is a long history of the Sámi and Finns living in Lapland together and the Sámi were considered land owners until the mid-18<sup>th</sup> century when the government took up these “ownerless” lands (Joonaa and Joonaa 2011; Amatulli 2015). Land rights are also controversial because of the competing interests of land being a significant source of revenue for the government and being crucial to the culture and livelihoods of the Sámi (Joonaa and Joonaa 2011; Koivurova 2015). *The Wilderness Act* was created in 1991 with the hope of resolving land use conflicts in Lapland by safeguarding Sámi culture; while it did not resolve all conflicts, it did help (Ahokumpu 2013). About 40 years ago the perception of Sámi land rights began to change, particularly in Sweden with the Taxed Mountain case (Supreme Court Case T324-76, NJA 1981 s. 1) and Norway with the Alta case (Supreme Court Decision no. 39/1982 *Alta*) (Amatulli 2015).

Conversations regarding land rights in Finland have centered on the Sámi Homeland and not the historical range of Sámi traditional territory, which consists of a third of modern day Finland (Joonaa and Joonaa 2011). There was a conversation in Finland regarding the potential to develop a political instrument, similar to Norway’s *Finnmark Act* from 2005, to protect Sámi rights in their traditional territory with their feedback, though it has yet to be created (Joonaa and Joonaa 2011). Another criticism of this plan was that it would not have transferred ownership of the land from the State to the Sámi and focused on reindeer herding which is no longer a main traditional livelihood for the Sámi (Joonaa and Joonaa 2011). Based on the example from Norway, it is likely that something similar to the *Finnmark Act* would meet this component of *ILO Convention No. 169* and likely create national pressure to increase the rights of the Sámi further (Joonaa and Joonaa 2011). In the meantime, there are gaps in the knowledge of policy makers regarding indigenous land rights that need to be addressed (Joonaa and Joonaa 2011).



#### *6.1.1.6 Recognition of the rights to participate in the use, management and conservation of resources*

While neither the EU's *EIA Directive* nor Finland's *Act on the Environmental Impact Assessment Procedure* speak to the rights of indigenous peoples, each piece of legislation allows for participation in the EIA process as members of the general public. However, the constitutional protection of Sámi language and culture is tied to the right to participate in the use and management of natural resources through the maintenance of traditional livelihoods. Only 10% of Sámi Parliament members earn a living from reindeer herding, although more participate in traditional livelihoods in addition to modern commercial activities (Joonas and Joonas 2011). In December 2004, it was recognized that modern ways of practicing traditional livelihoods are acceptable and should be considered as part of how natural areas are managed (Ahokumpu 2013; Koivurova 2015). However, as reindeer husbandry is not just a Sámi activity, legislation regarding it does not grant specific rights to the Sámi other than directing proponents to contact the Sámi RHC that may be affected (Amatulli 2015).

#### *6.1.1.7 Transboundary consideration to address issues of the indigenous peoples as a whole*

Both pieces of EIA legislation that affect EIAs in Finland and their supporting documents have a requirement for the EU Member State proposing a project that triggers an EIA to notify a Member State that may be affected by the proposed project of the assessment programme and EIA report. The EU's *EIA Directive* was amended in 1997 to consider the results of the Espoo Convention, the first transboundary EIA international treaty, but Finland's *Act on the Environmental Impact Assessment Procedure* already covered the principles of it (Bastmeijer and Koivurova 2008). Today the no-harm environmental principle means that most nations around the world have a transboundary EIA policy (Bastmeijer and Koivurova 2008).

Finland adopted the Espoo Convention in 1991, which outlines obligations to assess the transboundary impacts of a proposed project and to establish an EIA process that includes public participation (UN 1991; Fitzpatrick and Sinclair 2009). The Member State proposing the project needs to provide the same information to the affected Member State as they would give to their general public, coordinate a process for collecting the affected Member State's public comments, and notify their public that a transboundary EIA is required (UN 1991; FMOE 2006). The

consultation is intended to decrease the impact of the proposed project and must consider the no action alternative (UN 1991; Pölonen et al. 2011). The affected Member State must receive a copy of the final decision, including the considerations on which it was based (UN 1991). Research programmes must be exchanged between the parties and a jointly funded inquiry process can look at post-project impacts (UN 1991).

Transboundary impacts are clearly looked at as part of the EIA process in Finland and its neighbouring states of Norway and Sweden. In terms of coordinating the impacts to the Sámi people across these three countries, the Sámi Council is an international cooperative body that coordinates the Sámi Parliaments in Finland, Sweden and Norway (Amatulli 2015). The literature available in English was unclear on what, if any, coordination occurs with the Sámi in Russia.

#### ***6.1.1.8 Capacity funding***

To effectively participate in the EIA process, let alone to fight for land claims, often requires more financial resources than indigenous communities have available (Joonas and Joonas 2011). To fulfill this component of the *ILO Convention No. 169*, the Sámi would need to receive funding to participate in the EIA process, which is not indicated in the EU's *EIA Directive* or Finland's *Act on the Environmental Impact Assessment Procedure* (Joonas and Joonas 2011). There was no indication in the literature that government funding is provided for the Sámi community to participate in EIAs. Finland's Ministry of the Environment website indicated that the project developer is responsible for costs related to the EIA process, including a fee paid to the competent authority for any public participation events that are held (FMOE 2015a). It is likely that any funding for indigenous peoples' participation would come from the proponent of the project at their discretion and is likely inconsistent between projects.

### ***6.1.2 Collaborative Environmental Management***

#### ***6.1.2.1 Knowledge integration***

Both the EU's *EIA Directive* and Finland's *Act on the Environmental Impact Assessment Procedure* moderately meet this component because they speak of integrating comments from the general public and other government bodies, but not specifically from indigenous peoples or

clarifying how knowledge brought forward by the public would be integrated. Despite this, a study into the quality of EIAs in Finland found that the EIA process overall helped to increase the knowledge used for environmental decision-making (Jalava 2014). It is unclear if this is the result of integrating knowledge from multiple sources or an increase in western scientific knowledge.

One factor to acknowledge when considering the knowledge and concerns brought forward as part of the EIA process is that environmental impacts are perceived differently by different groups and that no observation is purely empirical (Jalava 2014). In 2000, a pilot project was done to look at a more collaborative approach to knowledge exchange as part of a strategic impact assessment process (Saarikoski 2000). While the pilot dealt with a locally controversial subject and had several challenges due to time constraints, the value of integrating knowledge between the proponent, experts, and local stakeholder groups was recognized by all that participated (Saarikoski 2000). However, it does not appear that this process has been applied to other EIAs in Finland.

#### *6.1.2.2 Community is actively involved in decision-making*

The EU's *EIA Directive* met this component of CEM more strongly than Finland's *Act on the Environmental Impact Assessment Procedure*. This component of CEM is closely related to the fourth component of the *ILO Convention No. 169* that consultation should be done in good faith. One way for consultation to be done in good faith is for the community to be actively involved in decision-making, which for the purposes of this study means that the community's concerns were clearly considered in the final decision. This section will focus on how well the community's concerns are documented in the final decision to avoid duplication with the fourth component of the *ILO Convention No. 169*.

One of the goals of the EIA process is to give the public more opportunities to participate in EIAs and impact the development of the project through identifying potential adverse impacts and providing information regarding the local area (FMEE 2015; FMOE 2015a; FMOE 2015b). The importance of community involvement in the EIA process and ultimately in helping to shape the proposed projects are reiterated throughout the various guides developed by the Finnish government and stakeholder groups to supplement the EIA legislation. One guide to the EIA

process for mining projects indicates that the EIA report should attempt to explain the reasons behind any differing perspectives between stakeholder groups to gain a better understanding of potential impacts for the final decision (FMEE 2015). While Finland's EIA legislation provides opportunities for public involvement at the assessment programme and EIA report stages, in practice proposed projects often have several other opportunities for public involvement either by the proponent's choice or through regulatory approval processes (FMOE 2006; FMEE 2015).

The structural separation of the EIA being reviewed by the liaison authority system and the regulatory approvals reviewed by the appropriate government body improves the quality of EIAs and promotes meaningful public participation (Pölonen et al. 2011; Jalava 2014). However, this separation can make it difficult for the information to be clearly referenced by the final decision-maker and there is no requirement for the decision-maker to follow the recommendations outlined in the EIA report (Pölonen et al. 2011; Jalava 2014). The EIA legislation has a broad definition of environmental impacts, but only those impacts that can be addressed by the regulator are typically considered in the final decision (Pölonen et al. 2011). A review of EIAs in Finland found that how well information from the EIA is considered in the final decision differs between cases and stakeholder groups (Jalava 2014). In some cases, public concerns or questions were not responded to in the EIA or final decision (Jalava 2014). Requiring the recommendations in the EIA to be legally-binding requirements and better defining what is meant in the EU's *EIA Directive* by "taking into consideration" the public's comments in the final decision has been suggested to improve the EIA process (Pölonen et al. 2011).

### ***6.1.2.3 Rights and responsibilities are clearly defined***

The EU's *EIA Directive* and Finland's *Act on the Environmental Impact Assessment Procedure* both strongly met this criterion by defining the rights and responsibilities of the parties involved broadly. Finland's *Act on the Environmental Impact Assessment Procedure* explained that further details of these rights and responsibilities would be added in the Decree and supporting regulations. For example, the proponent of the project is responsible for any costs associated with the EIA process (FMOE 2015b). Other regulations in Finland affect the rights and responsibilities of those parties involved in the EIA process, such as the *Act on the Sámi Parliament* and the *Reindeer Husbandry Act* (RHA 2014; Koivurova 2015). The *ILO Convention No. 169* is clear that enacting it should not adversely impact the rights of indigenous peoples; if

the legislation offers greater protections than the *ILO Convention No. 169* would, those protections should not be lessened as a result of the adopting the convention (Joonas and Joonas 2011).

In practice, the level of detail in the definitions used in Finland's EIA legislation does not provide enough clarity to implement clearly, which can result in confusion regarding rights and responsibilities. The EU's *EIA Directive* does not define what it means by a significant adverse impact, make reference to the scoping stage of EIAs or what is involved at that stage, or require the development of a monitoring program (Bond 1999). The broad language used leaves many aspects of the EIA process up to the discretion of the Member States, which has resulted in the directive being implemented in a variety of ways across the EU (Bond 1999). In Finland, there is similar confusion over the criteria used to determine the effects on Sámi culture and a vague description of how to determine if reindeer husbandry is significantly negatively impacted enough to reduce activities in the area (RHA 2014; Koivurova 2015).

#### ***6.1.2.4 Mechanisms for conflict resolution and debate***

As Kaisa Raitio said in her thesis “a process is unlikely to result in a successful settlement of disputes where the parties are known to disagree on...the ground rules” (2008, 126). This recognizes the importance of clear mechanisms for conflict resolution and debate within a natural resource management tool, such as EIAs, where the parties involved know they can have their voice heard another time. While the EU's *EIA Directive* did not mention mechanisms for conflict resolution, Finland's *Act on the Environmental Impact Assessment Procedure* vaguely outlined an appeals process to address disagreements that come out of the EIA. The appeals process in Finland typically occurs at the regulatory approval stage when the permit is being issued (Pölonen et al. 2011). In cases where no permit is required, there is often little opportunity to appeal the decision (Pölonen et al. 2011).

Within the Sámi Homeland, Sámi have the right to appeal a decision that undermines their rights to language and culture (Koivurova 2015). There has been concern that the cost associated with a lengthy appeals process and the high likelihood of the Sámi appealing a decision, has deterred companies from proposing development projects in the Sámi Homeland, though this may change as more mineable resources are found (Koivurova 2015). There have been two United Nations

court cases that have been brought against Finland and reference the *ILO Convention No. 169; Ilmari Länsman et al. v Finland* (No. 511/1992) which looked at a quarry proposed in a sacred mountain, and *Jouni E. Länsman et al. v Finland* (No. 671/1995) which looked at forestry activities in a winter reindeer herding area (Amatulli 2015). Neither case ruled in the favour of the Sámi until a 2014 case in the Supreme Administrative Court of Finland regarding mining in the Valley of the Kings (Supreme Administrative Court KHO 2014:111), which indicates increased recognition of Sámi rights (Amatulli 2015). Unlike the US and Canada where the court system is used to assess the quality of EIA reports, Finnish courts do not result in detailed decisions outlining the quality of EIAs (Pölönen et al. 2011).

For transboundary EIAs under the Espoo Convention, both Member States can initiate an inquiry process into the efficacy of the EIA and the expense of this inquiry will be borne equally by both parties (UN 1991). This process is initiated by the government of one or both of the Member States and does not speak to the ability of indigenous peoples that span boundaries to influence whether an inquiry is initiated.

#### ***6.1.2.5 Recognition of shared values and a responsibility to act***

As was outlined in Chapter 5, the creation of EIA legislation revealed recognition of a responsibility to act and the EU's *EIA Directive* was the only piece of legislation that spoke to the values that went into it. The literature did not elaborate on the shared values, if any, that sparked the development of EIA legislation or legislation related to Sámi participation in natural resource management in Finland. Pölönen et al. (2011) noted several challenges associated with the Finnish EIA system, which included that the effectiveness of public participation often depended on the perspective of the proponent and that the EIA process can be used to further political positions when projects are controversial. These challenges indicate that there is still some work to be done in Finland to recognize shared values and encourage more collaborative EIAs consistently.

#### ***6.1.2.6 Community is well-defined and cohesive***

EIA legislation in Finland provides a clear definition of the general public involved in the EIA process, but the sense of cohesion of a specific community that may be affected is dependent on the project. While it is well-defined, the practical definition of Sámi people in Finland is limited

to individuals who are registered on the Sámi Parliament electoral roll (Joonas and Joonas 2011). The existence of the Sámi Parliament creates a governing body, which has the potential to add cohesion to the Sámi people. However, individual local communities or Sámi groups may not feel represented by the Sámi Parliament and could have local-specific concerns that are not well-represented as a whole. Similarly, there are 56 RHCs within Finland's reindeer herding area (36% of the country); 13 of which are within the Sámi Homeland (FMEE 2014; RHA 2014). Each RHC is a member of the Reindeer Herders' Association, though consultation occurs with each individual RHC instead of the Association (RHA 2014). The RHCs are more likely to be a cohesive group as they share a traditional livelihood tied to their identity and there is recognition that loss of reindeer herding can have negative social and cultural impacts on these communities (RHA 2014).

#### *6.1.2.7 Resources are well-defined*

The EIA legislation in Finland clearly defines the aspects of the environment that will be considered through the EIA process. The *Decree on Environmental Impact Assessment Procedure* provides more detail on the definition of the resources of concern by indicating that the absorption capacity of the natural environment be considered when determining whether an EIA should be triggered (FMOE 2006). The cumulative impacts of multiple development projects on the landscape are often a concern regarding the use and management of natural resources, particularly to indigenous peoples. Based on rulings by the European Union Court of Justice, the EU's *EIA Directive* is intended to include an assessment of cumulative impacts which the developer should discuss with the competent authority (FMEE 2015). Finland's *Act on the Environmental Impact Assessment Procedure* was the first piece of legislation in Finland to look at cumulative effects across multiple industries (Pölonen et al. 2011). However, there is no clear guidance regarding how to assess the cumulative impacts of multiple projects on the landscape in the EIA process or if consultation with Sámi communities is required regarding cumulative impacts.

A requirement outlined in the Decree is that the assessment programme provides a baseline description of the environment, including any information gathered in past EIAs (FMOE 2006). The EIA guide for mining projects indicates that, in addition to baseline information being included in the assessment programme, this benchmark needs to be revised in the EIA report to

include any new information that arose from the EIA (FMEE 2015). Consideration should also be given in the EIA to any future work that is expected as a result of the proposed project (FMEE 2015). EIAs in Finland currently do a good job of describing the proposed project, its location and any potential impacts, though a criticism is that an analysis of this information would also be useful (Jalava 2014).

#### **6.1.2.8 Mechanisms for monitoring exist**

As was outlined in Chapter 5, there is no formal mechanism for monitoring the efficacy of an EIA on a proposed project in either piece of EIA legislation affecting EIAs in Finland. However, the *Decree on Environmental Impact Assessment Procedure* requires the EIA report to contain a proposal for a monitoring programme (FMOE 2006). In some cases, the monitoring programme developed by the proponent may be more inclusive than the one outlined in the EIA or mandated by the environmental permits required (FMEE 2015). Despite this requirement, research has shown that follow-up to the EIA process is often poorly conducted or excluded from the EIA (Pölonen et al. 2011; Jalava 2014). As there is very little guidance on conducting a follow-up program, where they exist they are diverse and inconsistent with little comparison between the real impacts and those predicted in the EIA (Jalava 2014).

Follow-up or monitoring programs can be of benefit to future EIAs by expanding the baseline knowledge about the environment and potential impacts of a project (FMEE 2015). They can also increase the credibility of the EIA process when results are shared with stakeholders (Pölonen et al. 2011). The Reindeer Herders' Association recommends the creation of a monitoring group to assess impacts of the proposed project, which will include impacts to reindeer husbandry and contain a representative from the affected RHC (RHA 2014). As was mentioned before for transboundary EIAs, either state involved can request a post-project analysis to determine the real impacts of a project as compared to those expected in the EIA, though standard monitoring programs are rare in the EU (UN 1991; Pölonen et al. 2011).

#### **6.1.2.9 Mechanisms for graduated sanctions**

Unlike other environmental legislation in Finland, neither Finland's *Act on the Environmental Impact Assessment Procedure* nor its associated decree outlined any sanctions associated with violation of the Act. Furthermore, none of the literature found described any sanctions associated



with non-compliance with EIA legislation. It appears that the greatest mechanisms for imposing sanctions on natural resource development projects arise at the environmental permitting stage, though it should be noted that an EIA may be required to obtain a permit.

#### *6.1.2.10 Opportunities for new interactions to build trust*

According to EIA legislation analysed, there are no mandated in-person interactions between the project proponent and the public or Sámi. The various guides to the EIA process in Finland acknowledge that impacts to people can change based on their experiences and knowledge, which can be influenced through mutual respect and trust-building interactions between the developer and the public (RHA 2014; FMEE 2015). Conflict can be avoided by encouraging a better understanding of the different perspectives involved, perhaps with the assistance of a third-party contractor to ease any existing tensions (RHA 2014). All parties involved appear to recognize the importance of honest communication and building trust in having effective public participation (Leskinen 2003; Raitio 2008; RHA 2014; Koivurova 2015). However, there are still cases of public resistance and lack of dialogue in the early stages of controversial projects when building trust is most important (Pölönen et al. 2011; Koivurova 2015). Since face-to-face interactions to build trust are not formalized in the EIA process, they are inconsistent between proponents and stakeholder groups (Pölönen et al. 2011).

