

GENDER AND DECISION-MAKING IN NATURAL RESOURCE CO-MANAGEMENT IN  
YUKON TERRITORY

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## ABSTRACT

Across the Canadian North, resource co-management has become a central institution for the management of natural resources. An inventory of co-management boards in Canada's northern territories, conducted in 2012, identified more than 30 different boards, with responsibilities ranging from wildlife, water, lands and non-renewable natural resources (Natcher 2013). While operating along a continuum of institutional authority, co-management has been heralded by many as an effective means to engage resource users and government managers in a collaborative and more equitable approach to environmental decision-making. Although a considerable amount of multi-disciplinary research has examined the various social and political dimensions that influence the effectiveness of resource co-management, little has been done to understand how gender might affect collaboration and decision-making within this resource regime. This gap in understanding is particularly evident in the northern Canadian context, where women make up 16% of all current co-management board members.

With the intention to address this analytical void, this study set out to examine the ways in which a gender imbalance influences board decision-making and the experiences of those involved in co-management boards that have been established in the Yukon Territory. It focused in particular on women within these institutions, while also acknowledging broader gender roles that involve both men and women. Written surveys and semi-structured interviews demonstrated that the representation of women within these institutions was important to establishing a holistic decision-making process and positive institutional culture that facilitated effective decision-making. The presence of women on these boards also influenced the scope and efficacy of decision outcomes. Participants found that though opportunities to participate in decision-making existed, there were still barriers preventing board members from acting on these opportunities. These barriers were often experienced by men and women in different ways. Implicit within these findings are the gendered roles and characteristics that shape the activities and expectations of those involved with co-management institutions. Gendered roles in the community and on the land were particularly relevant to these boards. This research contributes to a more informed understanding of a critical, yet unexplored, aspect of the social and political context of co-management, with practical implications for how effective decision-making is interpreted and implemented by these boards.

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## **LIST OF ABBREVIATIONS**

CYFN	Council of Yukon First Nations
HTO	Hunters and Trappers Organization
NWT	Northwest Territories
PCMB	Porcupine Caribou Management Board
RRC	Renewable Resource Council
UFA	Umbrella Final Agreement
YFWMB	Yukon Fish and Wildlife Management Board



## CHAPTER 1: INTRODUCTION

Since the 1980s, co-management agreements have been established across the three northern Canadian territories to bring resource users, Aboriginal authorities, and various levels of government together in the process of natural resource management decision-making. In addition to managing human uses of natural resources in more sustainable ways, co-management also aims to integrate the voices of local communities and Aboriginal peoples tied to these resources into the policy making process. By directly engaging community and/or Aboriginal representatives in the management process, co-management allows local value systems to be represented more accurately while ultimately improving public participation, accountability, and overall democratization of resource governance (Natcher, Davis, and Hickey 2005).

Notwithstanding this potential, critiques of resource co-management have shown that communities are not necessarily the sites of singular, common interests that they are often characterized to be. Rather, communities consist of multiple and at times conflicting interests, which are shaped in part by social structures within the community, such as ethnicity, class, and gender (Agarwal 2010a). For example, while the Yukon Territory<sup>1</sup> may have a small population, it is nonetheless characterized by rich cultural diversity. The territory is home to Inuvialuit, Gwich'in, Hän, Upper Tanana, Northern Tutchone, Southern Tutchone, Tlingit, Kaska, and Tagish peoples, encompassing a range of histories, cultures, and social and political structures. To best account for this plurality, representation on co-management institutions must be equally diverse and reflective of the multiple values and interests of community members (Kafarowski 2005).

At the center of these issues is the understanding that natural resource management does not exist in a vacuum; rather, resource management is influenced by a range of social, economic, legal, and political factors. While there has been some exploration of the cultural and political aspects that affect participation in northern co-management boards (e.g. Castro and Nielsen 2001; Nadasdy 2003a; Nadasdy 2003b; Natcher, Davis, and Hickey 2005; White 2008), a gendered analysis of resource co-management in northern Canada has, with only a few exceptions (Kafarowski 2005; Kafarowski 2009), largely been ignored by the academic community. One exception to this lacuna is the work done by Natcher (2013) comparing the

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<sup>1</sup> Hereafter referred to as “the Yukon” or “the territory”

nominal representation of men and women on co-management boards<sup>2</sup> in the three Canadian territories. This study found that among the 34 co-management boards that have been implemented in the three northern territories, men are overwhelmingly represented, with 93% of board members being male in Nunavut and 83% in the Northwest Territories. In the Yukon, only 18% of current co-management board members are female, a proportion that is the highest among the three Canadian territories. While identifying the nominal representation of women in northern co-management is an important starting point, these data alone do not provide insights on how internal dynamics of co-management boards are influenced by gender (Nemarundwe 2005).

Co-management boards in the Canadian North are tasked with representing the voice of Aboriginal peoples and local communities, and in doing so influence access to and control over natural resources and how they are managed. For this reason, it is important to understand who is involved in these organizations, how they are involved, how decisions are made, and who benefits from decisions (Nemarundwe 2005). As with other social dimensions that affect decision-making, gender plays an important role in influencing how institutions function (Reed and Davidson 2011). Research has demonstrated the different ways in which perspectives, knowledge, and experiences with various natural resources can be gendered (e.g. Mikkelsen 2005; Reed and Varghese 2007; Reed and Davidson 2011). Yet in the Yukon, little is known about the role that gender plays within natural resource co-management boards. As Kafarowski (2005) points out, “in order for environmental change in the Arctic to be addressed, innovative and robust policies must be developed that are holistic, flexible, culturally relevant and sensitive to gender” (pg.16). For this to be achieved, initial steps must be taken to understand the relationship between gender and the resource management institutions that influence policy formation, an area that is currently poorly understood in the Yukon specifically and the territorial North more generally.

### **1.1 Objectives**

The purpose of this research is to examine the ways in which gender dynamics influence decision-making within natural resource co-management institutions in the Yukon. This includes different aspects of decision-making: how it is carried out, its outcomes, and how different participants take part in and experience it. In light of the gender disparity within board

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<sup>2</sup> Co-management boards in this context were defined as those established under the Umbrella Final Agreement

membership (Natcher 2013), this research focuses on exploring women's experiences while serving on co-management boards. However, it is important to acknowledge that these experiences are entrenched in broader gender relations of which men are very much a part. This research explores the following questions:

- a) What is the relationship between gender and decision-making processes on co-management boards in the Yukon?
- b) What are women's past and current experiences in participating in decision-making on co-management boards?
- c) Are there factors that facilitate or impede effective participation of board and staff members on co-management boards?
- d) Have (a), (b) and (c) affected the nature of the decisions made by the co-management boards? If so, how?

In pursuing these questions, this research contributes to both the academic and applied aspects of co-management in the Yukon. From a theoretical perspective, it builds on the ongoing exploration of the cultural and political context of natural resource co-management in the North<sup>3</sup>. This research seeks to fill an important gap in literature on co-management in Canada and identify future areas of research that can advance this field of inquiry. In practice, this research aims to develop an understanding of effective decision-making within co-management and how current decision-making processes could potentially be made more effective, with an overarching goal of improving social and ecological sustainability.

This thesis is structured as three chapters. The first chapter provides context for the project and includes an overview of its objectives, relevant literature, and the author's position within the project. The second chapter is a manuscript that has been formatted for a refereed journal publication. This chapter includes an abstract, introduction, brief summary of literature, review of methods, findings, and discussion. The final chapter ties the research findings into the broader scope of the discipline and related literature. It also identifies limitations of the work and potential areas for future research.

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<sup>3</sup> Throughout this manuscript, the North refers to the Canadian or territorial North, including the Yukon Territory, Northwest Territories, and Nunavut.

## 1.2 Literature Review

The objectives and research questions of this project are framed by a diverse body of literature. This review is made up of three overlapping sections. First, it will explore the theoretical context of natural resource co-management, how co-management emerged as a resource regime, and how it has been put into practice in Canada and in the Yukon. This review then examines the concept of “community” and its application in the context of community-based resource management. Finally, I examine the connections between gender and natural resource management, focusing in particular on key lessons learned and areas where gaps in research remain.

### 1.2.1 Co-management in Theory and Practice

The management of common pool natural resources<sup>4</sup>, such as water, wildlife, and forests, has long been a focus of academic analysis. A seminal model of common pool resource use that for many years guided resource managers in the Western world is Hardin’s (1968) “tragedy of the commons”. This model was based on the assumption that these resources will inevitably be overexploited because users place their individual interests above those of the community (*ibid.*). The management strategies that were informed by this understanding promoted handing over control of resource management to a centralized government authority (Berkes and Farvar 1989). Such an approach was not only commonplace in the Western world, but was also exported to “developing” countries implementing their own natural resource management policies.

Numerous critiques of centralizing resource management authority have since emerged, which raise questions of inefficiencies, high costs, and low compliance levels when under the exclusive authority of the “state” (e.g. Agrawal and Gibson 1999; Goodland, Ledec, and Webb 1989; Ostrom 1990). Critiques point out that common pool resources can be, and in fact have been, managed based on norms of cooperation rather than conflict. Out of this history, the concept of community-based natural resource management has developed, which aims to incorporate communities in various ways into the process of making decisions about natural resources and their management. Cleaver (2012) outlines the various theoretical assumptions on which community-level resource management institutions are based. Central to such arrangements is the idea that communities are more effective than the state at managing natural

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<sup>4</sup> Common pool resources have two key characteristics; they are both subtractable (part of the resource used by one person cannot be used by another) and excludable (difficult to exclude others from) (Acheson 2006).

resources, and that efficiency is improved by the use of local knowledge. In establishing such institutions, Cleaver (2012) argued that marginalized groups are empowered, problems with state failures are avoided, and existing informal management systems are strengthened in their codification into governance arrangements (*ibid.*). This is not to say that community-based management strategies are a panacea for all environmental problems. Indeed, there is no single arrangement for managing natural resources that guarantees a sustainable outcome, and both centralized and community-based governance structures can fail under different circumstances (Acheson 2006). For this reason, it is important to understand the various contexts to which community-based resource regimes are best suited. Community-based resource management institutions can take various forms, including formal and informal systems, with communities taking full or partial control over management decisions (Acheson 2006). Where communities or community representatives share this control with government bodies, it is typically referred to as co-management. However, as will be discussed below, this definition has been expanding and now encompasses a range of institutional arrangements.