#### *6.1.2.11 Opportunities to experiment and adapt the management*

A requirement for gathering knowledge within the EIA process and comparing the results of EIAs between projects is not clearly outlined in the EU's *EIA Directive* and Finland's *Act on the Environmental Impact Assessment Procedure*. The *Decree on Environmental Impact Assessment Procedure* clarifies that the assessment programme must contain "a description of the environment, information on the studies on environmental impact already carried out and planned, and information on the methods to be used in the acquisition and assessment of the material and on assumptions related to the methods" (FMOE 2006, 3(9)4) and the EIA report must contain "an assessment of the environmental impact of the project and its alternatives, any deficiencies in the data used, and the main uncertainty factors" (FMOE 2006, 3(10)5).

In addition to these formal requirements, the guides to EIAs in Finland indicate that EIAs should take into consideration past EIAs and experiences with similar projects, and ideally continue

throughout the lifecycle of the project as more information is gained (FMEE 2015). Lack of information in some areas, such as cumulative impacts on reindeer husbandry and mining, is a barrier and the studies during and after an EIA can help increase the information available for decision-making (Jalava 2014; Koivurova 2015). The Finnish Environmental Institute gathers information on EIAs and obtains the expertise needed in the EIA process on behalf of the Ministry of the Environment (FMOE 2006). Similarly, the Finnish Association for Impact Assessment, founded the same year as Finland's EIA legislation, develops EIA strategies and promotes research related to EIAs in Finland (FAIA 2017).

It is important to consider alternatives to the proposed project when doing additional studies as well as exceptional situations that may occur over time, such as accidents, natural disasters, extreme weather, human error, and changes in production (FMEE 2015). Since EIAs are conducted by the proponent, the alternatives considered in Finland have been limited (Jalava 2014). Furthermore, it can be difficult to directly compare alternatives (FMEE 2015).

#### *6.1.2.12 Communities receive support and resources*

EIA legislation in Finland does not commit the government to providing financial support to the public to participate in the EIA process, though it does require information to be provided to the public using accessible language. However, one study found that translating from technical to plain language was one of the flaws in the current EIA process in Finland, so it does not appear to be an effective method of supporting public participation in practice (Pölonen et al. 2011). While this does not necessarily relate to capacity funding, the onus is on the proponent of the project to fund the costs associated with the EIA process. This is reiterated in greater detail in the *Decree on Environmental Impact Assessment Procedure* and the various guides to the EIA process in Finland (FMOE 2006; FMEE 2015; FMOE 2015a; FMOE 2015b).

#### *6.1.2.13 Process is applied to the local conditions*

The results in Chapter 5 reveal that the EU's *EIA Directive* better directs that the EIA process is applied to the circumstances, compared to Finland's *Act on the Environmental Impact Assessment Procedure*, which only requires that the EIA be coordinated with land use planning. The *Decree on Environmental Impact Assessment Procedure* elaborates on the Act by indicating that the local conditions, specifically "landscapes of historical, cultural or archaeological

significance” are considered when determining whether an EIA is required (FMOE 2006, 2(7)2c). It also states that the EIA report must account for how the project and its alternatives relate to the land use plan for the area (FMOE 2006). The present state of the environment should be described in the assessment programme and EIA report, as well as any potential changes to the landscape and potential impacts due to climate change or exceptional situations (FMEE 2015).

Considering the history of an area can better help EIA practitioners understand the local conditions and potential impacts of a proposed project. Within Finnish state forests, rapid changes to environmental management without consideration for the historical relationship between the local public and government has made conflict management difficult (Raitio 2008). It is important to remember that the creation of new formal institutions does not override existing informal ones, so the informal ones should be considered when developing the assessment programme (Raitio 2008). To create a more complete picture of potential impacts and appropriate mitigations, it is important to negotiate and gain input from local stakeholders, such as the local RHCs, neighbouring land owners, and Sámi community members (Leskinen 2003; RHA 2014).

#### *6.1.2.14 Collaboration occurs early and at several stages in the process*

The EU’s *EIA Directive* explicitly indicates the importance of the EIA occurring as early as possible in the planning stage, but does not outline the details of when public participation fits into the process. When Finland implemented this directive in their EIA legislation, they reiterated the importance of the EIA occurring as early in the planning stage as possible and indicated two opportunities for public involvement: after the assessment programme and the EIA report. While the *Decree on Environmental Impact Assessment Procedure* does not create requirements for more stages of public participation, it does allow the opportunity for the proponent to create a plan for public participation as part of their assessment programme, so there is a place for the public to comment on whether the level is sufficient (FMOE 2006).

The guides to the EIA process in Finland indicate that in practice there are more opportunities for public participation than after the two main stages of the EIA (RHA 2014; FMEE 2015). In reality, the public and specific stakeholders are often involved before the EIA assessment

programme is created (RHA 2014; FMEE 2015). Addressing concerns and exchanging information early when they can more easily be addressed is recognized by many proponents and stakeholders as being a valuable way to build trust and decrease costs, though this is still a point of conflict in some cases (Pölonen et al. 2011; RHA 2014; Amatulli 2015; FMEE 2015; Koivurova 2015). It is common practice to have joint public participation events run by the proponent and the competent authority to ensure transparency of the process (FMEE 2015). While impacts at each stage of the project's lifecycle should be considered in the EIA, continuous interaction and cooperation with the public is recommended for the entire lifecycle of the proposed project and at all stages of decision-making (Amatulli 2015; FMEE 2015).

#### *6.1.2.15 Nested enterprises*

The management of natural resources, particularly when considering the rights of an indigenous peoples like the Sámi whose traditional territory spans political borders, has different considerations and perspectives at the local, national, regional and international scales (Raitio 2008). Finland's *Act on the Environmental Impact Assessment Procedure* is connected to the EIA processes of its neighbouring countries through transboundary EIA requirements as outlined in the Espoo Convention and through the standardization of the EU's *EIA Directive* (Fitzpatrick and Sinclair 2009).

Finland's EIA process is part of nested enterprises domestically through the requirement to coordinate the coordinating authority (local Centre for Economic Development, Transport and the Environment) and local council or regional authority to consider land use planning in the EIA process (FMOE 2006). The Finnish Environmental Institute gathers EIA information from the local Centre for Economic Development, Transport and the Environment to coordinate EIAs across Finland (FMOE 2006). A requirement of the assessment report is that the proposed project and its alternatives be considered in relation to land use plans and any other relevant plans (FMOE 2006; RHA 2014). Throughout the EIA process, the impacts should be considered within the context of regional and national land use guidelines, objectives and activities, and the EIA report should justify whether or not land use objectives were met (RHA 2014; FMEE 2015).

### ***6.1.2.16 Effective and time-sensitive***

The EU's *EIA Directive* places the responsibility to set appropriate timelines for the EIA process on its Member States. Finland's *Act on the Environmental Impact Assessment Procedure* outlines flexible timelines for the different stages of an EIA, for example 30 to 60 days are given for public input into the assessment programme and again for the EIA report (FMOE 1994). This allows for the comment period to be proportional to the type of project being proposed. The specific timelines for public participation, project planning milestones, and any studies that are part of the EIA process must be outlined in the assessment programme, which is provided to the public for comment (FMOE 2006). The coordinating authority has more time to review the results of the EIA stages than the public has to comment on them, though this could be justified as they are reviewing more information than the public (FMOE 2006). The literature did not reveal that the timelines provided to the public for comment were insufficient in Finland.

## **6.2 EIA Legislation in Labrador, Canada**

The EIA process in Labrador, Canada is outlined in two pieces of legislation depending on whether the proposed project falls under federal, provincial or both jurisdictions. Projects may trigger the more specific requirements of the federal *Canadian Environmental Assessment Act, 2012* or the broader requirements of the provincial *Environmental Protection Act*. As was outlined in Chapter 5, the Canadian legislation better met the requirements of the *ILO Convention No. 169* and CEM framework than Newfoundland and Labrador's *Environmental Protection Act*.

It is a commitment of the current federal government of Canada to make changes to the federal EIA legislation based on public criticism of the changes made under the previous government in the *Canadian Environmental Assessment Act, 2012* (LPC 2017). This commitment has resulted in the creation of a panel of experts who looked into the issues raised and published a report on April 5, 2017 summarizing their findings called *Building Common Ground: A new vision for impact assessment in Canada*. Despite Newfoundland and Labrador's *Environmental Protection Act* being older than the *Canadian Environmental Assessment Act, 2012*, there does not appear to be a plan to change the province's legislation or EIA process in the near future (Hanna 2009).

## 6.2.1 ILO Convention No. 169

### 6.2.1.1 Recognition of indigenous peoples as having rights related to their culture, history and values

The Canadian EIA legislation identified Aboriginal peoples as a unique rights-holder group throughout *Canadian Environmental Assessment Act, 2012* and Newfoundland and Labrador's *Environmental Protection Act* deferred to the land claims agreements with the Inuit of Labrador for projects with the potential to affect their rights. Recognition of the rights of indigenous peoples to be active participants in the EIA process has increased over the last 20 years. In 2003, the original *Canadian Environmental Assessment Act* was amended to include language that directly recognized the value of community and traditional knowledge to the EIA process (Gibson and Hanna 2009). In 2007, the proposed Kemess North Mine in BC was the first project that was denied based on the impacts it would have on the ecology of the area and Aboriginal rights (Gibson and Hanna 2009).

The federal EIA regulations on information to be included in the project description specifically states that it should include the impacts on Aboriginal peoples of expected changes to the environment from the proposed project (GCMJ 2014b). The guiding documents to the federal EIA process in Canada make a point of mentioning Aboriginal peoples, for example they reiterate one of the purposes of the *Canadian Environmental Assessment Act, 2012* is to promote cooperation with Aboriginal peoples, that the concerns of Aboriginal peoples will be considered in determining how closely cumulative effects will be assessed, and that Aboriginal traditional knowledge will be incorporated into the assessment of cumulative effects (GC 2015b). Another guide states that, "There is recognition, both in Canada and abroad, that Aboriginal peoples have unique knowledge about the local environment, how it functions, and its characteristic ecological relationships. This Aboriginal traditional knowledge (ATK) is recognized as an important part of project planning, resource management, and environmental assessment" (GC 2015c).

Despite increased recognition of the rights of indigenous peoples in the EIA process, there has been much criticism by the public in Newfoundland and Labrador, as well as other jurisdictions across Canada. In 2007, the Carrier Sekani Tribal Council outlined "the lack of mandatory First Nations criteria under current legislation, the lack of Aboriginal perspectives, [and] the inability to address Treaty and Aboriginal rights and Aboriginal title" as some of the deficiencies with

BC's EIA legislation (Booth and Skelton 2011, 52-3). The court system has recognized the importance of considering First Nations' interests in the EIA process, but from the perspective of many First Nations there is dissatisfaction with how this is implemented and a lack of trust in the process (Booth and Skelton 2011). Even Newfoundland and Labrador's *Aboriginal Consultation Policy on Land and Resource Development Decisions* only considers site-specific concerns, which are not clearly defined (GNL 2013).

#### **6.2.1.2 Self-identification as an indigenous group**

As was mentioned in Chapter 2, *The Constitution of Canada*, 1982 recognizes three groups of Aboriginal peoples; Indian, Inuit and Métis peoples (GC 1982). The *Indian Act*, 1985 defines an Indian as those individuals registered under the *Indian Act* (GC 1985). One is eligible to be registered as a status Indian if they were registered before the act was released in 1985, if they are a member of a recognized Aboriginal group, or if they lost their status under the old *Indian Act* due to marriage or adoption (GC 1985). Similarly, there is a list of all Aboriginal groups or bands that are recognized by the Canadian government (GC 1985). The government of Newfoundland and Labrador uses the same registries as the federal government. In practice, this means that if an indigenous group is to be considered an "interested party" within the EIA process, they must have traditional territory within the project footprint and demonstrate that their Treaty and Aboriginal rights will be affected or that they have knowledge of the area; all of which must be recognized by the responsible authority (GC 2012).

#### **6.2.1.3 Governments have a responsibility to protect the rights of indigenous groups with their participation**

As outlined in Chapter 5, the EIA legislation for Canada clearly meets this component with recognition of the government's responsibility to protect the rights of indigenous groups with their participation. This responsibility was reiterated in the guiding document on Aboriginal consultation in the federal EIA process, which stated the requirement for government to consult with Aboriginal people on proposed activities that could negatively impact potential or established Aboriginal or Treaty rights (GC 2016a). This component was only moderately met based on the analysis of Newfoundland and Labrador's *Environmental Protection Act*. Although it is not formal legislation, Newfoundland and Labrador's *Aboriginal Consultation Policy on Land and Resource Development Decisions* recognizes the provincial government's commitment

to consult with indigenous groups, including those with asserted rights that have not yet been accepted by the government, regarding land use decisions with the potential to adversely affect their rights (GNL 2013). Although proponents might carry out consultation, this policy recognizes that it is ultimately the government's responsibility to ensure that Aboriginal consultation is done well and land under provincial jurisdiction is managed well (GNL 2013).

In practice, the government has implemented legislation and policies that affect the rights of indigenous peoples without inviting their participation in its development. For example, no evidence was found of consultation with indigenous groups occurring before the development of the *Canadian Environmental Assessment Act, 2012*. However, after the legislation came into force the Canadian Environmental Assessment Agency met with national Aboriginal organizations to determine whether amendments to the Regulations should be made (CEAA 2013). There were no submissions from the national Aboriginal organizations during this time period, though Aboriginal groups did express "support for the addition of offshore oil and gas exploration projects and seismic testing" via letters submitted at a later date (CEAA 2013).

While EIA legislation in the Atlantic provinces of Canada varies, in each province the final decision is made by the minister (Hanna 2009). The natural resource management process has several checks; once the proponent has received EIA approval, they may need additional approvals from other government bodies (Hanna 2009). The government has the authority to exempt a project perceived to have a low impact from the EIA process, in which case the public would not be notified through the EIA process though other forms of public participation may occur at regulatory approval stages (Hanna 2009; GNL 2013). Similarly, the level of public participation required can be adjusted by the minister where there is reason to do so (Hanna 2009; GNL 2013). Newfoundland and Labrador's *Aboriginal Consultation Policy on Land and Resource Development Decisions* clearly outlines the responsibilities of the provincial government in carrying out consultation and indicates that further details will be included in Consultation Guidelines (GNL 2013). It is unclear if these Guidelines have been created in the last four years to implement the policy and if consultation with affected indigenous communities was part of the development of the policy.



#### *6.2.1.4 Participation and consultation are done in good faith*

Similar to the above component, Chapter 5 indicated that the language in the *Canadian Environmental Assessment Act, 2012* meets this component more strongly than it is met by Newfoundland and Labrador's *Environmental Protection Act*. There has been a positive trend in the recognition of First Nations' jurisdiction to conduct their own EIAs and the incorporation of Aboriginal traditional knowledge within the federal EIA process between the 1992 and 2012 versions of the Act (Booth and Skelton 2011). Regulations supporting the *Canadian Environmental Assessment Act, 2012* indicate that any previous consultation with Aboriginal peoples or the general public should be included in the description of the project, which increases the transparency of the process related to the specific project (GCMJ 2014b).

The level of consultation that occurs with Aboriginal groups varies between projects depending on the nature of the rights and the potential for the project to adversely impact them (GC 2016a). For example, there is no legislated requirement to gain public feedback on the screening of whether or not an EIA is required (Sinclair and Diduck 2009). Aboriginal groups are invited to comment on the potential environmental effects of a proposed project, the potential impacts of that project on potential or established Aboriginal and Treaty rights, proposed mitigations, and follow-up programs (GC 2016a). Feedback from Aboriginal groups will be considered before a decision is finalized and there may be other opportunities for consultation as a requirement of other regulatory approvals (GC 2016a).

Part of consultation being done in good faith is that the EIA takes place as early as possible so it is easier to incorporate proposed mitigations and there are more opportunities for the participation of Aboriginal groups and the general public (GC 2016b). There are four main documents where public comment is required under the legislation: determining whether an EIA is required, the draft environmental impact statement (EIS) guidelines, EIS report from the proponent, and final EIA report from the responsible authority (GC 2016b). For EIAs conducted by a review panel, other opportunities are the public hearing and the draft review panel terms of reference or joint review panel agreement (GC 2016b).

Despite the strong language used in the *Canadian Environmental Assessment Act, 2012*, there are still some criticisms of how public participation and Aboriginal consultation are implemented.

There needs to be more clarity on the intention of public participation activities to ensure the expectations of the public are at least met and preferably exceeded (Sinclair and Diduck 2009). This is of particular concern with indigenous groups, as they often feel as though their concerns are not taken seriously and there is already a lack of trust between the parties (Booth and Skelton 2011).

While information pertaining to an EIA must be made available to the public through online registries and libraries, this does not ensure that all interested individuals or groups can easily access the information (Sinclair and Diduck 2009). Open houses are a common technique used to gather public comment, but under the 1992 *Canadian Environmental Assessment Act* more than 99% of EIAs had no legislative requirement for gathering public comments, as it was required at the discretion of the responsible authority (Sinclair and Diduck 2009). In cases where a public hearing is required, in less than 2% of cases under the 1992 Act, the hearing panel only provides advice to the decision-maker (Sinclair and Diduck 2009). With Bill C-19 introduced to improve public participation in 2001 and Bill C-9 passed in 2003 for better recognition of TEK, there appears to be a trend towards making the process more open and participatory (Gibson and Hanna 2009).

Newfoundland and Labrador was the first jurisdiction in Atlantic Canada to legislate the EIA process (Hanna 2009). One of the guiding principles of the current EIA legislation is that Aboriginal “Consultation shall be meaningful and must be conducted in good faith by all consulting parties” (GNL 2013, 3). This good faith consultation with Aboriginal groups is considered to be consultation “based on principles of respect, open communication and cooperation” (GNL 2013, 6). Newfoundland and Labrador is considered to have one of the best provincial EIA legislations in Canada in terms of balancing issues with cooperation (Hanna 2009). Despite improvements to the time given for public review in the 2002 revision, its public participation is still weak (Hanna 2009). Aboriginal groups in particular were critical of the EIA process for the Voisey’s Bay mine and mill project, with the Innu Nation filing an appeal to the courts to stop the approval (Hanna 2009).

Newfoundland and Labrador’s *Environmental Protection Act* requires opportunities for public comment at every stage of the EIA process and encourages consultation to occur as early as

possible in the planning process, but does not outline the timing or quality of these opportunities (Sinclair and Diduck 2009; GNL 2013; MDEC 2016). Guidelines to the *Environmental Protection Act* outline more specific requirements, such as the minister and the public must be given at least seven days' notice before any meetings with the public scheduled by the proponent (GNL 2003). There are more legislated requirements when a public hearing is required for an EIA, including timing of the hearing, information that must be made available to the public and board, and a requirement to answer all questions raised by the public (GNL 2003; Sinclair and Diduck 2009). Within the EIS guidelines developed as part of the EIA process, there is a required program for undertaking public participation and the EIA report must include a response to concerns raised during the public comment period, including any agreed upon mitigations (GNL 2003; MDEC 2016).

A goal in Newfoundland and Labrador is to work with other jurisdictions to improve public participation in the EIA process (Hanna 2009). Under the *Environmental Protection Act*, all levels of public involvement can be adjusted at the discretion of the minister (Hanna 2009). The assessment committee is the group of technical experts from affected government departments who review information to come out of the public participation process and advise the minister (MDEC 2016). There is a requirement for all decisions made by the minister throughout the EIA process to be announced to the public via press release, mailed notice, publishing in a newspaper, and publishing on the Environmental Assessment Bulletin, whether or not there is a formal public comment period (GNL 2003; MDEC 2016).

#### ***6.2.1.5 Recognition of the rights of ownership and possession to traditional territory***

The *Canadian Environmental Assessment Act, 2012* does not indicate recognition of the right of ownership of the traditional territory of indigenous peoples. However, guiding documents to this Act specify that the project description should include proximity to a reserve and identification of any areas currently or historically used by Aboriginal peoples for traditional purposes (GCMJ 2014b). Newfoundland and Labrador's *Environmental Protection Act* moderately recognizes this right by stating that if there is a land claims agreement in place, such as the one for the Inuit of Labrador, that agreement will supersede the EIA process outlined in the Act. The Government of Newfoundland and Labrador does not indicate recognition of a right to ownership where no land claim agreement has been settled, which is why this component is not strongly met. The

*Aboriginal Consultation Policy on Land and Resource Development Decisions* even states that consulting with an Aboriginal group through EIA or another regulatory process does not constitute recognition of an asserted right (GNL 2013).

The Innu Nation and other indigenous communities in Canada have had similar roadblocks to the recognition of the right to ownership of their traditional territory as the Sámi have had in Finland. The governments of Canada and its provinces gain a lot of economic value from the land, which is often in conflict with traditional uses of the land by indigenous peoples. In Canada, treaties were signed across the country with various First Nations though not all communities were included in the treaties and not all land was covered. This further confuses any recognition of the right to ownership of traditional territory by the over 600 First Nations and other Aboriginal groups. In the case of the Innu Nation there are ongoing land claim agreement negotiations being undertaken, which does indicate recognition of the right to ownership or at least historical ownership of their traditional territory (Innu of Labrador et al. 2011). What this means practically and for the EIA process specifically is currently being decided through these negotiations.

#### ***6.2.1.6 Recognition of the rights to participate in the use, management and conservation of resources***

As described in Chapter 5, when compared to Newfoundland and Labrador's *Environmental Protection Act*, the language in the *Canadian Environmental Assessment Act, 2012* more strongly endorses the rights of indigenous peoples to participate in the use and management of natural resources within their traditional territory. Guiding documents to the federal EIA process require the project description to include resources currently used by Aboriginal peoples and ensure an opportunity is provided for Aboriginal peoples to identify potential environmental impacts to their rights (GCMJ 2014b; GC 2016a).

However, the Canadian Environmental Assessment Agency decides the level and nature of the consultation required based on the description of the project, and identifies which Aboriginal communities may be affected (GC 2016a). One of the issues associated with the recognition of the right to participate in the management of natural resources is that in Canada this management is shared across multiple jurisdictions (MacKay 2006). Cooperation between these jurisdictions,

particularly in the case of managing the cumulative effects aspect of EIAs, is an ongoing issue and can limit the recognition of this right because it may vary across jurisdictions (MacKay 2006). For example, Newfoundland and Labrador's *Environmental Protection Act* does not use language specific to the rights of Aboriginal peoples though they are able to participate as members of the general public in the EIA process. They may also participate if they are triggered under the *Aboriginal Consultation Policy on Land and Resource Development Decisions*, but this does not constitute recognition of a right (GNL 2013).

#### *6.2.1.7 Transboundary consideration to address issues of the indigenous peoples as a whole*

Both the *Canadian Environmental Assessment Act, 2012* and Newfoundland and Labrador's *Environmental Protection Act* mention the opportunity to create a joint EIA when both federal and provincial EIAs are triggered. The federal legislation provides for the additional opportunity of a foreign government or international organization of states to undertake the EIA on behalf of the Canadian government. In fact, one of the purposes of the *Canadian Environmental Assessment Act, 2012* is to promote coordination across multiple jurisdictions including with Aboriginal governments where possible (GC 2016a; GC 2016b). Where one of these substitutions occurs, the public is provided with the same opportunity to participate as they would be granted under the *Canadian Environmental Assessment Act, 2012*. Additionally, the results of regional studies undertaken under the federal legislation must be done in conjunction with other jurisdictions and made available to the public (GC 2016b).

Part of what makes EIAs in Canada challenging is that the management of the environment falls within multiple jurisdictions between the federal, territorial, and provincial governments (Fitzpatrick and Sinclair 2009). In the 1997 Voisey's Bay project, a joint assessment EIA was done under the jurisdictions of Newfoundland and Labrador, Canada, the Labrador Inuit and the Labrador Innu (Gibson and Hanna 2009). This collaboration resulted in more intensive tests to determine the ecological and community sustainability of a proposed project (Gibson and Hanna 2009).

The following year in 1998, the *Canada-wide Accord on Environmental Harmonization* was signed to allow for one EIA for a project to be managed by multiple jurisdictions, which has the

potential to raise the standards higher than each EIA on its own (Fitzpatrick and Sinclair 2009; Hanna 2009). Newfoundland and Labrador updated its EIA legislation to include harmonization with the federal legislation in 2002 (Hanna 2009). One of the guiding principles of the current *Environmental Protection Act* is that it will coordinate with the federal government and across the provincial government (GNL 2013). This is implemented by guidelines indicating that any proposed project that falls under this Act will also be reviewed under the *Canadian Environmental Assessment Act, 2012* so that harmonization can happen as early in the process as possible (MDEC 2016).

The relationship between public participation and a harmonized EIA process is complex (Fitzpatrick and Sinclair 2009). Information can be difficult to find when each jurisdiction has its own system of information management and publication, and cooperation between the jurisdictions is accomplished with inconsistent success (MacKay 2006; Fitzpatrick and Sinclair 2009). Efforts have been made, particularly by the EU, to standardize the EIA process and public participation across state boundaries through the Espoo and Aarhus Conventions respectively (Fitzpatrick and Sinclair 2009). While Canada has ratified the Espoo Convention, it included a declaration that the Convention was ratified in the context of the Canadian constitutional system, which divides EIAs between federal and provincial jurisdictions (UNTC 2017). This was objected to by Sweden, Norway, Finland and several other states as not being clear regarding the extent to which Canada would then be bound by the Convention (UNTC 2017). There does not appear to be any change in Canada's position regarding this and it is unclear how it would affect the standardization of transboundary EIAs.

#### **6.2.1.8 Capacity funding**

The *Canadian Environmental Assessment Act, 2012* moderately meets the last component of the *ILO Convention No. 169* regarding capacity funding by requiring the creation of a participant funding program. Even under the 1992 *Canadian Environmental Assessment Act*, the Government of Canada committed to facilitating public participation (Sinclair and Diduck 2009). However, capacity funding for public participation has been a recurring issue in Canadian EIAs for a long time, even though it was raised as a way to facilitate effective public participation in the 1987 *Reforming Federal EIA: A Discussion Paper* (Gibson and Hanna 2009; EPREAP

2017). It is of particular concern regarding the ability of Aboriginal communities to effectively participate in EIAs (Booth and Skelton 2011; EPREAP 2017).

Where participant funding exists in Canada, it is often reserved for large-scale projects and varied in its design and application (Sinclair and Diduck 2009). For federal EIAs, participant funding programs are required for all designated projects to support individuals, non-profit organizations and Aboriginal groups (GCMJ 2014a; GC 2016a; GC 2016e). To be eligible for participant funding, you need to demonstrate you will provide value to the EIA and one of the following:

- *“Have a direct, local interest in the project, such as living or owning property in the project area;*
- *Have community knowledge or Aboriginal traditional knowledge relevant to the environmental assessment;*
- *Plan to provide expert information relevant to the anticipated environmental effects of the project; and/or*
- *Have an interest in the potential impacts of the project on treaty lands, settlement lands or traditional territories and/or related claims and rights.”* (GC 2016e)

It is then at the discretion of the Canadian Environmental Assessment Agency, whether an individual or group is granted the funding, which is a maximum of \$12,300 or \$21,800 depending on whether or not the EIA is undertaken by a review panel (GC 2016a; GC 2016d). The funding provided is often inadequate and received late in the EIA process (EPREAP 2017).

It is common for important voices not to be heard in an EIA because of the resources required to participate, which can reduce trust in the process and bias the results of the EIA (Sinclair and Diduck 2009). It is important to balance these issues with the concerns of proponents and government that it can be too costly to incorporate public participation (Sinclair and Diduck 2009). Proponents may be required to pay costs associated with the EIA, though this is not a requirement if the proponent is a band council under the *Indian Act* and the proponent is not required to pay for participant funding (GCMJ 2012).

Newfoundland and Labrador’s *Environmental Protection Act* did not meet this component because it does not provide for any member of the general public or indigenous group to receive

funding to participate in the EIA (Hanna 2009; Sinclair and Diduck 2009). Guiding documents indicate that the proponent must pay a fee to have their project assessed to determine EIA requirements and may need to pay a deposit to compensate for any rehabilitation required as a result of accident or non-compliance (GNL 2003; MDEC 2016). The cost associated with Aboriginal consultation is also considered to be the responsibility of the proponent (GNL 2013). As the required costs need to be “reasonably necessary capacity-funding”, it is likely that the funding provided varies depending on the nature of the project and the attitude of the proponent (GNL 2013, 3).

## ***6.2.2 Collaborative Environmental Management***

### ***6.2.2.1 Knowledge integration***

Both pieces of EIA legislation affecting Labrador provide the opportunity for knowledge integration between project experts and the general public, with the *Canadian Environmental Assessment Act, 2012* stating that Aboriginal traditional knowledge may be considered in the EIA. The guiding documents of the *Canadian Environmental Assessment Act, 2012* elaborate on this stating that Aboriginal traditional knowledge should be incorporated into the assessment of cumulative effects in the EIA, where this information is not proprietary, and that the information in this assessment should be considered when deciding on mitigations (GC 2015b).

The definition of Aboriginal traditional knowledge is similar to the one described in Chapter 2 with traditional ecological knowledge (TEK) being a subset of it (GC 2015c). The value of Aboriginal traditional knowledge is recognized by these guiding documents as increasing the information available about the proposed project, reducing the potential impacts, improving decisions, building relationships between the parties involved in the EIA, improving the capacity of the Aboriginal communities to participate in the EIA, and building awareness of the value of their knowledge (GC 2015c). It is recommended that this knowledge be incorporated throughout the EIA process and that it is gathered with the participation and consent of the community, although how it is incorporated is dependent on the nature of the knowledge (GC 2015c). Where the western and Aboriginal traditional knowledge gathered are in conflict with one another, the only requirement of the EIA report is to demonstrate how both were considered (GC 2015c). In



practice, this often means the TEK is not accepted over western science because indigenous groups do not have the same level of political clout (Nadasdy 2006).

One of the criticisms of the Canadian EIA process is the lack of ongoing communication between the parties involved in the EIA, which could have resulted in better knowledge integration (Sinclair and Diduck 2009). However, there is a trend towards accepting different kinds of knowledge with the *Canadian Environmental Assessment Act* being amended in 2003 to better recognize Aboriginal traditional knowledge in the EIA process (Gibson and Hanna 2009). While the main focus of the federal EIA legislation is the biophysical impacts of a proposed project, the directly related social impacts are also considered (Pushchak and Farrugia-Uhalde 2009).

In Labrador, an EIA on low-level flying resulted in the creation of the Labrador Institute for Environmental Monitoring and Research, which is co-managed between government and local and Aboriginal peoples (Sinclair and Diduck 2009). Also, projects of great concern to the public have their EIA and the knowledge compiled within it reviewed by an independent review committee, which consists of a minimum of five individuals from various government agencies (Hanna 2009). Regarding consultation on the creation of a national park, the importance of knowledge exchange was recognized with the emphasis that the information exchanged needs to be correct and understandable to all parties for it to have value (Thinley 2010).

#### ***6.2.2.2 Community is actively involved in decision-making***

According to Chapter 5, the *Canadian Environmental Assessment Act, 2012* more strongly meets this component than Newfoundland and Labrador's *Environmental Protection Act*. This component is closely tied to the *ILO Convention No. 169*'s fourth component regarding consultation being done in good faith. As was done in the section for Lapland, Finland, this section will focus on how well the community's concerns are documented in the final decision to avoid duplication with the fourth component of the *ILO Convention No. 169*. Under the *Canadian Environmental Assessment Act, 2012* public participation is intended to be meaningful; there are several opportunities for the public to provide comments and at each decision-making stage these comments must be considered by the responsible authority.

In the final decision, public comments need to be balanced with the purpose of the proposed project, results of any regional studies, expected environmental impacts including cumulative effects and those caused by accidents, and the financial costs of modifications to the project (GC 2016b). The significance of these impacts must be considered in the context of the mitigation measures that will be implemented (GC 2015b). The extent to which each of these characteristics is weighted over one another is not clear and potentially is assessed on a case-by-case basis. In many cases, it is unclear what the intention of the public participation is and without clear expectations as to what will be done with their comments the public is often left dissatisfied with their involvement (Sinclair and Diduck 2009).

Although the Canadian Environmental Assessment Agency is independent of the regulatory decision-makers, similar to the system in Finland, the conditions of the EIA decision made by the Agency will be incorporated into other federal regulatory approvals (GC 2016b). However, it is unclear how the federal EIA conditions would be incorporated into provincially regulated approvals and this would likely vary between provinces. After the decision on the EIA has been made, there is no legislation in Canada that provides for public participation in the monitoring and follow-up stages, though an exception was made for the low-level flying EIA in Labrador (Sinclair and Diduck 2009).

Newfoundland and Labrador's *Environmental Protection Act* provides opportunities for public involvement, but indicates that more information will be outlined in regulations to support the Act and it does not describe how the public comments are to be incorporated into the final decision. The regulations associated with this Act indicate that the proponent has to specifically respond to all concerns raised by the public through comment periods or public hearings and, where appropriate, include mitigation measures to address them within the EIS (GNL 2003). These must be made available to the public for further comment before the minister makes a decision (GNL 2003).

The minister holds the power to adjust the level of public participation throughout the EIA process, which could increase or decrease how actively the community is involved in decision-making (Hanna 2009). The Environmental Assessment Division of the Department of Environment and Conservation or an assessment committee of technical experts from various

levels of government reviews the public comments throughout the EIA process and advises the Minister on potential environmental impacts prior to a decision being made (MDEC 2016). While the guiding documents provide more clarification into the timing of public comment in relation to decision-making and indicate that all of the concerns raised by the public need to be addressed, they do not clarify how public comments and concerns are incorporated into the final decision.

### **6.2.2.3 *Rights and responsibilities are clearly defined***

Both pieces of EIA legislation affecting Labrador, Canada clearly outline the rights and responsibilities of all parties involved in the EIA process. While the *Canadian Environmental Assessment Act, 2012* is one of the more consistent environmental policies in Canada, there are still issues associated with it that could use more clarification (Gibson and Hanna 2009). As was mentioned before, the role of the public's feedback in the process could use clarification, as well as the role of Aboriginal perspectives (Sinclair and Diduck 2009; Booth and Skelton 2011). Similarly, Newfoundland and Labrador's *Environmental Protection Act* outlines a highly-structured process and clearly defines the role of all parties involved (Hanna 2009). In the *Aboriginal Consultation Policy on Land and Resource Development Decisions* the rights and responsibilities of the parties involved in consultation are clearly defined as well (GNL 2013). These definitions can be perceived as positive in that they are clear or negative in that they can be too prescriptive (Hanna 2009).

### **6.2.2.4 *Mechanisms for conflict resolution and debate***

Neither the *Canadian Environmental Assessment Act, 2012* nor Newfoundland and Labrador's *Environmental Protection Act* include effective mechanisms to deal with conflict resolution outside of the court system. The 1992 *Canadian Environmental Assessment Act* permitted the use of mediation where a public hearing was undertaken as an alternative to the panel review (Sinclair and Diduck 2009). If mediation failed, a panel review would be the next step, but this was dropped in 2005 in an attempt to encourage mediation (Sinclair and Diduck 2009). In the current *Canadian Environmental Assessment Act, 2012* there is no mention of alternative dispute resolution mechanisms, such as mediation. In Newfoundland and Labrador, the independent review committee may be involved in the use of alternative dispute resolution mechanisms, but

this is only in the case of conflict between the minister and the proponent regarding the conditions attached to the EIA approval (Hanna 2009). Conflicts that arise out of the EIA process in Labrador, Canada would typically be settled through the court system, unless a mechanism was built into the land claims agreement with an indigenous community where one was created.

#### *6.2.2.5 Recognition of shared values and a responsibility to act*

Other than the creation of the legislation, there is nothing to indicate recognition of shared values or a responsibility to act within the *Canadian Environmental Assessment Act, 2012* and Newfoundland and Labrador's *Environmental Protection Act*. There is a trend towards recognition of diverse kinds of knowledge with the incorporation of local and Aboriginal traditional knowledge, which could help to develop an appreciation for the shared responsibility to act (Gibson and Hanna 2009).

The literature suggests that one way to build recognition of shared values is to develop a shared sense of place (Wondolleck and Yaffee 2000). Often with EIAs in Canada, particularly in the North or rural areas, the benefits of a proposed project occur in a differently physical location from the project and its negative impacts, which can make it difficult to develop a shared sense of place. It has been suggested that if the federal and provincial governments in Canada recognized that Aboriginal concerns have historically not been considered in the EIA process, this would help to move towards shared values and a responsibility to act (Booth and Skelton 2011).

#### *6.2.2.6 Community is well-defined and cohesive*

As was outlined in Chapter 5, the social cohesion of a community is more dependent on the specific project and which communities are being included in the public participation process. As was indicated in a case of park management in Labrador, the ability of the community to work together can pose a challenge to the management process (Thinley 2010). The level of consultation associated with a project could vary with the credibility of the asserted right, which may be affected by the community's ability to demonstrate their cultural connection internally (Hanna 2009). It should be reiterated that the *Aboriginal Consultation Policy on Land and Resource Development Decisions* applies in cases of asserted rights and does not confirm or deny the existence of the rights for a given community (GNL 2013).