The concept of co-management gained traction within resource management policy throughout the 1980s and 1990s (Plummer and Armitage 2007). Like community-based management more broadly, co-management is associated with similar goals of efficiency and efficacy (Castro and Nielsen 2001) and is grounded in concepts of justice, equity, and empowerment (Berkes 2009). Berkes, George, and Preston (1991) describe co-management as “the sharing of power and responsibility between the government and local resource users” (p.13). This is a diverse category that includes different “levels” of participation on the part of resource users, ranging from consultation to full power-sharing agreements (*ibid.*). Co-management has also been defined by various academics and institutions as a problem-solving process (Carlsson and Berkes 2005), a partnership (International Union for Conservation of Nature and Natural Resources 1997), and a continuum of power and authority (Pomeroy and Berkes 1997).

Thus, co-management can be implemented in a number of different forms, and there is no universally accepted definition of the term (Yandle 2003; Berkes 2009). In light of this, Yandle (2003) approaches co-management in such a way that accounts for institutional diversity: “co-management can be thought of as a spectrum of institutional arrangements in which management responsibilities are shared between the users (who may or may not be community-based) and

government” (p.180). This definition of co-management will be adopted for the basis of this manuscript. The caveat that users may or may not be community based is especially important in the context of the North, where there are a number of co-management regimes that engage Aboriginal governments acting on behalf of their citizens. Plummer and Fitzgibbon (2004) use this description in laying out a conceptual framework for co-management that identifies commonalities between these diverse institutions. This framework highlights three key components associated with co-management, including preconditions (impetus for the co-management process)<sup>5</sup>, characteristics (attributes associated with co-management)<sup>6</sup>, and outcomes (consequences that may be realized)<sup>7</sup> (*ibid.*). In doing so, they also highlight the lack of theoretical development within this body of literature and the need to expand our conceptual understanding of co-management.

One area of co-management theory that has more recently developed is “adaptive co-management”<sup>8</sup>, which incorporates the concept of adaptive management, or learning-by-doing, into co-management (Plummer and Armitage 2007; Berkes 2009). Adaptive co-management acknowledges that social and ecological uncertainty are inherent to governance, and responding to this uncertainty requires collaboration and social learning (Armitage et al. 2009). In addition to drawing attention to management objectives and structures, it also highlights institutional flexibility, linkages between different actors across and within different scales, and shared learning through change (Plummer and Armitage 2007; Armitage et al. 2011). Literature on adaptive co-management marks a shift away from focusing on the legal and structural arrangements of co-management institutions, towards problem-solving processes and networks (Carlsson and Berkes 2005; Berkes 2009). Lessons from this work are particularly relevant in understanding how co-management institutions in the North learn to adapt to the rapidly changing Arctic environment and uncertainty associated with these changes (Plummer and Armitage 2007; Armitage et al. 2011).

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<sup>5</sup> Preconditions of co-management include: real or imagined crisis, willingness for local users to contribute, opportunity for negotiation or simple function, legally mandated by a government or third party, leadership or energy center, and a common vision or existing networks (Plummer and Fitzgibbon 2004).

<sup>6</sup> Characteristics of co-management include: pluralism, communication and negotiation, transactive decision-making, social learning, and shared action or commitment (Plummer and Fitzgibbon 2004).

<sup>7</sup> Potential outcomes of co-management include: equity and efficiency of decision-making, legitimization of actions, and greater capacity (Plummer and Fitzgibbon 2004).

<sup>8</sup> Adaptive co-management is defined by Folke et al. (2002) as “a process by which institutional arrangements and ecological knowledge are tested and revised in a dynamic, ongoing, self-organized process of learning-by-doing” (p.20)

As the theoretical side of co-management has evolved and expanded, so too has the implementation of co-management agreements in practice.<sup>9</sup> In addition to cuts in funding for government agencies responsible for managing natural resources (Plummer and Fitzgibbon 2004), one of the driving forces behind the movement towards co-management in Canada was the political development of Aboriginal governments in the 1980s and 1990s (Notzke 1995). Previously the relationship between the State and Aboriginal peoples was characterized by decades of paternalistic, assimilationist policies on the part of the State. However, the move towards co-management was part of a larger reorientation within Aboriginal self-governance (Nadasdy 2003a).

There are two main types of co-management systems in Canada, including crisis-based and claims-based agreements. Crisis-based co-management is designed to safeguard one or more resources that are under immediate threat due to resource development, over-exploitation, or mismanagement (Goetze 2004). In the Canadian context, these agreements typically involve Aboriginal peoples and state managers, and are established to allow for some level of protection for natural resources while more comprehensive agreements are negotiated (*ibid.*). A number of case studies (e.g. Notzke 1995; Rusnak 1997; Goetze 2004) have demonstrated the diversity of situations that have given rise to crisis-based co-management agreements across Canada. For example, the Beverly-Kaminuriak Barren Ground Caribou Management Agreement brought together representatives from Saskatchewan, Manitoba, and the Northwest Territories in response to the perceived crisis of diminished caribou populations<sup>10</sup> (Notzke 1995). Elsewhere, similar agreements have been established in response to protests, civil disobedience, and failure to negotiate over the management of a specific geographic area, as was the case with the Central Region Board in Clayoquot Sound, British Columbia (Goetze 2004).

Claims-based co-management agreements are long-term legal agreements that establish management bodies for shared control over decision-making. In Canada, they are negotiated exclusively between federal, provincial, and territorial governments and organizations representing Aboriginal peoples (*ibid.*). This sharing of responsibility for decision-making has required the restructuring of power and authority between those involved in natural resource management, from political decision-makers to resource managers and biologists. In this context,

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<sup>9</sup> Literature on the co-management of natural resources is extremely diverse, and for this reason this review will focus specifically on experiences with co-management in Canada and the Canadian North.

co-management was promoted as a way to resolve longstanding conflicts over natural resources between the State and Aboriginal peoples (Natcher, Davis, and Hickey 2005). The impetus to settle these conflicts via land claims agreements was triggered by the uncertainty surrounding Aboriginal title<sup>11</sup> and harvesting rights, as well as the potential for Aboriginal groups to obstruct resource developments through court challenges (Rusnak 1997). By signing land claims agreements, state governments and aboriginal authorities addressed this uncertainty with respect to Aboriginal title and rights. The claim agreements were and are a contract between Aboriginal people and the Crown to settle longstanding grievances in these areas by more clearly defining rights as they apply to exclusive and shared authority over Aboriginal and Crown jurisdiction and Aboriginal title (Usher 1986). The co-management of natural resources is an important aspect of delineating this shared authority, particularly in regards to Aboriginal rights to hunt, trap, and fish. Ensuring Aboriginal peoples have a certain level of authority and responsibility for the resources they depend on is a necessary part of maintaining these harvesting rights (Staples 1997). The first two claims-based co-management agreements were established by the James Bay and Northern Quebec Agreement of 1975 and the Inuvialuit Final Agreement in 1984 (Rusnak 1997). Since then, similar agreements have been created across Canada (Notzke 1995; Rusnak 1997; Goetze 2004).

Claims-based co-management has played a particularly important role in the development of natural resource management in northern Canada. This region is characterized not only as a “resource frontier”, but also as an area where State and Indigenous management systems have historically come into conflict. Usher (1986) describes the differences between these systems and the ways in which the State system has come to dominate northern resource management policy, as well as what the implications of this are for conservation. He states that in the North, “opposition persists because the state system, by its very nature, negates the legitimacy and effectiveness of the indigenous system that it was intended to supplant” (Usher 1986, p.20). Co-management agreements set out to bring these systems together (Hayes 2000). In the Yukon, the land claims agreement that established the majority of the co-management bodies in the territory was the Umbrella Final Agreement (UFA), signed in 1993. The management of fish and wildlife populations is a significant component of the UFA, an area that requires considering the needs of

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<sup>10</sup> As Usher (1991) later pointed out, the size of the caribou herds was larger initially expected.



recreational, commercial, traditional, and subsistence wildlife harvesting. The balancing of these various interests is one way in which the institutions responsible for implementing co-management have been tasked with bringing State and Indigenous systems together. This goal was expressed by the Yukon Fish and Wildlife Board (YFWMB) in the title of their 1998 conference, “Two Eyes, One Vision”.

With the expanding implementation of co-management in Canada, both practitioners and academics have begun assessing whether or not co-management has lived up to its expectations. Experiences in this regard have been diverse, with both praise (e.g. Pinkerton 1994; Berkes 2009) and critiques (e.g. Spak 2005; White 2006) emerging from a range of resource sectors. Plummer and Armitage (2007) summarize several key critiques that have emerged from analyzing the “reality” of co-management institutions. They point to issues of efficiency, in that co-management agreements require a significant amount of time and resources, and often involve rigid bureaucratic processes. They also describe problems with equity, raising questions about the ability of stakeholders to represent a diversity of interests, as well as the failure of power-sharing agreements, which can contribute to the further marginalization of resource users. Finally, they find the vague and broad terminology associated with co-management to be extremely problematic (*ibid.*).

Canadian experiences with co-management demonstrate similar challenges. Goetz (2004) outlined both the achievements and limitations of co-management agreements in Canada, drawing on claims-based and crisis-based examples. Some broad successes included improving how resources are managed overall, improving the ways in which information is gathered and disseminated, and reducing conflict. However, many of the accomplishments she listed are merely steps in the right direction. For example, while she found that co-management has succeeded in integrating local knowledge, governments are still failing to make recommendations based on traditional ecological knowledge (*ibid.*). She expanded upon the limitations of Canadian co-management, pointing to issues such as resistance to sharing power on the part of the state, difficulties recruiting local representatives, and increased pressure on human resources. Case studies have continued to draw attention to both the successes and limitations of co-management in more recent years (Assembly of First Nations 2011; McGregor

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<sup>11</sup> Aboriginal title gives Aboriginal peoples distinctive rights to lands and resources based on traditional occupancy and use (Usher 1986).

2011). Yet, the lack of an agreed-upon definition of co-management is a fundamental barrier to comprehensively assessing whether or not the challenges faced by those involved in co-management have been addressed (Assembly of First Nations 2011).

In northern Canada, where co-management has largely been claims-based, experiences have been equally as mixed. In the late 1980s, when co-management was still gaining traction as a resource regime, Usher (1986) raised concerns that the institutions created by northern land claims agreements do not necessarily lead to improved conservation outcomes. While his focus at the time was on the Northwest Territories, many of the issues he voiced have been echoed several decades later in a number of northern regions (e.g. Spak 2005), including the Yukon. For example, Nadasdy (2003a; 2003b) has argued that the structure of co-management boards in the Yukon as Western bureaucratic management systems has failed to integrate, translate, and implement Indigenous traditional ecological knowledge. Further concerns with co-management in the Yukon have been raised by Natcher, Davis and Hickey (2005) over limitations to effectiveness and collaboration caused by cultural differences and colonial histories between those involved in these institutions.

Nonetheless, the successes of co-management agreements in the North have also been explored. For example, during the North Slope Wildlife Management Conference in 2012, co-management practitioners described their experiences with co-management and its capacity to promote local ownership and participation in resource management decisions (Yukon North Slope Wildlife Management Advisory Council 2012). Similarly, Kruse et al. (1998) examined joint management systems specific to caribou management in northern Canada and Alaska and found governments were more sensitive and responsive to user concerns. Looking specifically at co-management boards in the Yukon, Hayes (2000) found that the overall quality of decisions and management initiatives was improved by co-management agreements.

As the preceding examples demonstrate, the implementation of co-management in Canada has sparked a critical analysis of both the successes and failures of this management system. The literature and anecdotal experiences that stem from this inquiry have begun to fill the gaps identified by Spaeder and Feit (2005), who argue that there is an analytical lacuna in the context of North American co-management regimes. Nonetheless, there remains a lot to be understood about the various factors that shape co-management institutions, such as political regimes, socio-cultural traditions, and power dynamics (*ibid.*). For example, Natcher (2013)

points out that while research has demonstrated that ethnic and political parity are key factors affecting the function of resource co-management arrangements in Canada, the extent to which gender plays a similar role has received far less attention. This research will begin to address this gap by analyzing the role of gender dynamics within co-management boards in the Yukon.

### **1.2.2 Co-management and “The Community”**

The examination of gender and co-management is situated within a larger analytical framework of resource management and the concept of “the community”. Defining “community” in itself can be a challenging task, and varies according to discipline and context. Reed (2003) provided an overview of these definitions, pointing to three key characteristics. First, a community can be geographic, determined by political or physical boundaries. Second, it can be interest-based, grounded in local social systems and linked to interests or identities such as ethnic origin, religion, or occupation (Reed 2003). Third, communities of attachment are formed around collective association and action. Reed goes on to demonstrate the complexity of these different aspects of community; for example, by pointing out that boundaries are often fluid, rather than fixed, and that physical proximity does not necessitate the establishment of social relationships. Hayes (2000) draws on several of these concepts in characterizing communities in the Yukon. She points out that while there are different communities of identity within geographic communities, in that the Yukon has a relatively large population of non-Aboriginal people, many of the people within these communities are bound in a shared relationship to the natural resources they rely on. This attachment between people and the land has been explored elsewhere (e.g. White 1995). While it is important to acknowledge these complexities, for the purpose of this thesis the term “community” will be used to refer to the resource users whose interests co-management is intended to represent, often within a given geographic location (e.g. a First Nation’s traditional territory or the habitat of a specific wildlife population).

As was discussed, initiatives toward community-based natural resource management were based in part on efforts to decentralize decision-making and provide communities with the means to participate in policy formation (Natcher, Davis, and Hickey 2005). However, it is now being recognized that the characterization of “community” within the context of community-based resource management may be naive. Scholars such as Agrawal and Gibson (1999), Mikkelsen (2005) and Agarwal (2010a) have argued that communities are not the static,

ahistorical and homogenous entities they have been made out to be by management planners. Natcher and Hickey (2002) focused their critique on how Indigenous communities in particular are incorrectly perceived as uniform and harmonious. They argued that in practice, the “community” is a site of various ideologies, objectives, and interests that at times overlap but also conflict. Furthermore, these differences are often shaped by social structures such as age, gender, economic class, and racial identity (*ibid.*). As a social process that takes place at the community level, community-based natural resource management is influenced by these variables. Moreover, the implementation of power-sharing agreements does not necessitate changes in existing power relations within a community, and may actually contribute to greater internal differentiation (Carlsson and Berkes 2005). Thus, despite intentions of representing a diverse range of interested parties, resource management bodies such as co-management boards can come to mirror the values and concerns of the dominant modes of power within a community (Agarwal 2001). In treating “the community” as a homogenous entity, these institutions run the risk of excluding those who already lack the means to participate in decision-making and further entrenching the power of those who do.

In light of the gap between the theoretical concept of “community” and how they operate in practice, Agrawal and Gibson (1999) argued that the way in which resource management strategies are analyzed need to be reconsidered. They advocate for examining community development and conservation by “focusing on the multiple interests and actors within communities, on how these actors influence decision-making, and on the internal and external institutions that shape the decision-making process” (p.629). In light of the social and political complexity of northern communities, this call seems particularly relevant for understanding how the interplay of actors, interests, and decision-making processes are influenced by gender in a resource co-management setting. Accordingly, this project aims to explore the connections between gender, other aspects of a community’s social structure, and decision-making within natural resource management institutions. As will be discussed below, research in other areas has demonstrated that gender has the potential to play an influential role in shaping the multiple interests and institutions within this resource management context.

### **1.2.3 Gender and Natural Resource Management**

To discuss issues of gender and co-management in the Canadian North, it is necessary to understand why gender is important to natural resource management more broadly. As a starting

point, gender refers to “the assignment of masculine and feminine characteristics to bodies in cultural contexts” (Oudshoorn 2006, p. 8). In other words, it encompasses the socially and culturally constructed differences between men and women that are based on biologically determined differences. These characteristics of masculinity and femininity vary across place and time. Arora-Jonsson (2013) builds on this definition by conceptualizing how gender applies to environmental management. She describes gender “(1) as a description of society based on sexual attributes, (2) as a category of analysis, and also (3) how it becomes an issue or problem that needs to be dealt with in development and environmental governance” (Arora-Jonsson 2013, p.4). While this study draws upon each of these characterizations, it largely focuses on gender as a category of analysis, which necessarily “implies studying the organization of power in initiatives for local environmental governance and development” (Arora-Jonsson 2013, p.5).

Reed and Davidson (2011) propose that gender functions in conjunction with other social structures and processes to influence the type of knowledge, values, and concerns that are brought to the table in community-based natural resource management. These are based on the different roles, responsibilities, and experiences that men and women have within the community in relation to the natural environment (Mikkelsen 2005; Varghese and Reed 2012). This argument has been illustrated in a number of ways. For example, Reed and Varghese (2007) show that men are more likely to associate the environment with utilitarian values, whereas women convey stronger support for its intrinsic value. In the Yukon, First Nations men and women traditionally held distinct yet flexible roles in relation to hunting and harvesting; the knowledge that both genders gained from these roles were equally as important for survival (Whitehorse Aboriginal Women’s Circle 2010). These roles reinforce the idea that the perspectives of those involved in natural resource management can be gendered. Furthermore, social and cultural norms within a community can dictate how these different perspectives are represented and engaged within resource management institutions. Such norms are expressed in various ways, and can influence the various functions of an institution such as membership, the setting of agendas, and the style of participation it requires (Reed and Davidson 2011).

Understanding gendered perspectives and the norms that govern formal participation in resource management institutions is important because doing so can be central to effective environmental governance. Agarwal (2010a) elucidates this point using the example of forest management institutions. She argues that accounting for multiple interests within a community

are foundational to determining the effectiveness and sustainability of these institutions because they require community members to both cooperate and act as a group in regards to a common pool resource. More broadly, Agarwal also describes the ways in which the gender composition of public bodies can influence how they function and the decisions they make. For example, research has linked the presence of women within government bodies to decreased corruption (Swamy et al. 2001), and their presence within natural resource management groups to improved collaboration, solidarity, conflict resolution (Westermann, Ashby, and Pretty 2005).

In addition to connecting gendered perspectives to environmental governance, understanding the relationship between gender and the management of natural resources is also relevant to goals of community participation. Agarwal (2001) demonstrated this in her discussion of “participatory exclusions”, referring to the type of marginalization that can exclude certain groups, such as women, within seemingly participatory institutions. Her study focused on community forestry groups in India and Nepal. She described how in seeking community-based participation, these groups have failed to account for factors such as social norms and local perceptions of women’s abilities, resulting in the exclusion of women from participating in these organizations in certain ways. Thus, gender is one social structure that has the potential to shape the “participatory exclusions” expressed in natural resource co-management (Agarwal 2001; Lidestav and Reed 2010). Moreover, gender relations within communities are often taken for granted and overlooked as a part of everyday practices, activities, norms and attitudes (Varghese and Reed 2012). These “blind spots” are important to analyze because they “become invisible and lead us to disregard the important ways in which they structure the process and determine outcomes” (Arora-Jonsson 2008, p. 50).