### **6.2.2.7 Resources are well-defined**

In both *Canadian Environmental Assessment Act, 2012* and Newfoundland and Labrador's *Environmental Protection Act* the definition of the environmental impacts that are to be considered in the process is clearly outlined. The cumulative effects of multiple projects on the landscape and the potential impacts of malfunctions or accidents are specifically considered in the federal legislation, but not in the provincial legislation (GC 2016b). The method of assessing cumulative effects is determined on a case-by-case basis considering information available and concerns expressed by Aboriginal groups or the public (GC 2015b). An assessment of cumulative effects is not explicitly required for Newfoundland and Labrador's *Environmental Protection Act*, but it is implied in the guiding documents associated with the legislation (Hanna 2009).

Despite the clear definitions of the environment in the federal and provincial Canadian EIA legislation, the definitions have been criticized for being too narrow by focusing on biophysical impacts and directly related socio-economic impacts such as human health (Hanna 2009). For example, the EIA process in Canada often fails to consider the impacts of the proposed project on spirituality, which is an important connection for many Aboriginal communities (Booth and Skelton 2011). Furthermore, EIA legislation also often fails to define what it means by a significant impact on the environment despite requiring an assessment of the significance of environmental impacts with consideration for proposed mitigation measures (Hanna 2009; GC 2015b; GC 2016b).

### **6.2.2.8 Mechanisms for monitoring exist**

The *Canadian Environmental Assessment Act, 2012* provides for more clear mechanisms for monitoring and follow up than its provincial counterpart, the *Environmental Protection Act*. Under the 1992 *Canadian Environmental Assessment Act*, follow-up programs were only required for comprehensive studies and panel reviews, though they were recommended for all projects that triggered an EIA (Sinclair and Diduck 2009). Now they are a requirement of all projects that trigger an EIA and are required to address both project-specific and cumulative impacts (GC 2015b).

Despite the requirement for a follow up program with every project to undergo an EIA, follow-up is still considered a weak component of the EIA process (Sinclair and Diduck 2009; EPREAP 2017). This is partially because public participation is not a requirement of the follow-up programs in any federal or provincial EIA legislation with the only exception being the EIA on low-level flying in Labrador (Sinclair and Diduck 2009). In fact, Newfoundland and Labrador is the only Atlantic province to perform periodic evaluations of the final approvals and EIA process, performing surveillance to ensure compliance with conditions of the EIA (Hanna 2009).

#### **6.2.2.9 Mechanisms for graduated sanctions**

Mechanisms for graduated sanctions to address non-compliance are clearly outlined in both *Canadian Environmental Assessment Act, 2012* and Newfoundland and Labrador's *Environmental Protection Act*. In 2002, the Newfoundland and Labrador's EIA process was modified to increase the enforcement of infractions with surveillance of construction and implementation, and to increase the monetary penalties associated with it (Hanna 2009). The penalties associated with non-compliance with Newfoundland and Labrador's EIA process are based on the polluter pays principle, so payment for any infractions are the responsibility of the proponent (Hanna 2009). The proponent may be required to leave a deposit once the activity is released or exempt to pay for rehabilitating the environment after damage resulting from an accident or non-compliance (GNL 2003). Furthermore, the development of compliance-monitoring mechanisms by the province is a commitment outlined in the *Aboriginal Consultation Policy on Land and Resource Development Decisions* (GNL 2013). There has been some criticism that there is a lack of capacity to enforce compliance within Canada with suggestions that more severe sanctions should be included (EPREAP 2017).

#### **6.2.2.10 Opportunities for new interactions to build trust**

The *Canadian Environmental Assessment Act, 2012* does not include in-person interaction despite a lack of dialogical or interactive opportunities for public participation being a criticism of the Canadian EIA process (Sinclair and Diduck 2009). Ongoing communication between the parties involved in the EIA process can help to build relationships and resolve conflicts (Sinclair and Diduck 2009). In particular, the need to build relationships between government and Aboriginal groups has been found to be crucial in ensuring the EIA process is successful (Booth

and Skelton 2011). It is recognized as both the easiest and hardest of the components to implement, and should be initiated by the government due to power dynamics (Booth and Skelton 2011).

Newfoundland and Labrador's *Environmental Protection Act* was the only of the EIA legislations analysed that included a legislated opportunity for in-person interaction that can help to build trust between parties. The value of in-person interaction can be seen in the management of the Torngat Mountains National Park, where meetings are held three times a year with the Inuit, and the community and the park have a good relationship as a result (Thinley 2010). In the EIA process, only seven days' notice to the minister and the public is required before the proponent holds a meeting (GNL 2003). The *Aboriginal Consultation Policy on Land and Resource Development Decisions* is another tool developed to help improve relationships and build trust between Aboriginal communities, project proponents and the provincial government (GNL 2013). In addition to consultation specific to a project, this policy encourages consultation practices solely to develop relationships and improve the flow of information (GNL 2013).

#### *6.2.2.11 Opportunities to experiment and adapt the management*

Despite government resistance to change, the federal EIA process itself has evolved over time with the creation of legislation, the incorporation of harmonization between jurisdictions, the inclusion of more kinds of projects and the difficulty of avoidance (Gibson and Hanna 2009). The *Canadian Environmental Assessment Act, 2012* strongly meets this component of CEM through its requirement to look at alternatives to the proposed project, the potential to require studies to provide more information for the EIA, and the potential for regional studies.

Guiding documents to this Act require that the project description include any environmental studies that have been conducted in the region of the proposed project and both regional studies and alternatives to the proposed project must be considered during the EIA (GCMJ 2014b; GC 2016b). Regional studies provide a good opportunity to look at the cumulative impacts of development within a specific region and provide information that can help inform future EIAs (GC 2016b). However, there has not been a regional study undertaken since the legislation was implemented in 2012 (EPREAP 2017). The alternatives to the proposed project include ones that are technically and economically feasible for the proponent (GC 2015a). A rationale for which

alternative means are considered in the EIA must be included, but there is no requirement to consider the status quo or an entirely different project (GC 2015a).

Newfoundland and Labrador's *Environmental Protection Act* only moderately meets this component because it provides the option of requiring studies as part of the EIA process and the potential to undertake research related to EIAs in general. An environmental preview report may be required to gather more information if there is not enough to make a determination of whether or not an EIA is required (GNL 2003). The environmental impact statement (EIS) guidelines must include a description of any studies necessary to provide more information to the EIA process (GNL 2003). Component studies, unique to Newfoundland and Labrador's EIA process, may be required by the minister to provide information on specific aspects of the environment (GNL 2003; Hanna 2009). Another mechanism of gathering information is from the government technical experts on the assessment committee (MDEC 2016). Under Newfoundland and Labrador's EIA process, proponents are required to examine alternatives that are functionally different from the proposed project, not just alternative ways to carry out the same project (Hanna 2009).

#### ***6.2.2.12 Communities receive support and resources***

With the inclusion of a participant funding program in the EIA process, the *Canadian Environmental Assessment Act, 2012* strongly meets this component of the CEM framework. On the other hand, Newfoundland and Labrador's *Environmental Protection Act* only moderately meets this component because only limited government funding is available for one or more local individuals involved in the environmental assessment board. Both pieces of legislation require the proponent to provide plain language information about the proposed project to the general public. The details of federal participant funding program and proponent provided funding of the provincial EIA process were outlined in the Canadian section on capacity funding, so will not be discussed in this section.

The federal EIA process in Canada has been criticized for not providing more methods of and physical locations for the public to access project information, using language that is too technical, and inadequate notice for public participation opportunities (Sinclair and Diduck 2009). The use of technical language in the federal EIA legislation itself is another criticism as



well as the high volume of files that require community involvement (Sinclair and Diduck 2009; EPREAP 2017). Another criticism is with participant funding being reserved for large-scale projects, sporadic in how it is applied, and inadequate, which leads to important voices not being heard because they do not have the resources to participate (Sinclair and Diduck 2009; Booth and Skelton 2011). Many First Nations in particular struggle with a lack of capacity in terms of funding, staff, expertise and information, which limits their ability to effectively participate in the EIA process (Booth and Skelton 2011).

In Newfoundland and Labrador, proponents are expected to provide updated information regularly and in a timely manner to both the provincial government and Aboriginal organizations (GNL 2013). However, there are similar criticisms of the EIA process regarding a lack of funding for participants and the technical language used in EIAs being accessible to the general public (Hanna 2009). In other areas of natural resource management, such as the management of the Torngat Mountains National Park, there is a requirement to provide information in Inuktitut the language of the Labrador Inuit to ensure the information is accessible though translation to the local indigenous language, but this is not standard practice for EIAs (Thinley 2010).

#### ***6.2.2.13 Process is applied to the local conditions***

The EIA process under Newfoundland and Labrador's *Environmental Protection Act* is strongly applied to local conditions compared to the *Canadian Environmental Assessment Act, 2012*, which only moderately meets this component. In addition to the EIA legislation itself, one of the guiding principles of the *Aboriginal Consultation Policy on Land and Resource Development Decisions* is that the nature and level of consultation will depend on the community, their asserted rights, the proposed project and ongoing concerns in the area (GNL 2013).

The guiding documents of the *Canadian Environmental Assessment Act, 2012* elaborate on how the federal EIA process considers local conditions through policy instead of legislation. Aboriginal traditional knowledge is recognized to be unique to each Aboriginal group and it is recommended that their input is needed regarding how their knowledge is incorporated into the EIA process (GC 2015c). Regional studies can be used to assess cumulative effects and other areas of concern at a regional scale (GC 2016b). The project description must include information on any regional studies within the area of the proposed project, as well as any

expected changes to the environment over time (GCMJ 2014b). The results of regional studies must be considered in future EIA screenings and the process itself, and help to provide flexibility to consider regional interests and concerns (GC 2016b).

#### *6.2.2.14 Collaboration occurs early and at several stages in the process*

Both the *Canadian Environmental Assessment Act, 2012* and Newfoundland and Labrador's *Environmental Protection Act* only moderately meet this component of the CEM framework. An ongoing dialogue with the public at every stage of the project is recognized to be important for building relationships, resolving conflict and increasing knowledge sharing (Sinclair and Diduck 2009). Guiding documents of the *Canadian Environmental Assessment Act, 2012* indicate that the EIA should occur as early as possible in the planning process to ensure mitigations can be easily incorporated, to increase opportunities for public participation and Aboriginal consultation and support better decision-making (GC 2016b). The proponent is required to obtain all necessary approvals before construction starts, which can include more opportunities for public involvement than are found in the EIA process alone (GC 2016a).

A criticism of the federal EIA process is that public participation and Aboriginal consultation are not required earlier in the process before the operational decisions of the proposed project are being made and resources have been invested, which would ensure these groups could have more influence on the kind of development occurring (Sinclair and Diduck 2009; Booth and Skelton 2011; EPREAP 2017). For example, at the stage of screening for whether or not an EIA is required, there is no opportunity for public comment until after a decision has been made (Sinclair and Diduck 2009). That being said, there is a trend towards EIA being initiated earlier in the planning process and the Berger report in 1977 set the expectation of earlier public participation within the EIA process as well (Gibson and Hanna 2009). Another point to consider is that if public participation occurs too early in the process, the public is providing feedback on a proposal that is not yet fully formed, which may lead to more criticism of the project than would occur if the proposal was complete (Sinclair and Diduck 2009).

In Newfoundland and Labrador, there is also criticism of how early in the planning the EIA process occurs with the note that EIAs in this province only occur on projects and activities, not at the level of policies, plans and programs (Hanna 2009). The guiding documents of

Newfoundland and Labrador's *Environmental Protection Act* describe the benefits of registering a proposed project to determine if an EIA is required as early as possible to avoid potential expenses associated with delaying (MDEC 2016). In the *Aboriginal Consultation Policy on Land and Resource Development Decisions*, the value of early consultation is cited as being a reduction in the potential adverse impacts to asserted rights (GNL 2013). In addition to starting early in the EIA process, there has been some criticism that public participation does not extend for the lifecycle of the project; ending once construction has been completed (Thinley 2010).

#### *6.2.2.15 Nested enterprise*

While neither the *Canadian Environmental Assessment Act, 2012* nor Newfoundland and Labrador's *Environmental Protection Act* legislates incorporating EIAs with land use plans, they each involve some level of coordinating EIAs across multiple levels of government with the federal legislation meeting this component more strongly. Transboundary coordination of EIA processes was discussed in the Canadian section of the seventh *ILO Convention No. 169* component regarding transboundary EIAs, so it will not be further outlined in this section.

Land use planning in Canada falls under provincial jurisdiction, though an EIA for a given project could trigger federal and provincial EIA processes. In cases where a federal regional study has been conducted for the area of the proposed project, the information to come out of that study must be considered in the EIA (GC 2016b). However, there is no requirement in either the federal legislation or guiding documents to consider provincial land use plans. Even for some provincial EIA processes, such as British Columbia's, there is no requirement to consider regional First Nations land use planning initiatives (Booth and Skelton 2011). Similarly, the literature did not reveal that land use plans are considered in the EIA process of Newfoundland and Labrador.

#### *6.2.2.16 Effective and time-sensitive*

The *Canadian Environmental Assessment Act, 2012* outlines the time limits associated with the different stages of public participation and provides for the opportunity to change them for specific projects very clearly and directly in the legislation. In fact, one of the purposes of this legislation is to ensure EIAs are completed in a timely manner (GC 2015b). Within the project description, there must be a description of the phases and schedule associated with the proposed

project to ensure this is clear to the public (GCMJ 2014b). The guiding documents of this legislation reiterate the timelines associated with the federal EIA process and reiterate that the time for the proponent to respond to requests is not included in these timelines (GC 2016b).

The literature is mixed on the efficacy of the timelines outlined in the federal EIA legislation. Notice of the start of the EIA is considered sufficient with the project information being posted on the online registry within days of receiving adequate information from the proponent (Sinclair and Diduck 2009). There have been criticisms that the timelines do not vary enough for the complexity of EIAs in practice and are often inadequate (Sinclair and Diduck 2009; Booth and Skelton 2011; EPREAP 2017). Between the three responsible authorities that undertake federal EIAs in Canada, there appears to be inconsistency between how the Act is applied (EPREAP 2017). Another concern is that there is inadequate time for both the public and the regulator to properly review the information raised in the EIA (Sinclair and Diduck 2009; EPREAP 2017). On the other hand, proponents have expressed concerns that the flexibility of the process can make it inefficient and costly and rushed timelines can increase the time required for the process because the public is dissatisfied (Sinclair and Diduck 2009; EPREAP 2017). However, others have indicated that the process is responsive to concerns related to efficiency (Gibson and Hanna 2009).

Newfoundland and Labrador's *Environmental Protection Act* states time periods will be outlined in regulations associated with the legislation, which only moderately meets this component of CEM. Under these regulations, the public is invited to provide comments regarding the registration of a proposed project within 35 days of the announcement and the minister has 10 days after that to determine if an EIA is required (GNL 2003). The public has 40 days to review the environmental preview report or EIS guidelines, 35 days to comment on the environmental preview report, and 50 days to comment on the EIS (GNL 2003). Only seven days' notice is required from the proponent before a meeting scheduled with the public or the minister (GNL 2003). The timelines associated with an EIA that involves a public hearing can be longer and have a range of between 30 and 90 days, which must be included in the announcement of the public hearing (GNL 2003). The environmental assessment board must provide the report to the public and the minister will, within 60 days of receiving it, make a decision that is valid for three

years (GNL 2003). In order for these time limits to be extended, the proponent and minister have to agree on the length of the extension (GNL 2003).

Revisions to the provincial EIA process in 2002 attempted to make the process more focused (Hanna 2009). Efficiencies that were added were the ability of the minister to deny a project at the beginning of the regulatory process if it goes against a law or policy, or is not in the public interest, exempting low impact activities from requiring EIAs, and combining the terms of reference with the guidelines, which are now prepared by the regulatory body instead of the proponent (Hanna 2009). However, small projects may require registration to determine if an EIA is required where the proposed project is controversial in some manner (MDEC 2016). In terms of Aboriginal consultation, the *Aboriginal Consultation Policy on Land and Resource Development Decisions* indicates that timelines will be outlined in supporting guidelines that have yet to be created (GNL 2013).

## **7. REFLECTIONS AND FUTURE DIRECTIONS**

---

In Chapter 7, the environmental impact assessment (EIA) processes occurring in Lapland, Finland and Labrador, Canada will be compared to see if there are areas where the two regions can learn from one another to improve indigenous peoples' participation in EIAs through the components outlined in the *ILO Convention No. 169* and collaborative environmental management (CEM) frameworks. Based on this comparison, recommendations will be made on how to move toward effective indigenous peoples' participation.

### **7.1 Opportunities to Learn between Jurisdictions and Recommendations for EIA Legislation**

By comparing the results in Chapter 5 with guiding documents and literature on how EIA legislation is implemented in the field, it is clear that each jurisdiction has taken a different approach to the EIA process. This section will look more in depth into the methods used in Labrador, Canada and Lapland, Finland that meet the components of the *ILO Convention No. 169* and CEM and where each region can learn from one another. While there are many possible recommendations that could be made for each point, this study focuses on roughly one main recommendation for each component.

Making extensive changes to legislation and environmental management systems is not an easy task. In Finland, the issues associated with the current EIA process have been overlooked due to the practical difficulties associated with finding a new solution and implementing it (Jalava 2014). Finland is not alone in facing this challenge and it is important to go into the process recognizing that it might be difficult, but that the benefits can make it worth facing. Where legislation is to be rewritten, improvements could be made by considering the rights of indigenous peoples through international standards via the components of the *ILO Convention No. 169* and the level of public and indigenous participation through the academic standards outlined in the CEM framework. Similarly, if existing legislation could be interpreted in two ways, the way that best aligns with these international and scientific components should be chosen. In some cases, it might be easier to create a new EIA process than to try and revise an existing one (Booth and Skelton 2011).

Another consideration is that acting on any of these recommendations and implementing the components of the *ILO Convention No. 169* and CEM should not adversely affect the current rights of indigenous peoples (Joonas and Joonas 2011). It is important to take into consideration the different contexts of EIAs in Canada and Finland, including the diversity of the indigenous peoples living within their borders. While some of the techniques recommended here have worked in one country and would help the other country meet these components, they may need to be modified to fit the environmental, cultural, historical, political, and social contexts when being applied to a new region.

### ***7.1.1 ILO Convention No. 169***

This section will identify areas where the regions of Labrador, Canada and Lapland, Finland can learn from one another and the literature to address the components of the *ILO Convention No. 169*.

The first component of the *ILO Convention No. 169* is the recognition of indigenous peoples as having rights related to their culture, history and values. Although Finland's *Act on the Environmental Impact Assessment Procedure* does not reference the Sámi people or their rights, guidelines created to support the implementation of this legislation, Finland's *Act on Sámi Parliament* and the Finnish Constitution do recognize these unique rights. Similarly,

Newfoundland and Labrador's *Environmental Protection Act* recognizes that, where it applies, the *Labrador Inuit Land Claims Agreement Act* takes precedence over the provincial EIA legislation, but does not speak to the rights of other indigenous groups within its borders, such as the Innu Nation. To more clearly meet this component, EIA legislation in Finland and Newfoundland and Labrador could explicitly reference indigenous peoples and define their rights and responsibilities in the context of the EIA process as is done in the *Canadian Environmental Assessment Act, 2012*.

1. Make a direct reference to indigenous peoples and define their rights and responsibilities within the context of the EIA process in the legislation.

The second component of the *ILO Convention No. 169* is that self-identification is a key factor in determining indigenous peoples. None of the EIA legislation analysed defined what was considered an indigenous group or individual. Outside of the EIA legislation, both Finland and Canada maintain a list of indigenous people that are recognized with Canada also having a list of recognized Indian bands, both of which include self-identification as one of the factors to consider. It may not be necessary to include a definition of indigenous groups in the EIA legislation itself, as the implications reach further than the EIA process. Individuals that self-identify as indigenous, but are not officially recognized on the Sámi electoral roll or Indian register may still have concerns about a proposed project related to their practice of traditional activities. *Building Common Ground*, a recent expert panel report looking into the *Canadian Environmental Assessment Act, 2012*, suggested that instead of screening who may participate in the EIA process, interested parties are able to self-identify and their comments and concerns can be responded to and weighted against one another in the decision (EPREAP 2017). While this would apply to any member of the general public, it would provide a mechanism for non-recognized self-identifying indigenous peoples with asserted rights to have their voices heard.

2. Allow interested parties to self-identify and have their comments and concerns heard through the EIA process.

The third component of the *ILO Convention No. 169* is that governments have a responsibility to protect the rights of indigenous groups with their participation. Finland's *Act on the*

*Environmental Impact Assessment Procedure* does not meet this component, Newfoundland and Labrador's *Environmental Protection Act* moderately meets this component, and the *Canadian Environmental Assessment Act, 2012* strongly meets this component. Each jurisdiction contains other mechanisms for recognizing the government's responsibility to protect the rights of indigenous peoples and some have even engaged their indigenous people regarding policy documents that supplement this EIA legislation. No evidence was found that the Sámi or the Innu Nation participated in the creation of any EIA legislation initially. To meet this component, it is recommended that any changes to EIA legislation or process that have the potential to affect the rights of indigenous peoples should be designed in collaboration with representatives of affected indigenous groups. This will help to build trust in the EIA process and ensure legislation is created with consideration for indigenous peoples' rights.

3. Design any changes to EIA legislation or process that have the potential to affect the rights of indigenous peoples in collaboration with representatives of affected indigenous groups.

Participation and consultation being done in good faith is the fourth component of the *ILO Convention No. 169*. Each piece of EIA legislation analysed contained some of the elements of public participation being done early in the process, providing multiple opportunities for feedback, and incorporating feedback in the decision. The *Canadian Environmental Assessment Act, 2012* was the only piece of legislation to address consultation with indigenous peoples and to use the term meaningful participation. Despite the wording in the legislation providing the opportunity for this component to be met, the literature demonstrates that in each region the public and indigenous groups are dissatisfied with how participation and consultation are implemented (Booth and Skelton 2011; Jalava 2014; EPREAP 2017). This appears to be a result of not seeing their feedback in the final decision and the perception of a lack of transparency in the process.

4. Clearly respond to all public feedback provided throughout the EIA process and require that a comprehensive rationale be provided for any decision.



A recommendation to address this is to provide responses to public feedback and to include the elements that were considered in the rationale for the final decision (Jacob et al. 2016; EPREAP 2017). The expert panel to look at the *Canadian Environmental Assessment Act, 2012* took this a step further suggesting that a final decision stage be included in the process where consent is sought with indigenous groups, which is also included in the *Convention on Biological Diversity's* Akwé: Kon Guidelines, and a statement issued on whether the proposed project will contribute to sustainable development (SCBD 2004; EPREAP 2017). This free, prior and informed consent is not a veto, but a mutually respectful decision-making process where there are conflict resolution mechanisms to address consent being withheld (EPREAP 2017). This is a large jump from the federal EIA process in Canada today and has the potential of over-promising and under-delivering on the level of indigenous peoples' participation, which could further decrease trust in the process. In Canada, it may be beneficial to include a no-action alternative in the assessment, as is done in Finland, to reflect the positive and negative impacts of the proposed project compared to not taking action by considering how the environment is expected to change over time and to increase public trust in the process.

5. Include an impact assessment of not taking action (no-action alternative) to provide a more transparent justification of the decision to approve or dismiss the proposed project.

The fifth component of the *ILO Convention No. 169* is the recognition of indigenous peoples' rights of ownership and possession of their traditional territory. Other than Newfoundland and Labrador's *Environmental Protection Act's* reference to the *Labrador Inuit Land Claims Agreement Act*, none of the EIA legislation recognized this component. Indigenous peoples land rights are controversial in both Canada and Finland, and have been a deterrent to ratifying the *ILO Convention No. 169* in both countries. While land rights will not be resolved through the EIA process, whether or not they are resolved affects the EIA process and how successful it is. Ideally, indigenous peoples and state governments should work towards coming to a common understanding of land rights through a mutually respectful process (SCBD 2004; Booth and Skelton 2011). Until this is resolved, the EIA process can account for asserted land rights through the second recommendation, where interested parties can still have their voices heard whether or not their rights have been formally recognized by the state in which they live.

The sixth component of the *ILO Convention No. 169* is recognition of the rights of indigenous peoples to participate in the use, management and conservation of natural resources within their traditional territories. These rights are more easily recognized than land rights, with most EIA legislation analyzed moderately meeting this component through indigenous peoples' participation as members of the general public and with the Canadian federal legislation identifying Aboriginal peoples' right to participate independent of the general public. To more clearly meet this component, it would be beneficial for the legislation from Finland and Newfoundland and Labrador to differentiate between participation in the use of natural resources by indigenous peoples compared to the general public. This would be covered through implementation of the first recommendation.

The seventh component of the *ILO Convention No. 169* states that consideration for transboundary impacts to a project can better address the issues of an indigenous group as a whole. Each piece of EIA legislation included in this analysis enabled indigenous peoples to participate in a transboundary EIA process as members of the general public. In the EU, this occurs according to the EIA process of the country or region where the project has originated and in Canada this occurs according to agreements between the federal and provincial governments. The incorporation of the principles of the Espoo Convention on transboundary EIAs and the Aarhus Convention on public participation into EIA legislation can ensure consistency across political borders (Fitzpatrick and Sinclair 2009). This is particularly important where the traditional territory of indigenous peoples spans political borders, such as the Sámi between Norway, Sweden, Finland and Russia. Joint assessments where jurisdictions work together can be beneficial in ensuring consistency across jurisdictions for a specific project and may have the additional benefit of raising the standard of the EIA (EPREAP 2017). This is especially useful in Canada where the federal and provincial governments are each responsible for different aspects of the environment (EPREAP 2017).

6. Collaborate with neighbouring jurisdictions to either standardize the EIA process or undergo joint assessments for projects with potential transboundary impacts.

Capacity funding to effectively participate in environmental management is the last component of the *ILO Convention No. 169*. The only EIA legislation that moderately meets this component

is the *Canadian Environmental Assessment Act, 2012*, which includes the option of creating regulations for a participant funding program. In practice, this program provides only small amounts of funding with high eligibility criteria. The other jurisdictions rely on the proponent to supply appropriate funding for the public and indigenous peoples to participate in the EIA process, which likely varies depending on the proponent's internal policies. It is clear that funding is an important requirement of effective participation that is at worst absent and at best inconsistent across these jurisdictions. A potential solution would be to include a standard fee charged to the proponent based on the nature of the project and level of public interest, which can be used to fund the participation of the public and indigenous peoples. This would provide consistency to both the proponents and interested parties. Recommendations from the expert panel regarding capacity issues associated with participation in the federal EIA process in Canada indicate the importance of funding carrying through the whole EIA process, including monitoring and follow-up stages (EPREAP 2017).

7. Charge a standard fee to the proponent based on the nature of the project and the level of public interest, which can be used to fund participation.

### ***7.1.2 Collaborative Environmental Management***

CEM is a theoretical concept that looks at the characteristics of environmental management projects that can successfully involve collaboration between the public and the government authority. For the purposes of this study, CEM represents the academic standard for effective public participation. Within the CEM framework, 22 components were identified as needing to occur for the management to be considered successful; 16 of which applied to the EIA process. This section will identify areas where the regions of Labrador, Canada and Lapland, Finland can learn from one another and the literature to address these components.

The first component of successful CEM is that there is integration of knowledge from a variety of sources. According to the information in Chapter 5, the Canadian EIA legislation more strongly met this component than the Finnish and EU legislation. The *Canadian Environmental Assessment Act, 2012* mentions the option of incorporating Aboriginal traditional knowledge into the EIA process, but it is not a requirement and often needs to be validated by western science. To address this concern, it is recommended that EIA legislation use stronger language to require

all local knowledge and traditional ecological knowledge (TEK) raised during the EIA process to be incorporated into the final decision, including clarification of any discrepancies with western science (EPREAP 2017). This could be aided by establishing mechanisms for a two-way dialogue and information exchange between proponents and the public (Sinclair and Diduck 2009). Historical barriers to the knowledge exchange between generations and the unique circumstances and traditions of specific indigenous peoples should be considered when establishing a method of knowledge integration (SCBD 2004).

8. Update the language in EIA legislation to require the integration of traditional ecological knowledge and local knowledge in the EIA process.

None of the EIA legislation analysed elaborates on how to integrate public comments into the EIA process and the final decision. The fourth recommendation would likely work to address this last point. Being transparent about where the information on which the EIA is based has originated from can also increase trust in the knowledge and final decision by making it easier for external sources to verify the information (Jacob et al. 2016; EPREAP 2017). Publishing information on which decisions are based, where this information is not proprietary to the indigenous or local community, is recommended.

9. Publish non-proprietary information to allow for external verification of the information.

The second component of CEM is that the community is actively involved in decision-making, which is similar to the fourth component of the *ILO Convention No. 169*. Each piece of EIA legislation meets the component of the community being actively involved in decision-making with the EU's *EIA Directive* and *Canadian Environmental Assessment Act, 2012* strongly meeting this component. As was indicated under the fourth *ILO Convention No. 169* component, despite the positive language regarding public involvement in the EIA process, there is much dissatisfaction with how public comments are incorporated into the final decision. This is addressed by the fourth recommendation.

The third component of CEM is that the rights and responsibilities of all parties involved in the environmental management are clearly defined. This component was strongly met by each piece

of EIA legislation included in the analysis and further details are outlined in the corresponding guiding documents and related policies. In practice, the wording in all EIA legislation reviewed is too broad to be implemented consistently, which can lead to confusion from the government authorities implementing the EIA process, proponents, the public and indigenous communities and make it difficult to assess the quality of the EIA (Sinclair and Diduck 2009; Jalava 2014). It is recommended to create supporting documents that can be used to provide further clarity regarding the rights and responsibilities of the parties involved in the EIA process, including the purpose of comments received by the public and indigenous groups, and these documents should be developed with feedback from these parties to ensure a consistent interpretation of how the legislation should be implemented. While the Canadian EIA legislation is more prescriptive in its definitions than the Finnish legislation, it is important to remember that two of the strengths of EIA are its adaptability and flexibility (Jalava 2014). When providing clarity to the process it is important to not inhibit adaptation to specific circumstances. The expert panel looking at the Canadian federal EIA system recommended that a single authority conduct EIAs to ensure a consistent interpretation of the process, which is already the case in Finland (EPREAP 2017). This process has been effective in Finland and could work for Canada as well.

10. Create supporting documents, with feedback from all affected parties, to clarify the rights and responsibilities of the parties involved in the EIA process.

The fourth component of CEM is the inclusion of mechanisms for conflict resolution and debate. None of the EIA legislation, except Finland's *Act on the Environmental Impact Assessment Procedure*, included mechanisms for conflict resolution outside of the court system. Even the Finnish legislation does not clarify who is able to appeal a decision and what the process is to do so. In all jurisdictions, the possibility to appeal a decision often occurs at the regulatory approval stage where EIA recommendations may be implemented, rather than appealing the EIA decision. The expert panel looking into *Canadian Environmental Assessment Act, 2012* suggested the possibility of appealing the final decision and requiring the rationale for that decision to be debated within a limited timeframe (EPREAP 2017). The value of an appeals process is also recognized in the Akwé: Kon Guidelines (SCBD 2004). In order to deal with conflict in a timely and productive way that does not leave people feeling discouraged with the process, it is

recommended that each of the EIA legislations affecting Labrador, Canada and Lapland, Finland include clear mechanisms for conflict resolution at various stages in the EIA process.

11. Develop mechanisms for conflict resolution that can be engaged at key stages of the EIA process by any affected party within a clear timeline.

The fifth component of successful CEM is recognition of shared values and a responsibility to act. Each piece of EIA legislation demonstrated recognition of a responsibility to act by virtue of its creation, but only the EU's *EIA Directive* identified the values upon which it was created. Where literature is available on the shared values of the parties involved in the EIA process of Labrador, Canada and Lapland, Finland, it tends to indicate that this needs to be worked on in all jurisdictions. Mutual education between government, proponents and indigenous peoples has been suggested as a way to build positive relationships and better understand one another (Booth and Skelton 2011). It is recommended that in-person interactions at the location of the proposed project or a location comfortable to the parties be a requirement of the EIA process to learn more about one another and the proposed project. In-person meetings are already a requirement of Newfoundland and Labrador's *Environmental Protection Act*, but can be added to the other EIA legislation.

12. Make in-person interactions at the location of the proposed project or indigenous community a requirement of the EIA process.

The sixth component of successful CEM is that the community involved is well-defined and cohesive. As the communities involved in an EIA are dependent on the location of the project instead of the EIA process itself, there are no recommended changes to EIA legislation related to this component.

The seventh component of CEM is that the management involves resources that are well-defined. Each of the four pieces of EIA legislation clearly define what environmental impacts would be considered in the EIA process and this is often a broad definition that includes environmental, economic, social and cultural elements of the environment. The EU's *EIA Directive*, Finland's *Act on the Environmental Impact Assessment Procedure*, and the *Canadian Environmental Assessment Act, 2012* also include consideration for the cumulative effects of multiple projects

on the landscape, which are of particular concern to indigenous peoples and the public. Despite their inclusion in EIA legislation, cumulative effects are often excluded or inadequately addressed in the EIA process. It is recommended that Newfoundland and Labrador include cumulative impacts in its EIA legislation and that all jurisdictions work on more effective, proactive mechanisms for managing cumulative effects, such as setting thresholds within regional land use plans (Booth and Skelton 2011; Jacob et al. 2016).

13. Create guidelines to assess the cumulative impacts of development in the region as part of the EIA process in collaboration with regional land management strategies.

There has also been criticism in Canada of the exclusion of spiritual impacts in the definition of the environmental impacts, which is not considered in any of the EIA legislation analysed (Booth and Skelton 2011). A method of taking this into consideration could be to suggest the use of the Akwé: Kon Guidelines when a proposed project is within or near lands of spiritual significance to the indigenous peoples of the area. Use of the techniques outlined in this document is already suggested for EIAs in Finland's Sámi Homeland and could be suggested for Canada as well.

14. Suggest proponents use the Akwé: Kon Guidelines in areas of spiritual significance to indigenous peoples.

The existence of mechanisms for monitoring and follow-up is the eighth component of successful CEM. Each piece of EIA legislation, other than the EU's *EIA Directive*, includes either the option or requirement to include a monitoring and follow-up program in the EIA process. Despite this, monitoring and follow-ups are completed rarely and often do not provide information in a useful manner. It is recommended that a flexible monitoring program that can be adjusted based on the nature of the EIA and proposed project be a requirement of all EIA legislation (SCBD 2004; Pölönen et al. 2011). Public participation or even providing stakeholders with the results of the follow-up can increase transparency in the process and create accountability to ensure the follow-up is completed (Pölönen et al. 2011; EPREAP 2017). The standards for the information produced in the follow-up program should be clearly outlined in guiding documents and provide consistent information between projects (Sinclair and Diduck 2009; EPREAP 2017).

15. Require follow-up programs in EIA legislation that are flexible, involve public participation, and have clear standards for consistent implementation.

The ninth component of CEM is that the management includes mechanisms for sanctions that are graduated or change with the severity of the infraction. Newfoundland and Labrador's *Environmental Protection Act* and the *Canadian Environmental Assessment Act, 2012* both met this component more clearly by outlining sanctions associated with non-compliance with the legislation. Finland's *Act on the Environmental Impact Assessment Procedure* does not appear to have sanctions associated with the EIA process. Better compliance may result if Finland incorporates graduated sanctions into its EIA process; consideration should be given to the kinds of deterrents that are effective in Finland.

16. Incorporate several levels of increasingly severe sanctions into the EIA process.

The tenth component of successful CEM is that there are opportunities for the parties involved to interact with one another and build trust. Newfoundland and Labrador's *Environmental Protection Act* was the only piece of EIA legislation analysed that legislated an in-person interaction at or near the location of the proposed project, requiring two in cases where there is a public hearing. If the Canadian federal and Finnish legislation implemented the twelfth recommendation, it would increase the opportunities for new interactions to build trust as well as build relationships by recognizing shared values (Wondolleck and Yaffee 2000; EPREAP 2017). In addition to relationship building through the EIA process, it is important that a genuine effort is made to build relationships and learn about one another outside of the EIA process, particularly between governments and indigenous peoples (Booth and Skelton 2011; EPREAP 2017). The attitude with which relationship building is approached will play a big role in how effective it is (Booth and Skelton 2011; EPREAP 2017).

The eleventh component of successful CEM is that there are opportunities to experiment and adapt the management based on new information. The *Canadian Environmental Assessment Act, 2012* strongly meets this component because it includes multiple opportunities for studies to be done throughout the EIA, allows for studies of the EIA process itself and provides the opportunity for regional studies. This component was moderately met in Newfoundland and



Labrador and, when the guiding documents are taken into account, in Finland as well. In addition to making studies a more clearly legislated requirement, those studies should also consider alternatives to the proposed projects, changes to the environment that would occur naturally, and exceptional circumstances. While studies should be a requirement of the EIA process, the kinds of studies that need to be conducted should be flexible and consider the nature and location of the proposed project.

17. Legislate studies at several stages in the EIA process, including where applicable alternatives, environmental changes and exceptional circumstances.

The twelfth component of successful CEM is that the communities receive support and resources to effectively participate in the process. This is related to the eighth component of the *ILO Convention No. 169* and the seventh recommendation attempts to resolve the financial capacity concerns regarding effective participation in the EIA process. The use of technical language was a criticism of all EIA legislation analysed. Creating a standard for formatting information to make it easier to find, improving the plain language used in documents, and providing translations where necessary is recommended to help increase the capacity of the community to access information related to EIAs.