The relationship between gender and the management of natural resources has been explored in various contexts, with important lessons to be taken from these experiences. Many of these examples come from Asia and Africa (Cleaver 1998a; Resurreccion and Elmhirst 2008), which has led Lidestav and Reed (2010) to argue that issues relating to gender and resource management have largely been ignored by researchers looking at “developed” nations such as Canada. The significance of this omission is echoed by Arora-Jonsson (2009), who demonstrates that issues of gender and power within the environmental management practices of “richer” countries are important to understand because they can create subtle forms of gender discrimination that are difficult to challenge. This project will begin to answer the questions left

by this research gap, though it focuses on a particular region and set of issues within the Canadian context. Such an approach is advocated by Agarwal (2010a), who calls for researchers applying a gender perspective to environmental governance to “grapple with the specificity of a natural resource and the local context” (p. 6). The following sections review the limited work that has been done on these issues in Canada, while also drawing on work done internationally to identify the gaps that remain to be filled.

Much of the research on gender and natural resource management in Canada has focused on quantifying the lack of women represented in resource management organizations. Gender imbalance in representation has been identified in a number of specific resource sectors, including fisheries boards (Sloan et al. 2004), forestry committees (Lidestav and Reed 2010), and Hunters and Trappers Organizations (HTOs) (Kafarowski 2005). Similarly, Natcher (2013) shows that there is limited female representation on co-management boards in all three northern Canadian territories. Several attempts have been made to explain the lack of female representation in natural resource management in Canada. On Canadian forestry advisory committees, for example, Varghese and Reed (2012) discuss two institutional-level explanations in particular. These include: i) social relations based on gender are unacknowledged because the committees operate within male-dominated institutions, and ii) without a critical mass, women are not able to effectively participate. In the northern Canadian context, the lack of women on HTOs in the Northwest Territories and Nunavut has been related to broader socio-cultural norms, such the association of a higher status with men’s role as hunters than women’s role as fishers (Kafarowski 2005). There also may be practical concerns for women either not wanting or not being able to participate in these organizations due to lack of remuneration for child care or time commitments (*ibid.*).

Thus, the lack of female representation within different natural resource management institutions in the Canadian North is fairly well-documented. Nonetheless, there remain gaps in understanding the experiences of women who work within these male-dominated institutions. Even outside of the Canadian context, little is known about the impact that the presence of women within a resource management institution has on the decisions that it makes (Agarwal 2010a). Furthermore, focusing solely on issues of representation can be problematic from a gender perspective in that it can lead to assumptions about the homogeneity of women’s interests (*ibid.*). For this reason, understanding the complex socio-ecological relationships within resource

management requires looking beyond simply whether or not women are present within resource management organizations, and towards how they participate within them.

These concepts of representation and participation are useful in framing a gender-based analysis of resource management, but they are neither distinct nor clear-cut. Rather, the two concepts have been interpreted in a number of ways. Agarwal (2001) ties these concepts together by identifying six different types of participation in resource management institutions. These include nominal (representation through membership in a group), passive (listening without speaking up), consultative (being asked an opinion on specific matters, with no guarantee of it influencing a decision), activity-specific (undertaking specific tasks), active (taking initiative such as expressing opinions) and interactive/empowering (having voice and influence over decisions).

Reed and Varghese (2007; 2012) have consolidated this approach in the Canadian context by focusing on the relationship and differences between two forms of participation at either end of this spectrum: nominal and effective (for Agarwal, “interactive/empowering”) participation. They argue that the nominal and effective participation of women in natural resource management are linked in that women are more likely to participate effectively if there is a greater number of women present (Varghese and Reed 2012). This is supported by an extensive body of literature on “critical mass”, the specific number or percentage of women necessary to make their participation within an institution effective (Agarwal 2010b). While much of this literature has focused on political institutions, the theory has also found empirical support in the Canadian forestry sector (Richardson et al. 2011). It is generally agreed upon that the threshold for women’s effective participation is around one-quarter to one-third of those within a given institution (*ibid.*). The Yukon, which has the highest level of current female representation on co-management boards out of the three northern territories, is still below this critical mass (Natcher 2013). Given the current lack of research about women’s experiences with resource management institutions, there remain unanswered questions as to whether or not this lack of nominal representation has influenced the effective participation of women on these boards.

In contrast to nominal representation, effective participation draws attention to whether or not women are able to have their interests and concerns heard within management institutions. Similarly, focusing solely on women’s representation does not necessitate women’s participation in processes of decision-making. This issue is exemplified by a number of authors who point to



the over-representation of women in advisory and secretarial roles and their under-representation in decision-making positions within resource management institutions in Canada (Sloan et al. 2004; Kafarowski 2005; Natcher 2013) and internationally (Brasell-Jones 1998). Thus, while women may have a “place at the table”, they do not necessarily have a “voice and the table” (Varghese and Reed 2012). Arora-Jonsson (2008) has taken this concern a step further by arguing that focusing solely on the presence of women rather than their ability to participate can be seen as a purely symbolic act that maintains the status quo of power and decision-making authority. As such, it may end up undermining objectives of effective participation and sustainable conservation.

Unlike nominal participation, the concept of effective participation draws attention to how power operates as different groups and individuals advance their interests (Varghese and Reed 2012). Women’s participation in decision-making can provide women with a representative voice, which has both intrinsic and instrumental value (Agarwal 2010a). However, measuring the concept of participation within resource management institutions can be a challenging task. Work by Senecah (2004) offers guidance as to how gaining voice in participatory processes dealing with environmental issues can be evaluated. In her discussion of the “trinity of voice”, Senecah identifies three markers of the participatory process that must be present to build and maintain trust, resulting in sound environmental decisions. These include access (to opportunity, safety and the possibility for being heard), standing (assurance that contributions are valued, respected and honoured) and influence (meaningful participation in processes that provide opportunities for affecting outcomes) (*ibid.*). If any or all of these factors are missing, the potential for effective participation will be limited. Moreover, adding gender as a critical variable to this framework will allow for new analyses to emerge.

Agarwal (2001) warns that women’s participation does not guarantee a positive outcome, in that “there are limits to what participation alone (even if interactive) can achieve in terms of equity and efficiency, given pre-existing socioeconomic inequalities and relations of power” (p.1625). For this reason, it is important to acknowledge and understand the socio-cultural and political context in which resource management institutions exist. There are two key aspects of this context that are relevant to a gender analysis of natural resource management. First, gender is only one of many social structures that have the potential to influence how resource management institutions function. As Lidestav and Reed (2010) point out, gender may not be the

most significant social axis in natural resource management. Indeed, individuals relate to natural resource issues in different ways, and it should not be assumed that women are only concerned with issues that are ascribed to their gender (Varghese and Reed 2012). In both “developed” and “developing” countries gender must be considered alongside factors such as educational background, race, ethnicity, and class. Mikkelsen (2005) has applied this concern in the context of the Circumpolar North by arguing that Indigenous women are both doubly oppressed and doubly idealized as natural resource managers. She calls for gender and resource management to be considered alongside the ethnic discrimination of Indigenous peoples and their struggle for self-determination. Such an analysis of how these intersections operate within natural resource management in the Yukon, a place with a distinct history of Indigenous struggles for self-determination, has yet to occur.

Second, it is important to acknowledge that the formal institutions that govern natural resource management, including co-management boards, are embedded within the social structures of the communities in which they operate. As such, they co-exist and overlap with other “domains of interaction” through which decisions are made, such as the household or cultural norms and traditions (Meinzen-Dick and Zwarteveen 2001). Cleaver (1998a; 1998b) and later Resurreccion (2006) argue that the gendered dynamics of natural resource management cannot be understood by looking at formal institutions alone. Because men and women’s interests are constantly changing, “a more dynamic analysis is necessary to examine decision making in formal organizations and how positions are negotiated and roles enforced outside the formalized structures” (Cleaver 1998b, p.296). At the same time, focusing solely on formal institutions can hide the complexities and inter-dependencies of outside or informal arenas that can influence decision outcomes (Arora-Jonsson 2004).

Informal or alternative networks can play an important role in determining norms for how natural resources are used. Cleaver (1998a) illustrated this by exploring how local custom and practice directly influence the ways in which men and women use water resources in an environment where water is limited. These networks can also provide opportunities for women who may not otherwise be able to influence the management of natural resources (Meinzen-Dick and Zwarteveen 2001). For example, women may be able voice their interests through influential family members. By contrast, others have pointed to how informal institutions can limit women’s participation in decision-making. For example, even if women are represented on a

resource management committee, they may be disadvantaged by cultural norms or power relations that dictate what counts as knowledge and how knowledge should be produced (Reed and McIlveen 2006; Reed and Davidson 2011; Richardson et al. 2011). Despite this, little has been done in the Canadian North to understand how these domains of interaction overlap or diverge in the context of gender and natural resource management. These gaps underline the significance of pursuing a gender analysis of Canadian experiences with managing natural resources, particularly in the context of northern regions, and in doing so highlighting the socio-cultural and political context in which these experiences exist.

### **1.3 Standpoint**

The importance of reflexivity has been highlighted in a number of disciplines, including feminist literature. This concept encourages researchers to evaluate their own positions within research and the production of knowledge (Reed and McIlveen 2006). For feminist scholars, this means paying particular attention to the position of gender within this process, for example by considering the influence of the researcher's own gender on the ways in which research is carried out (Dyck 1993). This in turn emphasizes the significance of critically reflecting upon other factors that position groups and individuals in society and the potential influence they have on those involved in the research process.

My position within this project is framed by my background as a white female, born and raised in Whitehorse, Yukon. As other non-Aboriginal scholars from the North have noted (e.g. Christensen 2011), there is a duality to the experience of doing research in the North from this position. On one hand, having pre-established relationships in the territory facilitated the building of connections with participants. Moreover, I suspect that my position as a northerner was in some ways helpful towards building trust among participants. This is perhaps what set me apart from southern academics that "helicopter" in and out of northern communities with no regard for what happens after the field season is over.

On the other hand, being from Whitehorse, I cannot claim to know the experiences of those living in the smaller Yukon communities that I visited. Despite any pre-existing social connections, at the end of the day I still represent a southern academic institution and am embedded within its culture of "producing" knowledge. The issues associated with this position are described by Tuhiwai Smith (1999), who argues that the very idea of "research" is inherently tied to European concepts of imperialism and colonialism. Thus, an important aspect of this

project is to continually reflect upon and question my own positionality within the research process and the historical underpinnings associated with it.

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## CHAPTER 2: GENDER AND DECISION-MAKING IN NATURAL RESOURCE CO-MANAGEMENT IN THE YUKON TERRITORY

### **Abstract**

Across the Canadian North, resource co-management has become a central institution for the management of natural resources. An inventory of co-management boards in Canada's northern territories, conducted in 2012, identified more than 30 different boards, with responsibilities ranging from wildlife, water, lands and non-renewable natural resources (Natcher 2013). While operating along a continuum of institutional authority, co-management has been heralded by many as an effective means to engage resource users and government managers in a collaborative and more equitable approach to environmental decision-making. Although a considerable amount of multi-disciplinary research has examined the various social and political dimensions that influence the effectiveness of resource co-management, little has been done to understand how gender might affect collaboration and decision-making within this resource regime. This gap in understanding is particularly evident in the northern Canadian context, where women make up 16% of all current co-management board members.

With the intention to address this analytical void, this study set out to examine the ways in which a gender imbalance influences board decision-making and the experiences of those involved in co-management boards that have been established in the Yukon Territory. It focused in particular on women within these institutions, while also acknowledging broader gender roles that involve both men and women. Written surveys and semi-structured interviews demonstrated that the representation of women within these institutions was important to establishing a holistic decision-making process and positive institutional culture that facilitated effective decision-making. The presence of women on these boards also influenced the scope and efficacy of decision outcomes. Participants found that though opportunities to participate in decision-making existed, there were still barriers preventing board members from acting on these opportunities. These barriers were often experienced by men and women in different ways. Implicit within these findings are the gendered roles and characteristics that shape the activities and expectations of those involved with co-management institutions. Gendered roles in the community and on the land were particularly relevant to these boards. This research contributes to a more informed understanding of a critical, yet unexplored, aspect of the social and political context of co-

management, with practical implications for how effective decision-making is interpreted and implemented by these boards.

## **2.1 Introduction**

The implementation of natural resource co-management in Canada has brought together resource users, various levels of government, and Aboriginal authorities in the sharing of responsibility for how natural resources can best be managed. There are many different forms that co-management has taken, and as such it can be thought of as “a spectrum of institutional arrangements in which management responsibilities are shared between the users (who may or may not be community-based) and government” (Yandle, 2003, p.180). In the Canadian North, many of the existing co-management institutions that have emerged are based on the settlement of comprehensive land claims agreements, which have provided Aboriginal peoples with a decisive role in the management of their traditional territories. The impetus for establishing resource co-management institutions was based, in part, on efforts to empower those who had historically been excluded from formal decision-making processes, in particular local resource users and Aboriginal communities (Notzke 1995). At the same time, the relationship between the right to manage natural resources and Aboriginal rights to hunt, fish and trap is fundamental to both wildlife co-management and conservation (Staples 1997). In the Yukon Territory, 17 co-management boards, councils, and committees now hold a range of responsibilities for the management of fish, wildlife, lands, water, and renewable resources.

Since the mid-1980s, there has been a growing amount of literature pertaining to the conditions that either facilitate or impede co-operation and effective decision-making within co-management boards in the Yukon. For example, ethnic and political equality within co-management institutions have been tied to more equitable processes for decision-making (White 2008). However, issues with cultural differences and colonial histories limiting the institutional effectiveness of co-management boards in the territory have also been raised (Natcher, Davis, and Hickey 2005). Moreover, Nadasdy (2003a) has identified political barriers to the integration of traditional ecological knowledge within these institutions.

Nonetheless, one area of co-management that has eluded analytical attention is that of gender and the role that it plays in affecting decision-making. Although research conducted by Natcher (2013) found that the majority (82/100) of co-management board members in the Yukon are male, determining the nominal representation of men and women without exploring effective

participation leaves critical questions to be answered. This thesis aims to answer some of these questions, focusing on wildlife<sup>12</sup> co-management boards in the Yukon. Specifically, it explores the following themes:

- a) What is the relationship between gender and decision-making processes on co-management boards in the Yukon?
- b) What are women's past and current experiences in participating in decision-making on co-management boards?
- c) Are there factors that facilitate or impede effective participation of board and staff members on co-management boards?
- d) Have (a), (b) and (c) affected the nature of the decisions made by the co-management boards? If so, how?

In doing so, it addresses an unexplored dimension of resource co-management as it is conducted in northern Canada.

## **2.2 Gender and Natural Resource Management**

In the context of natural resource management, gender interacts with other social dimensions within a community, such as class and ethnicity, to shape the knowledge, perspectives, and concerns expressed within management institutions (Reed and Davidson 2011). These perspectives are in part grounded in the different roles and responsibilities that men and women have in relation to natural resources (Varghese and Reed 2012). However, as Agarwal (2001) demonstrates, even when resource management processes are participatory they can also be exclusionary, resulting in the further marginalization of women in decision-making institutions. At the same time, the intersection of these social dimensions can also affect the daily operations of resource management institutions, such as expectations around membership and styles of participation (Reed and Davidson 2011). Moreover, the gender composition of groups involved in natural resource management can influence their institutional sustainability and efficacy. While the relationship between different aspects of diversity and institutional efficacy is not necessarily linear (Das and Dirienzo 2010), Westermann et al. (2005) found a positive association between the representation of women on resource management groups in Latin America, Africa, and Asia and improved collaboration, solidarity, and conflict resolution.

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<sup>12</sup> Throughout this paper, the term "wildlife" is used to encompass both fish and animal populations.

Accounting for a diverse range of interests is central to effectively managing common pool resources because it requires those involved to act cooperatively as a group (Agarwal 2010a). Yet, gender cannot be separated from other forms of human diversity that establish roles, relationships, and power structures (McDougall 2001). In the Canadian context, one area where these intersections have been explored is the roles and contributions of Indigenous women within their communities and the natural environment. While academic literature on this topic has grown in the past decade, there are still gaps in this understanding (Parlee, Andre, and Kritsch 2014). In Canada, much of the literature on Aboriginal women is largely problem-focused (Stout and Kipling 1998). However, as Parlee, Andre and Kritsch (2014) point out, “women play a fundamental role in their own communities, not only in the ways stereotypically defined in the academic literature, but as mothers, grandmothers, aunts, social support workers, nurses, teachers, researchers, and leaders” (p.241).<sup>13</sup> Focusing on Gwich’in women in the NWT, they go on to argue that the knowledge and practices of these women in their communities are central to the stewardship of the environment, health, and culture.

Thus, research has demonstrated the significance of gender to natural resource management in a number of ways. However, these findings have largely been derived from research conducted in “developing” regions, where gender and natural resource management has received considerable attention (Lidestav and Reed 2010). In contrast, these issues have largely been overlooked in “developed” countries, such as Canada (*ibid.*). This has been attributed in part to gender too often being a “blind spot”, or taken for granted as part of everyday norms and attitudes (Arora-Jonsson 2008; Varghese and Reed 2012). This gap in understanding is significant because it can lead to the assumption that resource management is gender-neutral and ignore the ways in which gender influences processes and outcomes (Arora-Jonsson 2008). In the context of resource management in northern Canada, what little work has been done on gender has typically focused on the lack of female representation within specific resource management institutions, such as fisheries boards (Sloan et al. 2004), Hunters and Trappers Organizations (Kafarowski 2005), and, most recently, co-management boards, councils, and committees (Natcher 2013). Identifying this gender imbalance is an important first step to take in understanding the connections between gender and resource management in the Canadian North.

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<sup>13</sup> It should also be noted that an emphasis of women’s roles as mothers and care-givers has been a topic of debate within feminist theory. Others have argued that this focus is counterproductive because it fails to recognize women’s

Nonetheless this should not be the end point of a critical analysis. Further research is required to understand women's experiences within northern resource management institutions.

One way in which these experiences can be better understood is to examine the connection between representation and effective participation. Agarwal (2010) ties these concepts together with her work on "critical mass". The concept of representing a certain number, or critical mass, of women within an institution to ensure their effective participation has largely been explored within the political arena (Agarwal 2010). Yet in the context of resource management in the North, this idea has typically been overlooked. In general, the threshold for the effective participation of women within an institution is around one-quarter to one-third representation. In all three northern Canadian territories the nominal representation of women on most co-management boards are below this threshold. Despite this, little has been done to explore whether or not this factor has influenced the effective participation of the women on these boards.

For Agarwal (2001), effective participation is characterized by having a voice and having influence in decisions. This level of participation is a key component of affecting sound decision-making. Senecah (2004) provides a useful framework in linking the process and outcome aspects of decision-making. She argues that there are three key aspects of engagement that are necessary for an effective decision-making process, thereby resulting in good environmental decisions. Stakeholders must have access, standing, and influence in order to build and maintain trust between participants, and failing to achieve this trust limits the potential for effective participation. Thus, while the content and implications of the decisions made by resource management institutions are important, the way in which these bodies arrive at a decision is also relevant to their effectiveness as a whole. The significance of the decision-making process in the context of natural resource management is explained by Clark (2002): "natural resource policy and management is most usefully conceived as a process of decision making, and it is this process that must be upgraded to achieve better conservation and management" (pg. 57). This further underscores the importance of addressing gaps in understanding the relationship between factors that influence effective participation, such as gender representation, within natural resource management institutions in the North.

### 2.3 Co-Management in the Yukon Territory, Canada

In the Yukon, the creation of formal co-management bodies began with the signing of the Inuvialuit Final Agreement in 1984. This agreement established several wildlife management boards within the Inuvialuit Settlement Region, the western portion of which extends into northern Yukon (Joint Secretariat - Inuvialuit Settlement Region 2009).<sup>14</sup> Soon after (1985), the Porcupine Caribou Management Board (PCMB) was established pursuant to the Inuvialuit Final Agreement, bringing together Aboriginal, territorial, federal, and United States authorities into a cross-jurisdictional co-management agreement (Porcupine Caribou Management Board 2014a). In the 1990s co-management in the Yukon was expanded with the signing of the Umbrella Final Agreement (UFA), which laid the groundwork for negotiating individual First Nation Final Agreements. Creating new and innovative management structures for the management of fish, wildlife and other resources was an important issue in the land claims process (Hayes 2000). In contrast to previous resource management practices carried out by the territorial government, a central aspect of the UFA was to create a system of resource management that reflected First Nations values (B. Smith pers. com. in Hayes 2000). Chapters 16 and 17 of UFA established several co-management boards within the territory, including the Yukon Fish and Wildlife Management Board (YFMWB), Salmon Sub-Committee, and ten Renewable Resource Councils (RRCs).