18. Create standards for project information given to the public to ensure it is easy to find and to understand project information.

The thirteenth component of successful CEM is that the process is applied to the local conditions. This was met by each piece of EIA legislation analysed and strongly met by the EU's *EIA Directive* and the *Canadian Environmental Assessment Act, 2012*. Any future modifications of the EIA legislation should continue to ensure each stage of the EIA is worded in a flexible way to account for any regional differences or unique project characteristics. The inclusion of recommendation 14 regarding the Akwé: Kon Guidelines can also be used to take into consideration the unique circumstances of indigenous peoples that may pose a barrier to participation in the EIA process (SCBD 2004).

The fourteenth component of successful CEM is that collaboration occurs early and at several stages in the process. This component was met by all EIA legislation included in the analysis, but

more strongly met by the Finnish and EU legislation, which directs that the EIA process be initiated as early in the planning stages as possible. In practice, there are often more public participation opportunities than are required in the EIA legislation and engagement with the public on the proposed project typically starts before the EIA process, depending on the proponent. Despite this, both federal and provincial EIA processes in Canada have been criticized for initiating public participation too late in the project planning (EPREAP 2017). A proposed solution to this problem is to add a planning stage at the beginning of the EIA process where in-person public participation could occur before design elements of the project are finalized (EPREAP 2017). This would formalize what many proponents are currently doing and make it consistent across all projects, while adding another layer of complexity to the EIA process.

19. Ensure public participation occurs early in the project planning by requiring EIA before design elements of the project have been finalized.

The fifteenth component of successful CEM is that the process includes nested enterprises or layers of environmental management at different scales. At some level, this concept was incorporated into the EIA legislation of each jurisdiction. Finland's *Act on the Environmental Impact Assessment Procedure* and the *Canadian Environmental Assessment Act, 2012*, which strongly met this component, each included a mechanism to incorporate regional planning: land use planning and regional studies, respectively. No regional studies have been undertaken under the Canadian federal legislation and, due to the value they have in assessing cumulative impacts and regional goals in the EIA process, it has been suggested that this be a legislated requirement instead of optional (Sinclair and Diduck 2009; EPREAP 2017). In Canada and Newfoundland and Labrador, where regional land use planning is not incorporated into the EIA legislation, it is recommended that this become a legislated requirement to help manage projects within the context of regional goals. An additional benefit of this in Canada is to aide cooperation between provincial and federal jurisdictions in environmental management. In the other direction, community-based environmental assessments for small-scale projects where the EIA is led by the community have been used in developing countries and may work for indigenous communities as well (Sinclair and Diduck 2009).

## 20. Legislate the requirement to integrate the EIA process with regional land use planning.

The final component of CEM is that the process is effective and time-sensitive. Each piece of EIA legislation analyzed met this component, with the Finnish and Canadian federal legislations strongly outlining timelines at different stages of the process. The literature regarding these timelines is inconsistent in whether the timelines outlined adequately result in an effective EIA process, though there is an element of flexibility integrated into these pieces of EIA legislation related to timelines. More research would need to look into the adequacy of timelines, particularly with consideration for the recommendations outlined here and how they may improve the efficacy and efficiency of EIAs. Until this information is gathered, there is no recommendation associated with this component of CEM.

### 7.2 Limitations and Future Research

A limitation of this research is that the information gathered and analysed is specific to the locations and indigenous peoples studied. This research compared the similarities and differences between the participation opportunities available to the Sámi and the Innu Nation according to the EIA legislation of the regions in which they live. The conclusions may not apply directly to other indigenous peoples or regions, and any extrapolation of the information should be done with consideration of the different contexts. For example, the cultural norms of different communities may affect the way that community participates or would like to be engaged (Thinley 2010). A similar look into Sámi participation in the EIA processes of Norway, Sweden and Russia to compare with Finland or across provincial and territorial jurisdictions in Canada could help increase the body of information available regarding what characteristics of an EIA process is effective for different environmental, cultural, historical, political, and social contexts. In addition to these research methods being applied to other regions and indigenous peoples, the components identified could also be used to look at different environmental management systems that involve public and indigenous participation.

One notable difference between the EIA legislation in Canada and in Finland is the flexibility with which the legislation is written. EIA legislation in Canada tends to be more prescriptive, which made it easier to meet the components of the *ILO Convention No. 169* and CEM, but it is

less flexible to adapt to specific situations. This is a limitation of using these frameworks to determine the success of indigenous peoples and public participation in the EIA process because a more prescriptive process will inherently rank higher. As the compilation of these two frameworks was part of this research, these frameworks would benefit from testing in future research.

Throughout this study, it was clear that EIA legislation contains some grey areas that can be interpreted in multiple ways. Future research could look into how these less prescriptive areas are implemented in reality. Whether or not the legislation itself provides for successful participation by indigenous peoples, as identified through the components of the *ILO Convention No. 169* or CEM, people will respond to how that legislation is implemented rather than what it says. Research looking into the barriers that prevent the vision of EIA legislation from becoming a reality can be helpful in overcoming discrepancies between what is said and what is done. To complement this, one could look into the history of EIAs and indigenous peoples' participation in resource management across different countries to find out what has been tried in the past and why it was or was not successful.

As was indicated above, looking at how the *ILO Convention No. 169* and CEM components apply to the EIA legislation alone provides a limited view of the EIA processes affecting the Sámi and the Innu Nation. It would be valuable to look at specific case studies to see how the EIA legislation is implemented or perform interviews with the individuals involved in the EIA processes of these regions to gain an understanding of how the situations are perceived by those involved. The information gathered could be assessed against the *ILO Convention No. 169* and CEM frameworks to create more easily comparable data. Use of the triangulation method may be valuable to compile a more complete picture of the EIA process in reality. Other methods of analysis may be able to include the six components of successful CEM that were excluded from the results of this study: co-management participants trust one another, the system is self-sustaining and endures over time, the goal is to solve the problem instead of any underlying conflict, it occurs at a small-scale, the community is heavily dependent on the resources being managed, and there is a low rate of discounting the future over the present.

Several recommendations were generated as a result of this study. It is important to remember that these recommendations were based on information generated from the interpretations of one researcher. Re-analysis of this information through the eyes of another research may result in a different list of recommendations. Therefore, future research could take another look at the EIA legislation analysed in this study and could look into how best to implement these recommendations within the environmental, cultural, historical, political, and social contexts of each region. To reiterate one of the recommendations, follow-up after recommendations have been implemented to determine if they better align the EIA process with the frameworks is a crucial aspect of improving indigenous peoples' participation.

## 8. CONCLUSION

---

This research looked at four pieces of environmental impact assessment (EIA) legislation affecting Lapland, Finland and Labrador, Canada to determine the level of indigenous peoples' involvement in the EIA process. In order to compare this legislation, two frameworks were developed. Within the *ILO Convention No. 169*, eight components were identified to represent an international standard for the rights of indigenous peoples regarding the management of natural resources. The second framework identified 22 components of successful collaborative environmental management (CEM) from academic literature on the subject. The wording in the legislation was analyzed through these frameworks to determine how well each component was met. This enabled the legislation to be compared in order to identify areas in need of improvement and facilitate the jurisdictions learning from one another.

The results of this study revealed how well the legislation met both the *ILO Convention No. 169* and CEM frameworks, with the *Canadian Environmental Assessment Act, 2012* best meeting the standards followed by Newfoundland and Labrador's *Environmental Protection Act*, the European Union's *EIA Directive*, and Finland's *Act on the Environmental Impact Assessment Procedure*. The components of the *ILO Convention No. 169* that could use improvement across all four pieces of EIA legislation were self-identification as an indigenous group, recognition of the rights of ownership and possession to traditional territory, and capacity funding. Of the 16 components of successful CEM related to EIA legislation, the ones that each piece of EIA

legislation struggled to meet were mechanisms for conflict resolution and debate, and the community is well-defined and cohesive. In some cases, certain jurisdictions met a component and others did not. These areas where different jurisdictions could learn from one another included the following components; mechanisms for monitoring, opportunities to experiment and adapt the management, communities receive support and resources, and opportunities for new interactions to build trust.

While the *Canadian Environmental Assessment Act, 2012* strongly meets several components of the *ILO Convention No. 169* and the CEM framework, the literature reveals that many parties are dissatisfied with the EIA process in Canada. A closer look at the literature indicates that areas where the wording of the legislation for any of the four jurisdictions meets a component does not always result in the implementation of the legislation being in line with the same component. This suggests that it may be sufficient in some cases to change supporting policies or the interpretation of the legislation, rather than the legislation itself. Many good techniques are recommended as best practices, but are not required in policy or legislation, making their implementation inconsistent between projects. In these cases, more detailed and stronger language in the legislation would be required to align the EIA process with the components of the two frameworks and improve the participation of indigenous people.

This research supported 20 recommendations that could help to improve indigenous peoples' participation in the EIA process (Table 5). It is important to recognize that these recommendations were developed based on the results of this study and available literature, and thus are subject to the limitations outlined in Chapter 7. The environmental, cultural, historical, political, and social contexts of each jurisdiction should be considered when implementing these recommendations in a new region. Whenever one or more of these recommendations is implemented, follow up should be done to ensure the recommendations are meeting their intended goal. With these considerations in mind, the results of this study can be used to help inform policy decisions and better align current EIA processes with the international and academic standards of indigenous peoples' participation in environmental management.

**Table 5** List of recommendations to better align current EIA processes in Lapland, Finland and Labrador, Canada with the components of the *ILO Convention No. 169* and collaborative environmental management frameworks and improve indigenous peoples' participation in EIAs. The jurisdiction column indicates the legislation that could benefit from implementing the recommendation: the European Union's *EIA Directive* (EU), Finland's *Act on the Environmental Impact Assessment Procedure* (Finland), the *Canadian Environmental Assessment Act, 2012* (Canada), and Newfoundland and Labrador's *Environmental Protection Act* (NL)

#	Recommendations	Jurisdiction(s)
1	Make a direct reference to indigenous peoples and define their rights and responsibilities within the context of the EIA process in the legislation.	Finland; NL
2	Allow interested parties to self-identify and have their comments and concerns heard through the EIA process.	All
3	Design any changes to EIA legislation or process that have the potential to affect the rights of indigenous peoples in collaboration with representatives of affected indigenous groups.	All
4	Clearly respond to all public feedback provided throughout the EIA process and require that a comprehensive rationale be provided for any decision.	All
5	Include an impact assessment of not taking action (no-action alternative) to provide a more transparent justification of the decision to approve or dismiss the proposed project.	Canada; NL
6	Collaborate with neighbouring jurisdictions to either standardize the EIA process or undergo joint assessments for projects with potential transboundary impacts.	All
7	Charge a standard fee to the proponent based on the nature of the project and the level of public interest, which can be used to fund participation.	All
8	Update the language in EIA legislation to require the integration of traditional ecological knowledge and local knowledge in the EIA process.	All
9	Publish non-proprietary information to allow for external verification of the information.	All
10	Create supporting documents, with feedback from all affected parties, to clarify the rights and responsibilities of the parties involved in the EIA process.	All
11	Develop mechanisms for conflict resolution that can be engaged at key stages of the EIA process by any affected party within a clear timeline.	All
12	Make in-person interactions at the location of the proposed project or indigenous community a requirement of the EIA process to build an understanding of shared values and trust.	Finland; Canada
13	Create guidelines to assess the cumulative impacts of development in the region as part of the EIA process in collaboration with regional land management strategies.	All

14	Suggest proponents use the Akwé: Kon Guidelines in areas of spiritual significance to indigenous peoples.	Canada; NL
15	Require follow-up programs in EIA legislation that are flexible, involve public participation, and have clear standards for consistent implementation.	All, especially EU; Finland
16	Incorporate several levels of increasingly severe sanctions into the EIA process.	EU; Finland
17	Legislate studies at several stages in the EIA process, including where applicable alternatives, environmental changes and exceptional circumstances.	All, especially Finland
18	Create standards for project information given to the public to ensure it is easy to find and to understand project information.	All
19	Ensure public participation occurs early in the project planning by requiring EIA before design elements of the project have been finalized.	All
20	Legislate the requirement to integrate the EIA process with regional land use planning.	Canada; NL

It is likely that the future will see an increased demand for the development of natural resources in the Arctic (Koivurova 2015). As a common planning tool used around the world to ensure decisions regarding proposed natural resource development projects are made with a good understanding of their potential impacts, the EIA process will be crucial in how development occurs in sensitive Arctic environments. Public participation, particularly the participation of indigenous peoples, in the EIA process is recognized as being beneficial in identifying potential impacts of the proposed project and in addressing the concerns and rights of affected individuals and rights holder groups.

This research is timely because the Canadian federal government is currently looking at ways to revise the *Canadian Environmental Assessment Act, 2012* and has recently released the final report of the Expert Panel for the Review of Environmental Assessment Processes. The European Union has also considered revising their EIA Directive, which may result in Finland needing to revise their domestic EIA legislation to be in line with a new directive. Consideration of these recommendations as EIA legislation is updated can help to ensure the effective incorporation of indigenous peoples' knowledge, concerns and interests in EIAs and improve the decision-making process of natural resource management.

Fostering an environment of trust and respect, particularly between governments and indigenous peoples, outside of the EIA process will play an important role in the success of any of the



recommendations. Without trusting in the good intentions of the parties involved, it will be difficult to reach a stage where indigenous peoples' participation in the EIA process is considered satisfactory to those involved. It is unlikely that the process will result in a solution that fits everyone's ideal, but the goal is to reach a solution where everyone feels heard and understands the rationale behind the final decision (Raitio 2008).

## 9. REFERENCES

---

- Ahokumpu, A. 2013. *The Wilderness Act, Finland – A Successful Tool to Conserve the North Together with People*. Metsähallitus: 20 pp.
- Amatulli, G. 2015. *The Legal Position of the Sámi in the Exploitation of Mineral Resources in Finland, Norway and Sweden*. Åbo Akademi University: 93 pp.
- Appelstrand, M. 2002. Participation and societal values: The challenge for lawmakers and policy practitioners. *Forest Policy and Economics* 4(4): 281-290
- Arctic Council. 1996. *Declaration on the Establishment of the Arctic Council*. Arctic Council: Ottawa. 5 pp.
- Armitage, D.R. 2009. Environmental Impact Assessment in Canada's Northwest Territories: Integration, Collaboration, and the Mackenzie Valley Resource Management Act. In Hanna, K.S (Ed.). 2009. *Environmental Impact Assessment, Practice and Participation*. Second Edition. Oxford University Press: Toronto. 480 pp.
- Arnstein, S. 1969. A Ladder of Citizen Participation. *Journal of the American Planning Association* 35(4): 216-224
- Bastmeijer, K. and T. Koivurova. 2008. *Theory and Practice of Transboundary Environmental Impact Assessments*. Martinus Nijhoff Publishers: Boston. 400 pp.
- Béné, C. and A.E. Neiland. 2006. *From Participation to Governance: A critical review of the concepts of governance, co-management and participation, and their implementation in small-scale inland fisheries in developing countries*. WorldFish Center and CGIAR Challenge Program on Water and Food: 82 pp.
- Berger, T.R. 1977a. *Northern frontier, northern homeland: the report of the Mackenzie Valley Pipeline Inquiry v.1 Social, economic and environmental impact*. First Edition. Minister of Supply and Services Canada. 213 pp.
- Berger, T.R. 1977b. *Northern frontier, northern homeland: the report of the Mackenzie Valley Pipeline Inquiry v.2 Terms and conditions*. First Edition. Minister of Supply and Services Canada. 268 pp.
- Berkes, F. 1994. Co-Management: Bridging the two solitudes. *Northern Perspectives* 22: 18-20
- Berkes, F. 2009. Indigenous ways of knowing and the study of environmental change. *Journal of the Royal Society of New Zealand* 39(4): 151-156
- Bernard, H.R. 2011. Chapter 19 Text Analysis II: Schema Analysis, Grounded Theory, Content Analysis, and Analytical Induction. In *Research Methods in Anthropology: qualitative and quantitative approaches*. 5<sup>th</sup> Edition. AltaMira: Lanham, MD. 429-457

- Berry, W. 2001. The whole horse. In Freyfogle, E.R. (Ed). 2001. *The New Agrarianism: land, culture, and the community of life*. Island Press: Washington. 63-79
- Bond, A.J. 1999. EIA in the European Union. Available at [https://www.researchgate.net/profile/Alan\\_Bond2/publication/236243711\\_EIA\\_in\\_the\\_European\\_Union/links/0046352cc5b640d5bc000000.pdf](https://www.researchgate.net/profile/Alan_Bond2/publication/236243711_EIA_in_the_European_Union/links/0046352cc5b640d5bc000000.pdf) [accessed 30 April 2017]
- Booth, A.L. and N.W. Skelton. 2011. Improving First Nations' participation in environmental assessment processes: recommendations from the field. *Impact Assessment and Project Appraisal* 29(1): 49-58
- Brook, R., M. M'Lot and S. McLachlan. 2006. Pitfalls to Avoid when Linking Traditional and Scientific Knowledge. In Riewe, J.E. and R.R. Oakes. 2006. *Climate Change: Linking Traditional and Scientific Knowledge*. Aboriginal Issues Press: Winnipeg. 16-23
- Brown, K.L. 2006. As it was in the past: A return to the use of live-capture technology in the Aboriginal riverine fishery. In Menzies, C.R. 2006. *Traditional Ecological Knowledge and Natural Resource Management*. University of Nebraska Press: Lincoln. 273 pp.
- Bührs, T., and R.V. Bartlett. 1993. *Environmental policy in New Zealand: the politics of clean and green?* Edition 3. Oxford University Press: USA. 200 pp.
- Burdge, R. and F. Vanclay. 1995. Social Impact Assessment: state of the art. In Vanclay, F. and D.A. Bronstein (Eds.). 1995. *Environmental and Social Impact Assessment*. John Wiley & Sons Ltd: Chichester, United Kingdom. 325 pp.
- Butler, C. 2006. Historicizing indigenous knowledge: Practical and political issues. In Menzies, C.R. 2006. *Traditional Ecological Knowledge and Natural Resource Management*. University of Nebraska Press: Lincoln. 273 pp.
- Canadian Environmental Assessment Agency (CEAA). 2013. Regulatory Impact Analysis Statement. Available at <http://www.gazette.gc.ca/rp-pr/p1/2013/2013-04-20/html/reg1-eng.html> [accessed 19 May 2017]
- Canadian Heritage Information Network (CHIN). 2005. Introduction to the Innu. Tipatshimuna: Innu stories from the land. Available at [http://www.tipatshimuna.ca/1000\\_e.php](http://www.tipatshimuna.ca/1000_e.php) [accessed 31 October 2016]
- Chance, N.A. and E.N. Andreeva. 1995. Sustainability, equity, and natural resource development in northwest Siberia and Arctic Alaska. *Human Ecology* 23(2): 217-240
- Cheney, G. 2012. Translating and living native values in current business, global, and indigenous contexts. In Kenny, C. and T.N. Fraser. 2012. *Living Indigenous Leadership: Native Narratives on Building Strong Communities*. UBC Press: Toronto. 150-161
- Connick, S. and J.E. Innes. 2003. Outcomes of collaborative water policy making: Applying complexity thinking to evaluation. *Journal of Environmental Planning and Management* 46(2): 177-197