While the YFMWB and Salmon Sub-Committee operate across the Yukon, and the PCMB across the Yukon and Northwest Territories (NWT), RRCs function within specific Yukon First Nation Traditional Territories where individual land claims agreements have been signed (Yukon Fish and Wildlife Management Board 2013). With the exception of the Kwanlin Dun First Nation and the three Yukon First Nations that have yet to sign final agreements (Liard First Nation, Ross River Dena Council, and White River First Nation) each Yukon First Nation is represented by an RRC. RRCs were established as “a primary instrument for local renewable resources management” (Government of Canada 2011, p.163), and are responsible for providing a voice for local community members in the management of fish, wildlife, habitat, and forest resources (Yukon Fish and Wildlife Management Board 2013). Unless otherwise stipulated, RRC board members are residents within the traditional territory; their role is to consult with

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<sup>14</sup> The North Slope Wildlife Management Advisory Council was not included in this study for reasons of conflict of interest.

their respective communities and advise various levels of government accordingly (Government of Canada 2011). At the territorial level, co-management board members are appointed or nominated equally by the Yukon Government and Council of Yukon First Nations (CYFN)<sup>15</sup>, while vacancies on RRCs are filled by the Yukon Government and respective First Nations. When vacancies on land claims boards become available, the appointing body will often advertise the position to the general public (pers. com. with Yukon Government employee, Whitehorse, Yukon, June 25, 2013). With Yukon Government appointments, government departments will then review the applications and make a recommendation to Cabinet, which makes the final decision. In regards to seats that are filled by CYFN, a selection committee oversees the appointment or nomination process for these (and other) boards. Board members typically serve a five year term. While they do receive an honorarium, these positions are voluntary. Meetings are held regularly depending on the board, ranging anywhere from once a month two four times a year. On all of these boards, chairpersons are selected internally.

The implementation of co-management in the Yukon has received both praise and critiques. Some have pointed to its successes in promoting local participation in decision-making (e.g. Yukon North Slope Wildlife Management Advisory Council 2012) and overall improvement in quality of management decisions (Hayes 2000). Others have argued that co-management institutions have failed to overcome colonial histories (Natcher, Davis, and Hickey 2005) and meaningfully integrate, translate, and implement Indigenous traditional ecological knowledge (Nadasdy 2003a; Nadasdy 2003b). These analyses offer some insight into the various political and socio-cultural factors that influence co-management. Nonetheless, there are still significant analytical gaps in understanding North American co-management regimes (Spaeder and Feit 2005). With a few exceptions (Kafarowski 2005; Natcher 2013), the current literature on northern co-management has yet to analyze these institutions from a gendered perspective. In light of the lessons learned from research on gender and natural resource management elsewhere, this is an important avenue of analysis to consider.

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<sup>15</sup> The Salmon Sub-Committee varies slightly from this in that two of its members are selected from within the YFWMB membership, and two members from affected First Nations within each of the Yukon River, Alsek River and Porcupine River basins (Government of Canada 2011). The PCMB is also unique from the co-management boards that operate solely in the Yukon in that its board members include representatives from the Government of Canada, Government of Yukon, Government of the Northwest Territories, Inuvialuit Game Council, Gwich'in Tribal Council, and the Council of Yukon First Nations (Porcupine Caribou Management Board 2014a).



There is no single resource regime that guarantees a sustainable management outcome; rather, different arrangements are suited to different circumstances (Acheson 2006). For this reason, it is important to understand the various contexts to which co-management institutions are best suited and how they can be most effective. In 2014, the Canadian Polar Commission identified this as a significant gap in northern research, stating: “further knowledge is needed respecting the dynamics of co-management and other resource governance regimes, including factors that can strengthen or undermine their effectiveness (Caulfield, 2004). The regions’ resource management and regulatory boards, many born out of Aboriginal land claims, are still in their formative stages. Research is needed to inform the evolving operations of these governance innovations to ensure the developments they regulate proceed with a sufficient degree of ‘social license’ (Prno & Slocombe, 2012)” (p.11). This thesis addresses this gap, using gender as an analytical lens. It asks a number of key questions, including: What is the relationship between gender and decision-making processes on co-management boards in the Yukon? What are women’s past and current experiences in participating in decision-making on co-management boards? Are there factors that facilitate or impede the effective participation of board and staff members on co-management boards? Does all of the above affect the nature of the decisions made by the co-management boards, and if so, how? In doing so, it contributes to both the conceptual and applied aspects of co-management in the Yukon, building an understanding of key concepts around women’s representation, gender roles, effective participation, and decision-making that have thus far been overlooked in this context.

## **2.4 Methods**

The Yukon Territory is one of Canada’s three northern territories, bordered by NWT to the East, Alaska to the West and British Columbia to the South (Figure 2.1). It is home to over 36,000 people<sup>16</sup>, the majority of whom live in the capital city of Whitehorse (Yukon Bureau of Statistics 2013). There are 14 First Nations in the Territory, 11 of which are self-governing. First Nation citizens make up around 25 percent of the total population, though this proportion increases in most of the small communities (Yukon Bureau of Statistics 2006).

In light of the broad definitions of natural resource co-management, this thesis focuses primarily on the wildlife co-management boards in the Yukon that were established under the

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<sup>16</sup> 50.8% of the population is male and 49.2% is female (Yukon Bureau of Statistics 2013).

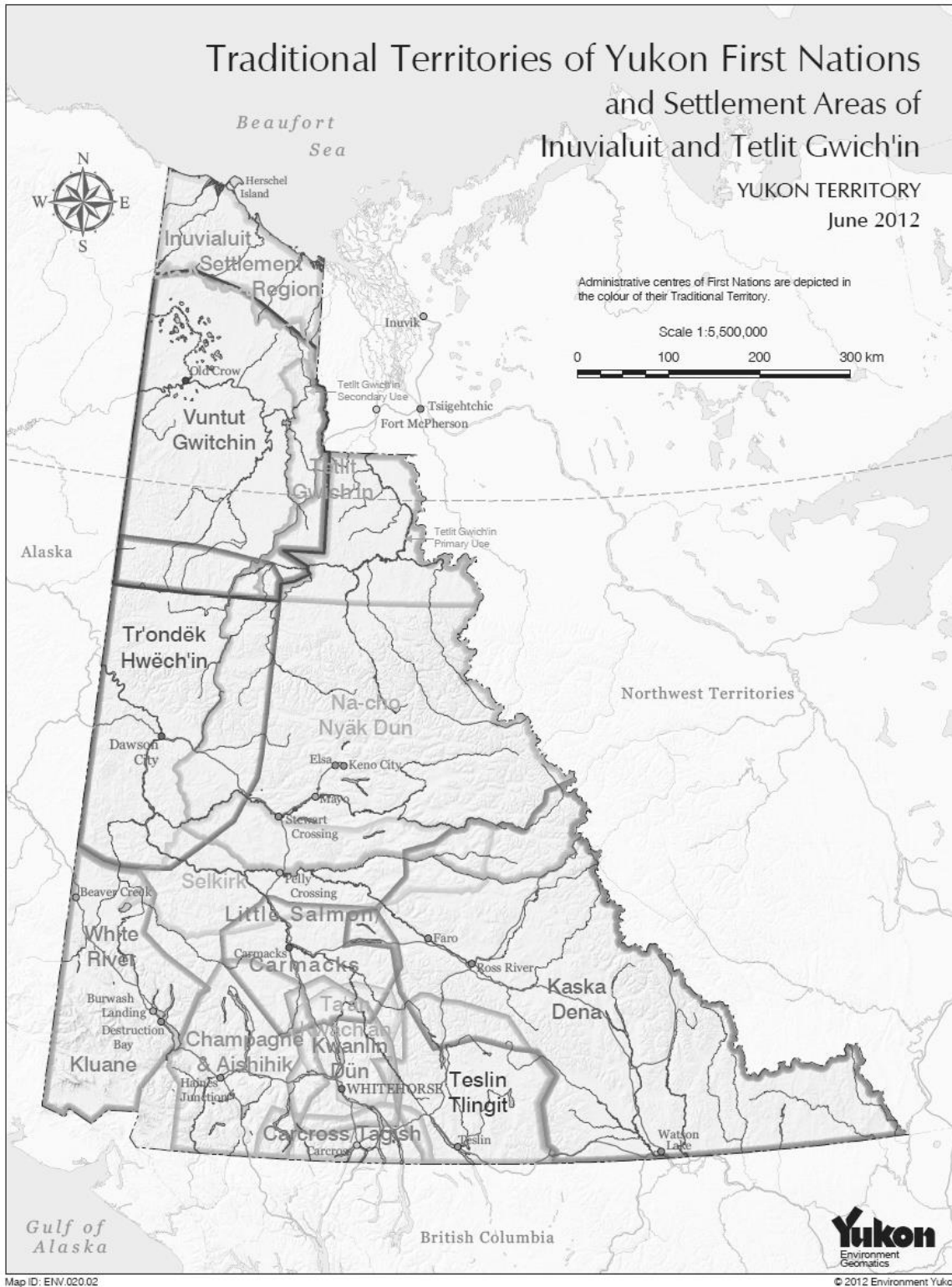
UFA. This includes ten RRCs, the YFWMB, and the Salmon Sub-Committee. Though it was not created under the UFA, the PCMB was also included in this study to capture the cross-territorial level of co-management. These boards were contacted so I could explain the context of the study and what participating in it would entail.<sup>17</sup> In many cases this information was then discussed independently by the board as a whole. While several boards were either not operating during the summer months, too busy to participate, or not interested in taking part, eight of the initial thirteen boards that were contacted had one or more members that agreed to participate in the study. These boards included the North Yukon RRC (Vuntut Gwitchin First Nation Traditional Territory), Mayo RRC (Na-cho Nyak Dun First Nation Traditional Territory), Laberge RRC (Kwanlin Dun First Nation<sup>18</sup> and Ta'an Kwach'an First Nation Traditional Territories), Day Keyi RRC (Kluane First Nation and White River First Nation Traditional Territories), Alsek RRC (Champagne Aishihik First Nation Traditional Territory), Salmon Sub-Committee (Yukon and Alaska), YFWMB (Yukon-wide), and PCMB (Yukon, NWT and Alaska)<sup>19</sup> (Figure 2.1).

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<sup>17</sup> The project was approved by the University of Saskatchewan Board of Ethics and received a Yukon Research License.

<sup>18</sup> Although the Laberge RRC operates within parts of the Kwanlin Dun First Nation traditional territory that overlap with the Ta'an Kwach'an First Nation traditional territory, it has no jurisdiction in this area as Kwanlin Dun has not signed on to the RRC.

<sup>19</sup> Although the range of the Porcupine Caribou Herd and salmon species extend into Alaska, neither the PCMB nor the Salmon Sub-Committee has American representatives on their boards. Rather, they work in conjunction with relevant American institutions and trans-boundary organizations such as the Yukon River Panel.



**Figure 2.1- Map of Yukon First Nation Traditional Territories and Inuvialuit Settlement Region** (Environment Yukon, "Traditional Territories of Yukon First Nations and Settlement Areas of Inuvialuit and Tetlit Gwich'in," accessed February 2, 2013, [http://www.env.gov.yk.ca/animals-habitat/documents/traditional\\_territories\\_map.pdf](http://www.env.gov.yk.ca/animals-habitat/documents/traditional_territories_map.pdf).)

Data collection took place between May and September of 2013. First, written surveys<sup>20</sup> were mailed or e-mailed to nine co-management boards, which included 63 current board members in total. The purpose of this survey was to gather information from a geographically diverse audience (Arksey and Knight 1999). Seven surveys were returned, six of which were fully completed; three of these responses were from women, and three were from men. No one who identified as First Nations completed the survey. This low response rate (11%) was in some ways expected, as Yukon residents often take time off during the summer to spend time on the land. Though the results from this survey are not treated as a representative sample, they do provide some additional insights on the relationship between gender and co-management.

Semi-structured interviews were the primary method of information gathering; this method was intended to provide flexibility, comparability, and a degree of informality to discussions with participants (*ibid.*). The interview guide<sup>21</sup> was piloted with three current co-management board and staff members, both male (1) and female (2)<sup>22</sup>. Twenty-nine interviews were conducted, the majority (24) in person and others (5) via telephone. When necessary, follow-up questions were sent by email.<sup>23</sup> Interviewees included both past (9) and present (20) board (20) and staff members (8), though one participant had experience in both roles. More women (21) were interviewed than men (8), and slightly more non-First Nations individuals (17) were represented in comparison to First Nations individuals (12). While each of the age categories was represented, the majority of those involved were in the 40-49 and 60+ age categories.

**Table 2.1 - Participant demographics (surveys and interviews)**

<b>Participant demographics (surveys and interviews)</b>				
			<b>Male (31%)</b>	<b>Female (69%)</b>
<b>Age</b>	20-29	1 (3%)	1	0
	30-39	7 (20%)	1	6
	40-49	11 (31.5%)	4	7
	50-59	4 (11.5%)	1	3
	60+	12 (34%)	4	8

<sup>20</sup> See Appendix A.

<sup>21</sup> See Appendix B.

<sup>22</sup> These individuals were not eligible to participate in the study

<sup>23</sup> The limitations of these methods are explored in Chapter 3.

<b>First Nations/Non-First Nation</b>	First Nations	12 (34%)	1	11
	Non-First Nations	23 (66%)	10	13

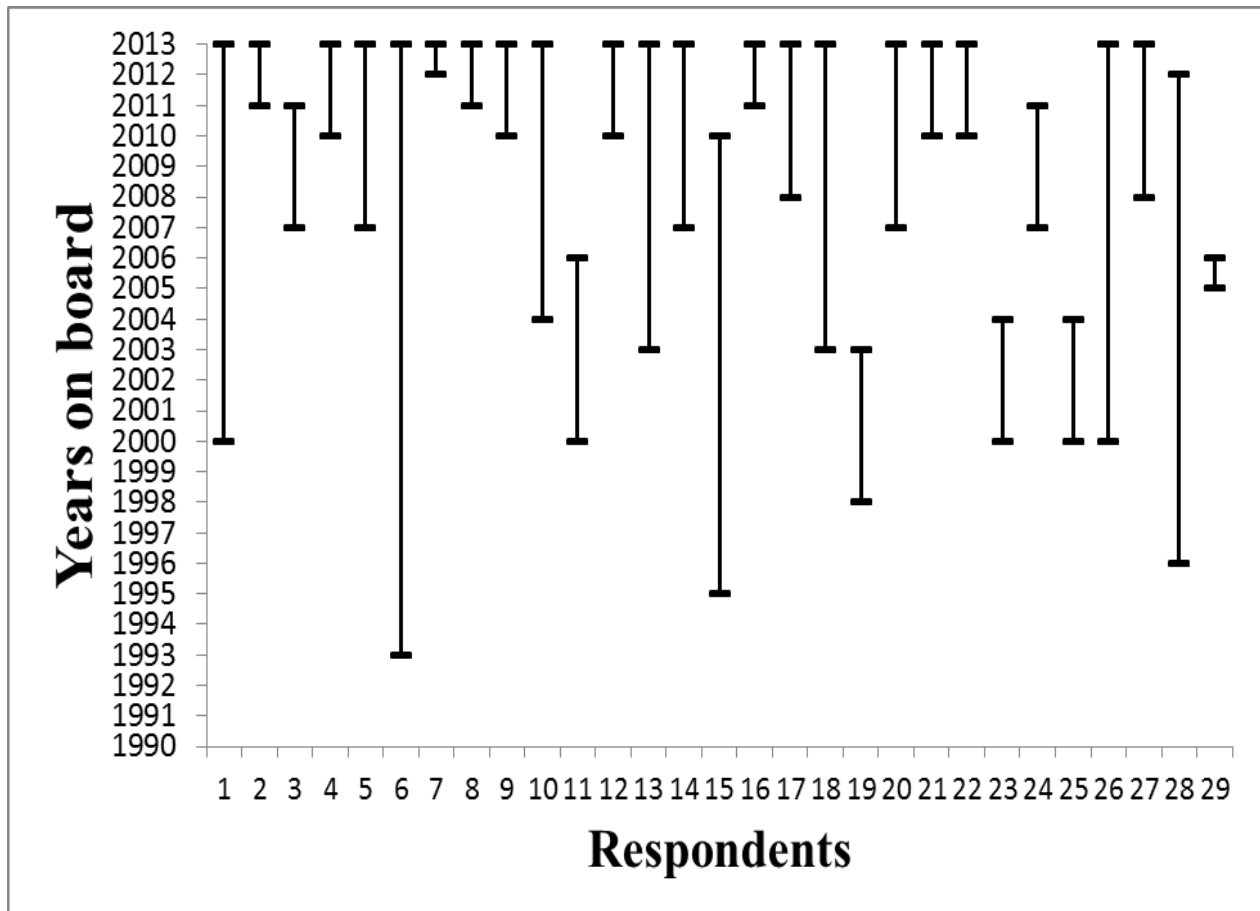
While survey respondents were anonymous, interviewees were able to indicate the various boards on which they had been a part. The current number of men and women on these co-management boards varied significantly, ranging from one represented entirely by male board members and one represented almost entirely by female members (Table 2.2). Though some interviewees were only recently involved in co-management, others had been involved since the early 1990s (Figure 2.2). On average, participants had spent 6.3 years involved with one or more co-management boards. At the same time, the boards included in the project operate at different levels, including community, territorial, and cross-territorial jurisdictions. Thus, while the sample size of participants was small, there was a diversity of experiences, as well as 112 person years of experience on co-management boards represented within the study.

**Table 2.2 - Current gender representation of boards included in project<sup>24</sup>**

<b>Board name</b>	<b># of women</b>	<b># of men</b>	<b># of interviewees from each board<sup>25</sup></b>
YFWMB	2 (18%)	9 (82%)	7
PCMB	2 (22%)	7 (78%)	4
Salmon Sub-Committee	3 (30%)	7 (70%)	3
Alsek RRC	2 (33%)	4 (67%)	5
Dan Keyi RRC	2 (33%)	4 (67%)	3
Laberge RRC	5 (83%)	1 (17%)	4
Mayo RRC	0 (0%)	5 (100%)	1
North Yukon RRC	1 (14%)	6 (86%)	4

<sup>24</sup> These numbers only capture the current nominal representation of men and women on co-management boards; it is likely that in some cases, this number would not be accurate for the past board and staff members who were interviewed

<sup>25</sup> Because a number of interviewees had had experiences on more than one board, the total number of interviewees presented here is not representative of the total number of individuals interviewed.



**Figure 2.2 - Number of years on board(s), by interviewee**

Once compiled, data were analyzed using *NVivo 10*. This allowed for both survey and interview responses to be sorted and coded according to broad themes, and then re-coded as new themes emerged.

## 2.5 Results

The results of this research are presented thematically below according to the broad categories of responses from both interviews and surveys. These findings address the significance of female representation, reasons for lack of female board membership, experiences with decision-making, barriers to participation in decision-making, and connections between representation and effective participation.