- Dawes, R. 1973. The commons dilemma game: An N-person mixed-motive game with a dominating strategy for defection. *ORI Research Bulletin* 13: 1-12
- Doyle, D. and B. Sadler. 1996. *Environmental impact assessment in Canada: frameworks, procedures & attributes of effectiveness. A report in support of the international study of the effectiveness of environmental assessment*, Canada. 44 pp.
- Dubbink, W. and M. van Vliet. 1996. Market regulation versus co-management? Two perspectives on regulating fisheries compared. *Marine Policy* 20(6): 499-516
- Duerden, F. and R.G. Kuhn. 1998. Scale, context, and application of traditional knowledge of the Canadian north. *Polar Record* 34(188): 31-38
- DuWors, E., M. Villeneuve, F.L. Fillion, R. Reid, P. Bouchard, D. Legg, P. Boxall, T. Williamso, A. Bath, and S. Meis. 1999. *The Importance of Nature to Canadians: Survey Highlights*. Environment Canada: Ottawa. 62 pp.
- Ecological Stratification Working Group (ESWG). 1996. *A National Ecological Framework for Canada*. Agriculture and Agri-Food Canada and Environment Canada: Ottawa. 132 pp.
- European Commission. 2016. The Aarhus Convention, 8 June 2016. Available at <http://ec.europa.eu/environment/aarhus/> [accessed 24 October 2016].
- European Union (EU). 1985. *Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment*. Available at <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:31985L0337> [accessed 16 February 2016]
- European Union (EU). 2015. Mapping and Assessment of Ecosystems and their Services (MAES) digital atlas. Biodiversity Information System for Europe. Available at <http://biodiversity.europa.eu/maes/maes-digital-atlas> [accessed 19 October 2016]
- Expert Panel for the Review of Environmental Assessment Processes (EPREAP). 2017. *Building Common Ground: A new vision for impact assessment in Canada*. Canadian Environmental Assessment Agency. 125 pp.
- Fielding, N.G. and J.L. Fielding. 1986. *Linking Data: The Articulation of Qualitative and Quantitative Methods in Social Research*. Sage: Beverly Hills.
- Finland's Ministry of the Environment (FMOE). 1994. *Act on Environmental Impact Assessment Procedure*. 468/1994; amendments up to 1812/2009 included. Available at <http://www.finlex.fi/en/laki/kaannokset/1994/en19940468.pdf> [accessed 14 February 2015]
- Finland's Ministry of the Environment (FMOE). 1997. *Arctic Environment Protection Strategy: Guidelines for Environmental Impact Assessment (EIA) in the Arctic*. Sustainable Development and Utilization. Finnish Ministry of the Environment: Finland. 50 pp.

Finland's Ministry of the Environment (FMOE). 2006. *Decree on Environmental Impact Assessment Procedure*. 713/2006; amendments up to 359/2011 included. Available at <http://www.finlex.fi/en/laki/kaannokset/2006/en20060713.pdf> [accessed 2 April 2017]

Finland's Ministry of the Environment (FMOE). 2015a. EIA Procedure for Projects. Available at [http://www.ymparisto.fi/en-US/Forms\\_permits\\_and\\_environmental\\_impact\\_assessment/Environmental\\_impact\\_assessment/EIA\\_procedure\\_for\\_projects](http://www.ymparisto.fi/en-US/Forms_permits_and_environmental_impact_assessment/Environmental_impact_assessment/EIA_procedure_for_projects) [accessed 8 April 2017].

Finland's Ministry of the Environment (FMOE). 2015b. Environmental Impact Assessments. Available at [http://www.ymparisto.fi/en-US/Forms\\_permits\\_and\\_environmental\\_impact\\_assessment/Environmental\\_impact\\_assessment](http://www.ymparisto.fi/en-US/Forms_permits_and_environmental_impact_assessment/Environmental_impact_assessment) [accessed 8 April 2017].

Finland's Ministry of the Environment (FMOE). 2016. New methods improve the quality of environmental impact assessments. Available at [http://www.ymparisto.fi/en-US/Forms\\_permits\\_and\\_environmental\\_impact\\_assessment/New\\_methods\\_improve\\_the\\_quality\\_of\\_envir\(37627\)](http://www.ymparisto.fi/en-US/Forms_permits_and_environmental_impact_assessment/New_methods_improve_the_quality_of_envir(37627)) [accessed 8 April 2017].

Finland's Ministry of Employment and the Economy (FMEE). 2014. *Guide: Exploration in protected areas, the Sámi homeland and the reindeer managing area*. Helsinki: 74 pp.

Finland's Ministry of Employment and the Economy (FMEE). 2015. *Guide: Environmental Impact Assessment Procedure for mining projects in Finland*. Helsinki: 105 pp.

Finland's Ministry of Justice (FMJ). 1995a. *Act on the Sámi Parliament*, 17 July 1995. Ministry of Justice: Finland. 28 pp.

Finland's Ministry of Justice (FMJ). 1995b. Asetus saamelaiskäräjistä (Decree on the Sámi Parliament), 22 December 1995. Ministry of Justice: Finland. Available at <http://www.finlex.fi/fi/laki/alkup/1995/19951727> [accessed 23 October 2016]

Finland's Ministry of Justice (FMJ). 1999. *The Constitution of Finland*, 11 June 1999. Ministry of Justice: Finland. 25 pp.

Finnish Association for Impact Assessment (FAIA). 2017. Finnish Association for Impact Assessment (FAIA). Available at <http://www.yvary.fi/in-english/>. [accessed on 30 April 2017]

Finnish Meteorological Institute (FMI). 2016. Seasons in Finland. Available at <http://en.ilmatieteenlaitos.fi/seasons-in-finland> [accessed 18 October 2016]

Fitzpatrick, P. and A.J. Sinclair. 2009. Multi-jurisdictional environmental assessment. In Hanna, K.S (Ed.). 2009. *Environmental Impact Assessment, Practice and Participation*. Second Edition. Oxford University Press: Toronto. 480 pp.

Formby, J. 1990. The politics of environmental impact assessment. *Impact Assessment* 8(1-2): 191-196

- Furgal, C. and J. Seguin. 2006. Climate change, health, and vulnerability in Canadian Northern aboriginal communities. *Environmental Health Perspectives* 114(12): 1964-1972
- Gagnon, C.-A. and D. Berteaux. 2006. Integrating tradition and scientific knowledge: Management of Canada's National Park. In Riewe, J.E. and R.R. Oakes. 2006. *Climate Change: Linking Traditional and Scientific Knowledge*. Aboriginal Issues Press: Winnipeg. 311-319
- Gibson, R.B. and K.S. Hanna. 2009. Progress and uncertainty: The evolution of federal environmental assessment in Canada. In Hanna, K.S (Ed.). 2009. *Environmental Impact Assessment, Practice and Participation*. Second Edition. Oxford University Press: Toronto. 480 pp.
- Gilligan, J., J. Clifford-Peña, J. Edey-Rowntree, K. Johansson, R. Gislason, T. Green, G. Arnold, J. Heath, and R. Brook. 2006. The value of integrating traditional, local, and scientific knowledge. In Riewe, J.E. and R.R. Oakes. 2006. *Climate Change: Linking Traditional and Scientific Knowledge*. Aboriginal Issues Press: Winnipeg. 4-15
- Gilmour, P.W. 2013. *Factors and processes affecting co-management of natural resources*. PhD thesis, Department of Zoology, Faculty of Science, The University of Melbourne. 173 pp.
- Global Environment Facility Evaluation Office (GEF). 2010. *Methodological note on triangulation analysis in country portfolio evaluations*. Global Environment Facility Evaluation Office. 9 pp.
- Goel, S. 2014. 'Bureaucratic attitudes' - an intermediary variable of policy performance. *The Journal of Business Perspective* 18(4): 299-308
- Goodwin, J.R. 2006. In Menzies, C.R. 2006. *Traditional Ecological Knowledge and Natural Resource Management*. University of Nebraska Press: Lincoln. 175-194
- Government of Canada (GC). 1982. *Constitution Acts, 1867 to 1982*. Available at <http://laws-lois.justice.gc.ca/eng/const/FullText.html> [accessed 28 October 2016]
- Government of Canada (GC). 1985. *Indian Act*. Available at <http://laws-lois.justice.gc.ca/eng/acts/i-5/> [accessed 19 May 2017]
- Government of Canada (GC). 2012. *Canadian Environmental Assessment Act, 2012*. Available at <http://laws-lois.justice.gc.ca/eng/acts/C-15.21/> [accessed 5 February 2017]
- Government of Canada (GC). 2015a. Addressing “Purpose of” and “Alternative Means” under the Canadian Environmental Assessment Act, 2012. Available at <https://www.canada.ca/en/environmental-assessment-agency/news/media-room/media-room-2015/addressing-purpose-alternative-means-under-canadian-environmental-assessment-act-2012.html> [accessed 17 May 2017]
- Government of Canada (GC). 2015b. Assessing Cumulative Environmental Effects under the Canadian Environmental Assessment Act, 2012. Available at <https://www.canada.ca/en/environmental-assessment-agency/news/media-room/media-room->

2015/assessing-cumulative-environmental-effects-under-canadian-environmental-assessment-act-2012.html [accessed 17 May 2017]

Government of Canada (GC). 2015c. Considering Aboriginal traditional knowledge in environmental assessments conducted under the Canadian Environmental Assessment Act, 2012. Available at <https://www.canada.ca/en/environmental-assessment-agency/services/policy-guidance/considering-Aboriginal-traditional-knowledge-environmental-assessments-conducted-under-canadian-environmental-assessment-act-2012.html> [accessed 17 May 2017]

Government of Canada (GC). 2016a. Aboriginal Consultation in Federal Environmental Assessment. Available at <https://www.canada.ca/en/environmental-assessment-agency/programs/Aboriginal-consultation-federal-environmental-assessment.html> [accessed 17 May 2017]

Government of Canada (GC). 2016b. Basics of environmental assessment. Available at <https://www.canada.ca/en/environmental-assessment-agency/services/environmental-assessments/basics-environmental-assessment.html> [accessed 17 May 2017]

Government of Canada (GC). 2016c. Environmental Assessment Processes, 25 October 2016. Available at <https://www.canada.ca/en/services/environment/conservation/assessments/environmental-reviews/environmental-assessment-processes.html> [accessed 4 November 2016]

Government of Canada (GC). 2016d. Frequently Asked Questions. Available at <https://www.canada.ca/en/environmental-assessment-agency/services/frequently-asked-questions.html> [accessed 17 May 2017]

Government of Canada (GC). 2016e. Participant funding application for an environmental assessment. Available at <https://www.canada.ca/en/environmental-assessment-agency/services/public-participation/participant-funding-application-environmental-assessment.html> [accessed 17 May 2017]

Government of Canada (GC) and Government of Newfoundland and Labrador (GNL). 2005. *Draft Canada-Newfoundland and Labrador Agreement on Environmental Assessment Coordination*, 6 July 2016. Available at <http://www.ceaa.gc.ca/default.asp?lang=En&n=439D3C45-1> [accessed 4 November 2016]

Government of Canada's Minister of Justice (GCMJ). 2012. *Cost Recovery Regulations SOR/2012-146*. Available at <http://laws-lois.justice.gc.ca/PDF/SOR-2012-146.pdf> [accessed 17 May 2017]

Government of Canada's Minister of Justice (GCMJ). 2014a. *Regulations Designating Physical Activities SOR/2012-147*. Available at <http://laws-lois.justice.gc.ca/PDF/SOR-2012-147.pdf> [accessed 17 May 2017]

Government of Canada's Minister of Justice (GCMJ). 2014b. *Prescribed Information for the Description of a Designated Project Regulations SOR/2012-148*. Available at <http://laws-lois.justice.gc.ca/PDF/SOR-2012-148.pdf> [accessed 17 May 2017]

Government of Newfoundland and Labrador (GNL). 2002. *Environmental Protection Act, 2002*. Available at <http://www.assembly.nl.ca/legislation/sr/statutes/e14-2.htm> [accessed 4 March 2017]

Government of Newfoundland and Labrador (GNL). 2003. *Environmental Assessment Regulations, 2003*. Available at <http://www.assembly.nl.ca/Legislation/sr/Regulations/rc030054.htm> [accessed 17 May 2017]

Government of Newfoundland and Labrador (GNL). 2013. *Aboriginal Consultation Policy on Land and Resource Development Decisions, April 2013*. Available at [http://www.laa.gov.nl.ca/laa/publications/aboriginal\\_consultation.pdf](http://www.laa.gov.nl.ca/laa/publications/aboriginal_consultation.pdf) [accessed 4 November 2016]

Government of Newfoundland and Labrador (GNL). 2015. Land Area, 8 October 2015. Available at <http://www.gov.nl.ca/aboutnl/area.html> [accessed 24 October 2016]

Graben, S.M. 2010. *Writing the rules of socio-economic impact assessment: adaptation through participation*. Osgoode Hall Law School: Comparative Research in Law and Political Economy. Research Paper #23: 44 pp.

Griffith, D. 2006. Local knowledge, multiple livelihoods, and the use of natural and social resources in North Carolina. In Menzies, C.R. 2006. *Traditional Ecological Knowledge and Natural Resource Management*. University of Nebraska Press: Lincoln. 153-174

Hall, A.J. 2015. Aboriginal Treaties. The Canadian Encyclopedia. Available at [www.thecanadianencyclopedia.ca/en/article/aboriginal-treaties](http://www.thecanadianencyclopedia.ca/en/article/aboriginal-treaties) [accessed 10 January 2016]

Hanna, K.S. 2009. Environmental Impact Assessment: Process, Setting, and Efficacy. In Hanna, K.S (Ed.). 2009. *Environmental Impact Assessment, Practice and Participation*. Second Edition. Oxford University Press: Toronto. 480 pp.

Hardin, G. 1968. The tragedy of the commons. *Science* 162(3859): 1243-1248

Heikka, K., K. Jokelainen, and J. Teräs. 2013. *Lapland's Arctic Specialisation Programme*. Regional Council of Lapland: Rovaniemi. 68 pp.

Hiebert, J. 2006. Industrial Development and Woodland Caribou. In Riewe, J.E. and R.R. Oakes. 2006. *Climate Change: Linking Traditional and Scientific Knowledge*. Aboriginal Issues Press: Winnipeg. 379-389

Higgins, J. 2008. Innu Rights and Government. Newfoundland and Labrador Heritage Web Site. Available at [http://www.innu.ca/index.php?option=com\\_content&view=article&id=10&Itemid=7&lang=en](http://www.innu.ca/index.php?option=com_content&view=article&id=10&Itemid=7&lang=en) [accessed 28 October 2016]

Horn, F. 1996. Minorities and Their Right of Political Participation. Rovaniemi, Finland: Northern Institute for Environmental and Minority Law. *Juridica Lapponica* 16: 156 pp.



- Hotain, M. 2006. "Ethical space" for indigenous environmental knowledge in policy development. In Riewe, J.E. and R.R. Oakes. 2006. *Climate Change: Linking Traditional and Scientific Knowledge*. Aboriginal Issues Press: Winnipeg. 34-63
- Hrezo, M.S. and W.E. Hrezo. 1984. The role of human values, attitudes, and beliefs in environmental assessment. In Hart, S.L., G.A. Enk and W.F. Hornick (Eds). 1984. *Improving Impact Assessment: Increasing the Relevance and Utilization of Scientific and Technical Information*. Westview Press: Boulder, Colorado. 119-139
- Hurlbert, M. and J. Gupta. 2015. The Split Ladder of Participation: A Diagnostic, Strategis, and Evaluation Tool to Assess When Participation is Needed. *Environmental Science and Policy* 50: 100-113
- Innu of Labrador, Government of Newfoundland and Labrador, and Government of Canada. 2011. *Labrador Innu Land Claims Agreement-in-Principle*. 436 pp.
- International Labour Organization (ILO). 1957. *Indigenous and Tribal Populations Convention, C107*, 26 June 1957, C107. Available at <http://www.refworld.org/docid/3ddb66804.html> [accessed 16 October 2016]
- International Labour Organization (ILO). 1989. *Indigenous and Tribal Peoples Convention, C169*, 27 June 1989, C169. Available at <http://www.refworld.org/docid/3ddb6d514.html> [accessed 21 March 2015]
- International Labour Organization (ILO). 2003. *ILO Convention on Indigenous and Tribal Peoples, 1989 (No. 169): A Manual. Project to Promote ILO Policy on Indigenous and Tribal Peoples*. International Labour Organization: Geneva. 112 pp.
- International Labour Organization (ILO). 2010. Ratifications of C169 – Indigenous and Tribal Peoples Convention, 1989 (No. 169), available at [http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO:11300:P11300\\_INSTRUMENT\\_ID:312314:NO](http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO:11300:P11300_INSTRUMENT_ID:312314:NO) [accessed 22 June 2017]
- International Labour Organization (ILO). 2017. *Leaflet No. 8: The ILO and Indigenous and Tribal Peoples*. Available at <http://www.ohchr.org/Documents/Publications/GuideIPLleaflet8en.pdf> [accessed 7 January 2017]. 8 pp.
- International Labour Standards Department (ILSD). 2013. *Understanding the Indigenous and Tribal People Convention, 1989 (No. 169): Handbook for ILO Tripartite Constituents*. International Labour Organization: Geneva. 57 pp.
- Jacob, A., C. Fox, T.G. Gerwing, N. Muñoz, K. Pitman, and M. Price. 2016. Young researchers call for scientific integrity in environmental decision-making in Canada: open letter. Available at <https://www.youngresearchersopenletter.org/> [accessed 17 May 2017]
- Jalava, K. 2014. *Quality of Environmental Impact Assessment in Finland*. Jyväskylä Yliopisto. 95 pp.

- Jentoft, S. 2000. Co-managing the coastal zone: is the task too complex? *Ocean and Coastal Management* 43: 527-535
- Jentoft, S. and T. Kristoffersen. 1989. Fishermen's co-management: the case of the Lofoten fishery. *Human Organization* 48: 355-365
- Joonas, T. and J. Joonas. 2011. The historical basis of Sámi land rights in Finland and the application of the ILO Convention No. 169. *The Yearbook of Polar Law* 3: 351-388
- Kangas, A., N. Saarinen, H. Saarikoski, L.A. Leskinen, T. Hujala and J. Tikkanen. 2010. Stakeholder perspectives about proper participation for Regional Forest Programmes in Finland. *Forest Policy and Economics* 12: 213-222
- Kaplan, R. 1984. Assessing human concerns for environmental decision-making. In Hart, S.L., G.A. Enk and W.F. Hornick (Eds). 1984. *Improving Impact Assessment: Increasing the Relevance and Utilization of Scientific and Technical Information*. Westview Press: Boulder, Colorado. 37-56
- Kaplan, S. 1984. A process oriented approach to concerns in environmental decision making. In Hart, S.L., G.A. Enk and W.F. Hornick (Eds). 1984. *Improving Impact Assessment: Increasing the Relevance and Utilization of Scientific and Technical Information*. Westview Press: Boulder, Colorado. 21-35
- Kenny, C. 2012. Liberating leadership theory. In Kenny, C. and T.N. Fraser. 2012. *Living Indigenous Leadership: Native Narratives on Building Strong Communities*. UBC Press: Toronto. 1-14
- Koivurova, T. 2015. Legal protection of Sámi traditional livelihoods from the adverse impacts of mining: A comparison of the level of protection enjoyed by Sámi in their four home states. *Arctic Review on Law and Politics* 6(1): 11-51
- Kyllönen, S., A. Colpaert, H. Heikkinen, M. Jokinen, J. Kumpula, M. Marttunen, K. Muje, and K. Raitio. 2006. Conflict management as a means to the sustainable use of natural resources. *Silva Fennica* 40: 687-728
- Langdon, S.J. 2006. Selective traditional Tlingit salmon fishing techniques on the west coast of the Prince of Wales Archipelago. In Menzies, C.R. 2006. *Traditional Ecological Knowledge and Natural Resource Management*. University of Nebraska Press: Lincoln. 21-46
- Leon, A.Y. 2012. Elders' teachings on indigenous leadership: Leadership as a gift. In Kenny, C. and T.N. Fraser. 2012. *Living Indigenous Leadership: Native Narratives on Building Strong Communities*. UBC Press: Toronto. 48-63
- Leskinen, L.A. 2003. Purposes and challenges of public participation in regional and local forestry in Finland. *Forest Policy and Economics* 6: 605-618
- Liberal Party of Canada (LPC). 2017. Environmental Assessments. Available at <https://www.liberal.ca/realchange/environmental-assessments/> [accessed 18 May 2017]

- Luke, T.W. 2002. The Practice of Adaptive and Collaborative Environmental Management: A Critique. *Capitalism Nature Socialism* 13(4): 1-22
- MacKay, W. 2006. Environmental assessment of hydro electric projects in the Hudson Bay/James Bay Bioregion. In Riewe, J.E. and R.R. Oakes. 2006. *Climate Change: Linking Traditional and Scientific Knowledge*. Aboriginal Issues Press: Winnipeg. 390
- McGoodwin, J.R. 2006. Integrating fishers' knowledge into fisheries science and management: possibilities, prospects and problems. In Menzies, C.R. 2006. *Traditional Ecological Knowledge and Natural Resource Management*. University of Nebraska Press: Lincoln. 175-194
- McLeod, Y.G. 2012. Learning to lead kokum style: An intergenerational study of eight First Nation women. In Kenny, C. and T.N. Fraser. 2012. *Living Indigenous Leadership: Native Narratives on Building Strong Communities*. UBC Press: Toronto. 17-47
- Menzies, C.R. 2001. Reflections on research with, for and among Indigenous peoples. *Canadian Journal of Native Education* 25(1): 19-36
- Menzies, C.R. 2006. Ecological knowledge, subsistence and livelihood practices: The case of the pine mushroom harvest in Northwestern British Columbia. In Menzies, C.R. 2006. *Traditional Ecological Knowledge and Natural Resource Management*. University of Nebraska Press: Lincoln. 87-106
- Menzies, C.R. and C. Butler. 2006. Understanding Ecological Knowledge. In Menzies, C.R. 2006. *Traditional Ecological Knowledge and Natural Resource Management*. University of Nebraska Press: Lincoln. 1-17
- Minister of Department of Environment and Conservation (MDEC). 2016. *Environmental Assessment...A guide to the process*. 20 pp.
- Mitchell, B. 2009. Environmental impact assessment: practice and participation. In Hanna, K.S (Ed.). 2009. *Environmental Impact Assessment, Practice and Participation*. Second Edition. Oxford University Press: Toronto. 480 pp.
- Moller, H., F. Berkes, P.O. Lyver, and M. Kislalioglu. 2004. Combining science and traditional ecological knowledge: monitoring populations for co-management. *Ecology and Science* 9(3): 2. Available at <http://www.ecologyandsociety.org/vol9/iss3/art2/> [accessed on 19 March 2015]
- Mustonen, K., T. Mustonen, A. Aikio and P. Aikio. 2010. *Drowning reindeer, drowning homes: Indigenous Sámi and hydroelectricity development in Sompio, Finland*. Snowchange Cooperative: Vaasa. 115 pp.
- Nadasdy, P. 2006. The case of the missing sheep: Time, space, and the politics of "trust" in co-management practice. In Menzies, C.R. 2006. *Traditional Ecological Knowledge and Natural Resource Management*. University of Nebraska Press: Lincoln. 127-152
- Nadasdy, P. 1999. The politics of TEK: Power and the "integration" of knowledge. *Arctic Anthropology* 36(1): 1-18

Nakashima, D. 1990. *Application of Native Knowledge in EIA: Inuit, Elders and Hudson Bay Oil*. Hull: Canadian Environmental Assessment Research Council. 5 pp.

Newfoundland and Labrador Heritage Website Project (NLHWP). 1999a. Climate Characteristics, November 2014. Available at <http://www.heritage.nf.ca/articles/environment/seasonal.php> [accessed 25 October 2016]

Newfoundland and Labrador Heritage Website Project (NLHWP). 1999b. Climate, Date Unknown. Available at <http://www.heritage.nf.ca/articles/environment/climate.php> [accessed 25 October 2016]

Newfoundland and Labrador Statistics Agency (NLSA). 2016. Population Estimates, July 1, 2011 to 2015, Census Divisions and St. John's Census Metropolitan Area (CMA), Newfoundland and Labrador, 11 February 2016. Statistics Canada. Available at [http://www.stats.gov.nl.ca/statistics/population/PDF/Population\\_Estimates\\_CDCMA.pdf](http://www.stats.gov.nl.ca/statistics/population/PDF/Population_Estimates_CDCMA.pdf) [accessed 24 October 2016].

Niskanen, A., B. Slee, P. Ollonqvist, D. Pettenella, L. Bouriaud and E. Rametsteiner. 2007. Entrepreneurship in the forest sector in Europe. *Silva Carelica* 52. University of Joensuu Faculty of Forestry. 129 pp.

Non-Governmental Organization (NGO) Conference. 1977. Declaration of principles for the defence of the indigenous nations and peoples of the western hemisphere. *American Indian Journal* 11: 12-13

Official Statistics of Finland (OSF). 2016. Area, population and GDP by region, 1 April 2016. Statistics Finland: Helsinki. Available at [http://www.stat.fi/tup/suoluk/suoluk\\_vaesto\\_en.html](http://www.stat.fi/tup/suoluk/suoluk_vaesto_en.html) [accessed 18 October 2016].

Olson, M. 1965. *The Logic of Collective Action: public goods and the theory of groups*. Harvard University Press. 176 pp.

Olynyk, J. M. 2005. *The Haida Nation and Taku River Tlingit Decisions: Clarifying Roles and Responsibilities for Aboriginal Consultation and Accomodation*. Lawson Lundell LLP: Calgary. 10 pp.

Ortolano, L. and A. Shepherd. 1995. Environmental Impact Assessment. In Vanclay, F. and D.A. Bronstein (Eds.). 1995. *Environmental and Social Impact Assessment*. John Wiley & Sons Ltd: Chichester, United Kingdom. 325 pp.

Osler. 2014. Tsilhqot'in Decision: The Sky is not Falling, 27 June 2014. Available at <https://www.osler.com/en/resources/regulations/2014/tsilhqot-in-decision-the-sky-is-not-falling> [accessed 2 November 2016]

Ostrom, E. 1990. *Governing the Commons: the evolution of institutions for collective action*. Cambridge University Press: New York. 280 pp.

O'Toole Jr, L.J. 2000. Research on policy implementation: Assessment and prospects. *Journal of Public Administration Research and Theory* 10(2): 263-288

Ottawa Declaration. 1996. *Declaration on the Establishment of the Arctic Council* (Ottawa, Canada, 1996). Available at <http://www.international.gc.ca/arctic-arctique/ottdec-decote.aspx?lang=eng> [accessed 18 February 2015]

Pennanen, J. and K. Näkkäläjärvi. Translated by K. Anttonen. 2000. *Siiddastallan: From Lapp Communities to Modern Sámi Life*. Siida Sámi Museum: Inari. 285 pp.

Pinkerton, E. 2003. Towards specificity in complexity: The Fisheries Co-Management Experience. *Fish and Fisheries Series* 26: 61-77

Popper, K. 1967. The rationality principle. In Miller, D. 1985. *Popper Selections*. Princeton University Press: Princeton, NJ. 347-365

Pushchak, R. and A.M. Farrugia-Uhalde. 2009. Social Impact Assessment and High-Level Radioactive Waste Disposal. In Hanna, K.S (Ed.). 2009. *Environmental Impact Assessment, Practice and Participation*. Second Edition. Oxford University Press: Toronto. 480 pp.

Pölönen, I., P. Hokkanen, and K. Jalava. 2011. The effectiveness of the Finnish EIA system – What works, what doesn't, and what could be improved? *Environmental Impact Assessment Review* 31: 120-128

Raitio, K. 2008. "You can't please everyone" conflict management practices, frames and institutions in Finnish state forests. University of Joensuu. Faculty of Social Sciences and Regional Studies/Social Policy dissertation. 273 pp.

Reindeer Herders' Association (RHA). 2014. *Guide to Examining Reindeer Husbandry in Land Use Projects*. Pohjolan Painotuote Oy, Rovaniemi: 46 pp.

Roberts, R. 1995. Public Involvement: From consultation to participation. In Vanclay, F. and D.A. Bronstein (Eds.). 1995. *Environmental and Social Impact Assessment*. John Wiley & Sons Ltd: Chichester, United Kingdom. 325 pp.

Roué, M. and D. Nakashima. 2002. Knowledge and foresight: the predictive capacity of traditional knowledge applied to environmental assessment. *International Social Science Journal* 54(173): 337-347

Rusk, J.J., S.C.R. Granchinho, and R.W. Barry. 2009. Impact Assessment in Nunavut. In Hanna, K.S (Ed.). 2009. *Environmental Impact Assessment, Practice and Participation*. Second Edition. Oxford University Press: Toronto. 480 pp.

Saarikoski, H. 2000. Environmental Impact Assessment (EIA) as collaborative learning process. *Environmental Impact Assessment Review* 20: 681-700

Saastamoinen, O. 1999. Forest policies, access rights and non-wood forest products in northern Europe. *Unasylva* 198(50): 20-26

Sadler, B. 1989. National parks, wilderness preservation, and native peoples in Northern Canada. *Natural Resources Journal* 29: 185-205

Sadler, B. 1996. *Environmental Assessment in a Changing World: Evaluating practice to improve performance - Final Report*. Canadian Environmental Assessment Agency: Hull. 248 pp.

Salomons, T. and E. Hanson. 2016. Sparrow Case, date unknown. UBC Indigenous Foundations. Available at <http://indigenousfoundations.arts.ubc.ca/home/land-rights/sparrow-case.html> [accessed 2 November 2016]

Sámi Parliament (Sámediggi). 2014a. Sámi Language, 11 March 2014. Available at [http://www.samediggi.fi/index.php?option=com\\_content&task=blogcategory&id=253&Itemid=405](http://www.samediggi.fi/index.php?option=com_content&task=blogcategory&id=253&Itemid=405) [accessed 21 October 2016].

Sámi Parliament (Sámediggi). 2014b. The Sámi in Finland, 17 March 2014. Available at [http://www.samediggi.fi/index.php?option=com\\_content&task=blogcategory&id=105&Itemid=104](http://www.samediggi.fi/index.php?option=com_content&task=blogcategory&id=105&Itemid=104) [accessed 18 October 2016].

Secretariat of the Convention on Biological Diversity (SCBD). 2004. *Akwé: Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessment regarding Developments Proposed to Take Place on, or which are Likely to Impact on, Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities*. Convention on Biological Diversity, Montreal. 25 pp.

Sinclair, A.J. and A. Diduck. 2009. Public Participation in Canadian Environmental Assessment: Enduring Challenges and Future Directions. In Hanna, K.S (Ed.). 2009. *Environmental Impact Assessment, Practice and Participation*. Second Edition. Oxford University Press: Toronto. 480 pp.

Slocombe, D.S., L. Hartley, and M. Noonan. 2009. Environmental Assessment and Land Claims, Devolution, and Co-Management: Evolving Challenges and Opportunities in Yukon. In Hanna, K.S (Ed.). 2009. *Environmental Impact Assessment, Practice and Participation*. Second Edition. Oxford University Press: Toronto. 480 pp.

Snively, G. 2006. Honoring aboriginal science knowledge and wisdom in an environmental education graduate program. In Menzies, C.R. 2006. *Traditional Ecological Knowledge and Natural Resource Management*. University of Nebraska Press: Lincoln. 195-220

Squetimkin-Anquoe, A. 2012. The graceful war dance: Engendering American Indian traditional knowledge and practice in leadership. In Kenny, C. and T.N. Fraser. 2012. *Living Indigenous Leadership: Native Narratives on Building Strong Communities*. UBC Press: Toronto. 204-220

Statistics Canada. 2005. Land and freshwater area, by province and territory, 1 February 2005. Natural Resources Canada. Available at <http://www.statcan.gc.ca/tables-tableaux/sum-som/101/cst01/phys01-eng.htm> [accessed 24 October 2016].

Statistics Canada. 2012. Focus on Geography Series, 2011 Census, 24 October 2012. Statistics Canada: Ottawa, Ontario. Available at <http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-pr-eng.cfm?Lang=Eng&GK=PR&GC=10> [accessed 27 October 2016]

Statistics Canada. 2016. Population by year, by province and territory, 1 July 2016. Statistics Canada. Available at <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo02a-eng.htm> [accessed 24 October 2016].

Stemler, S. 2001. An overview of content analysis. *Practical Assessment, Research & Evaluation* 7(17): 10 pp.

Stevenson, M.G. 1996. Indigenous knowledge in environmental assessment. *Arctic* 49(3): 278-291

Sutton, R. 1999. *The policy process: An overview*. Working Paper 118. Overseas Development Institute: London, UK. 35 pp.

Tanner, A. 1998. The Aboriginal Peoples of Newfoundland and Labrador and Confederation. *Newfoundland Studies* 14(2): 238-252

Thinley, P. 2010. *Empowering People, Enhancing Livelihood, and Conserving Nature Community Based Ecotourism in JSWNP, Bhutan and TMNP, Canada*. MPhil Policy Studies internship report, The University of New Brunswick. 24 pp.

Turner, N.J. and H. Clifton. 2006. The forest and the seaweed: Gitga'at seaweed, traditional ecological knowledge, and community survival. In Menzies, C.R. 2006. *Traditional Ecological Knowledge and Natural Resource Management*. University of Nebraska Press: Lincoln. 65-86

Turner, P. and S. Turner. 2009. Triangulation in practice. *Virtual Reality* 13:171-181

Turner, A., S. Crompton, and S. Langlois. 2013. *Aboriginal Peoples in Canada: First Nations People, Métis and Inuit*. Statistics Canada: Ottawa. 23 pp.

United Nations (UN). 1991. *Convention on Environmental Impact Assessment in a Transboundary Context*. Espoo, Finland.

United Nations Economic and Social Council Commission on Human Rights (UNESCCHR). 1997. *Review of Developments Pertaining to the Promotion and Protection of Human Rights and Fundamental Freedoms of Indigenous People: Environment, Land and Sustainable Development*, 16 June 1997. Available at <http://www.suri.ee/doc/Sámide.html> [accessed 4 November 2016]

United Nations General Assembly (UN). 1992a. *United Nations Rio Declaration on Environment and Development*, 12 August 1992. Available at <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm> [accessed 17 October 2016]

United Nations General Assembly (UN). 1992b. *United Nations Declaration on the Rights of Persons Belonging to National or Ethnic, Linguistic and Religious Minorities*, 18 December

1992. Available at <http://www.un.org/documents/ga/res/47/a47r135.htm> [accessed 17 October 2016]

United Nations General Assembly (UN). 2007. *United Nations Declaration on the Rights of Indigenous Peoples*: resolution / adopted by the General Assembly, 2 October 2007, A/RES/61/295. Available at: <http://www.refworld.org/docid/471355a82.html> [accessed 16 October 2016]

United Nations Treaty Collection (UNTC). 2017. Chapter XXVII: Environment. Available at [https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=XXVII-4&chapter=27&clang=\\_en](https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-4&chapter=27&clang=_en) [accessed 8 April 2017]

Weber, R.P. 1990. *Basic Content Analysis*. 2<sup>nd</sup> Edition. Sage Publications Ltd.: Newbury Park, CA. 98 pp.

Wesche, S. and D. Armitage. 2006. Adapting to Environmental Change in a Northern Delta System. In Riewe, J.E. and R.R. Oakes. 2006. *Climate Change: Linking Traditional and Scientific Knowledge*. Aboriginal Issues Press: Winnipeg. 165-184

Wikipedia. 2013. Sami native region (Finland). Available at [https://en.wikipedia.org/wiki/Sami\\_native\\_region\\_\(Finland\)](https://en.wikipedia.org/wiki/Sami_native_region_(Finland)) [accessed 24 June 2017]

Wikipedia. 2017. Labrador. Available at <https://en.wikipedia.org/wiki/Labrador> [accessed 24 June 2017]

Wondolleck, J.M. and S.L. Yaffee. 2000. *Making Collaboration Work: Lessons from Innovation in Natural Resource Management*. Island Press: Washington, DC. 280 pp.

Wutich, A., G. Ryan, and H.R. Bernard. 2015. Chapter 17 Text Analysis. In Bernard, H.R. and C.C. Graylee. *The Handbook of Methods in Cultural Anthropology*. 2<sup>nd</sup> Edition. Rowman and Littlefield Publishers: Lanham. 775 pp.

Yanow, D. 1993. The communication of policy meanings: Implementation as interpretation and text. *Policy Sciences* 26: 41-61

Yanow, D. 1995. Practices of policy interpretation. *Policy Sciences* 28: 111-126

Yin, R.K. 2009. *Case Study Research: Designs and Methods*. 4<sup>th</sup> Edition. Sage Publications Ltd: Thousand Oaks. 223 pp.