### 2.5.1 Importance of Female Representation

In both the interviews and the surveys, the majority (90% and 100%, respectively) of participants thought it was important to have women represented on co-management boards,

though often for different reasons (Table 2.3). In general, reasoning fell into three broad categories: women’s presence on co-management boards was important because board member diversity was important; women’s representation positively influenced decision-making processes; and, most frequently, women brought a unique set of perspectives, knowledge, and experiences to the table. Each of these responses are discussed in turn, and then related to effective decision outcomes, based on how participants define a “good” decision. Four of the total participants in the survey and interviews (n=35) thought that women’s representation on co-management boards was not relevant to the function of these boards. Three out of four these individuals were female. Their responses typically argued that gender had no impact on what they or other board members brought to the table.

**Table 2.3- Summary of responses from surveys and interviews for why it is important to have women on co-management boards**

<b>Reasoning<sup>26</sup></b>	<b>Percentage of total number of references (n=69)<sup>27</sup></b>
Women bring unique perspectives, knowledge and experiences	40%
Women positively influence the decision-making process	22%
Women’s representation is important because board member diversity is important	13%
Women’s representation does not matter	6%

### **2.5.1.1 Board member diversity**

The importance of having women on co-management boards was for some participants tied to representing diversity within these boards. For these respondents, gender was not necessarily the most important aspect of diversity. Other factors included background, ethnicity, education level, and personality as important to represent within co-management boards. In addition, age stood out as an aspect of diversity that was important to many of the participants. The lack of youth involvement in co-management, exemplified by the minority of participants in

<sup>26</sup> 19% of the responses fell into a broad “other” category that had no unifying theme.

<sup>27</sup> 69 references were made to the factors that contributed to a good decision within 29 interviews and 6 surveys (total number of participants= 35). Several participants referred to more than one factor.

the 20-29 age category, was of particular concern. The implications of failing to represent this diversity within the board were described by one participant: “I’m surrounded by men with grey hair. You know, like it’s the same thing over and over and over again and it’s just that then you create this sort of homogenous type of approach to things” (current board member, personal interview, August 14, 2013).

### **2.5.1.2 Decision-making processes**

Responses in the survey and interviews indicate the perception that women were more likely to consider a more holistic approach to decision-making. These participants found that women were more likely than men to consider different perspectives and ask difficult questions, contributing to a more complex discussion. As one male board member described: “when we have female participation on the board we’re...less likely to come to a quick decision...we’re more likely to bash around other ideas and come to perhaps a bit more of a compromise” (current board member, personal interview, June 24, 2013). Though participants acknowledged that a more holistic process was often time-consuming, it also established a longer-term view of management issues. Furthermore, having women on co-management boards was connected to characteristics of a more positive institutional environment in which decision-making could occur. These characteristics included less conflict, more civil and respectful discussions, and improved mediation and communication. It was also pointed out that women were more likely to maintain personal relationships and contribute to a more cohesive board as a whole.

However, when participants were asked directly whether or not the level of female representation on a board influenced decision-making in general, the responses were divided. While 45% (13) of interviewees thought it did influence decision-making, 34% (10) thought it did not<sup>28</sup>. Both men and women followed this pattern; as such, gender was not associated with a participant responding one way or another. Most of the age categories also followed this pattern of response, with the exception of the 60+ group, which disproportionately thought that female representation had no connection to decision-making. Similarly, female board members within a female-dominated board unanimously thought there was no connection between these factors. At the same time though, individuals who were either previously or currently staff members all answered this question affirmatively or were unsure.

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<sup>28</sup> The remaining interviewees were either unsure or did not answer the question.



### 2.5.1.3 Perspectives, knowledge, and experiences

The most common answer amongst participants discussing the importance of women's representation was in reference to the perspectives, knowledge, and experiences that women brought to the table. These contributions are in many ways shaped by the gendered roles found within different aspects of their lives, in particular women's roles in the community and on the land. However, these perspectives are valued to different degrees by co-management boards. Both survey and interview participants reflected the perception that women bring a community-minded perspective to co-management. This connection was central to representing broader grassroots level interests. Yet, ensuring that these perspectives were a part of the discussions on co-management boards was not always a priority. As one female participant stated:

it's so hard to break out of that paradigm. Like it's about this idea that when it comes to this decision-making, providing advice, if it's about fish and wildlife then it's a man's thing. But it's so much more about community, right...in a lot of cases that's what these boards and councils are supposed to be about. And so it's not necessarily that it's not supposed to be about fish and wildlife, but it's not just supposed to be about hunting, it's supposed to be about all of the interests (current board member, personal interview, August 14, 2013)

While this connection to the community as a whole was associated exclusively with women, experience on the land was an important part of being a board member, regardless of gender. Having these experiences was important for male and female board members, First Nation and non-First Nation participants alike. While it was acknowledged that having a diversity of experiences was important to the board, those with knowledge of the land not only gained the respect of other board members, but also provided an important source of first-hand information for what is happening on the land. As one participant described: "I think just being outside, being out there on the land, which I try to do as much as I can...I mean I do that because I enjoy it. But in the same token, when you do that, it also builds some credibility for you" (current staff member, personal interview, June 10, 2013).

Activities on the land have typically been characterized by a gendered division of labour, and in many ways this division of labour still exists. Traditionally, First Nations men in the Yukon were responsible for the hunting and harvesting of wildlife, while women processed meat and used hides to make clothing and supplies (Whitehorse Aboriginal Women's Circle 2010). These roles were both complementary and flexible. Participants reported that these gendered roles still exist, both within and outside of First Nations culture, but are not static. Indeed, four of

the women (19%) that were interviewed identified as hunters, though this activity is typically male-dominated.

Of the 21 women who were interviewed, 15 (71%) referred to women participating in activities on the land, either as something they participated in themselves (38%) or had observed other women on co-management boards participating in (33%).<sup>29</sup> Moreover, their experiences on the land played an important role in shaping the perspectives and knowledge that they brought to the board. For example, one female board member described her own experiences of working in a fish camp:

When you look at like a traditional fish camp perspective, the majority of the work, anyways in my culture, is done by the woman. And so you know we're the ones cutting the fish, seeing the fish, doing all the work with them, hanging them, drying them, preparing them. Normally the men are catching the fish but it's that type of involvement...me bringing that perspective of what it's like to have run a fish camp...I think I bring a very different, and I think I bring more of an emotional...perspective to the table. (current board member, personal interview, July 4, 2013)

In this case, though men are the primary harvesters, women's role in the processing of fish provides a unique and important perspective.

At the same time, female-dominated activities on the land outside of fish and wildlife harvesting also play an important role in the knowledge that they contribute to the co-management discussion. As one female participant described, "women you know a lot of them are harvesters of a different nature, you know the berry patches, and the roots and the medicinal plants, so the nature of what brings them onto the land brings them to different places than the men" (current staff member, personal interview, August 15, 2013). While these activities may not directly involve fish and wildlife, they do provide unique knowledge of the ecosystem that humans share with wildlife.

The perspectives, knowledge, and experiences related to women's roles on the land were engaged to varying degrees by different co-management boards. On several boards, women reflected that their experiences on the land outside of wildlife harvesting were valued in the same way as those who hunt, trap, and fish. Women who identified as active hunters expressed similar views, though they were less likely to perceive gender as being relevant to co-management. These women unanimously thought that gender had no influence on their experiences or on the board as a whole. On other boards however, both men and women identified that because fish

and wildlife was the focus of their board, male-dominated activities of hunting, trapping, and fishing were more relevant to their objectives than female-dominated activities such as berry picking. This focus on fish and wildlife harvesting experiences was echoed on a number of boards. It was also pointed out that activities like berry picking are rarely subject to regulatory consideration, and as such they were considered less important to the co-management discussion.

The emphasis on “male-oriented” activities on the land affected women’s participation in different ways. Some female board members felt that because they could contribute to the board in other ways, the focus on hunting, trapping, and fishing had no influence on them as a board member. Other women felt that this focus limited the type of contributions they could make, so that their experiences on the land that did not directly involve hunting, trapping, or fishing were perceived as irrelevant or less visible to the board’s decisions. As one participant described: “the women would talk about the medicines and the berries. And the men look at them like, ‘what? Berries?’” (current board member, personal interview, August 21, 2013). Elsewhere, women felt that even when female-dominated activities on the land were discussed by the board, they were still secondary to male-dominated activities: “activities that women undertake like ‘gathering’ type activities are considered very occasionally, but not like ‘hunting/fishing/trapping’ activities. Gathering is a fascinating consideration in the grand scheme because it is traditional, important, and particularly because products being ‘gathered’ are sessile, activities such as exploration, mining, roads, and even tourism can have significant effects on them” (current staff member, e-mail, October 21, 2013).

#### **2.5.1.4 Effective decision outcomes**

Another aspect of the relationship between gender and decision-making concerns the overall effectiveness of decisions made by the board. This is reflected in how participants defined a “good” decision. Four primary characteristics of a good decision emerged from the surveys and interviews, and each of these was connected in some way to the importance of female representation, as discussed above. First, and most frequently, participants thought that decisions should be made on the basis of a good understanding of the issue at hand. This requires having full information, using both scientific and traditional knowledge, and considering all aspects of the situation. Both male and female participants demonstrated that women’s

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<sup>29</sup> The remaining 29% of women that were interviewed did not reference women participating in activities on the land.

experiences in the community and on the land are an important part of understanding different aspects of management issues. Moreover, women's representation facilitates the type of holistic approach in which developing a good understanding of these issues can occur. Second, a good decision was defined as one that represents all interests and reflects the voice of the community. The significance of this goal is echoed in the importance that participants placed on board member diversity as a means of representing diversity within the community. Again, gender is one component of a community's social structure that shapes needs and interests.

Third, board and staff members found that an effective decision was also dependent on a fair and equitable discussion, during which all board members had the chance to participate. As was noted previously, participants found that female representation on a board corresponded to establishing an institutional culture of respect in which such discussions could take place. Finally, this institutional culture also facilitated board members coming together and achieving consensus on a decision, a factor that participants considered central to making a good decision. Consequently, while good or effective decision-making is undoubtedly influenced by a number of factors, gender is one aspect of this process that is important to consider in the context of co-management.

### **2.5.2 Experiences with Co-management Board Decision-making**

Experiences with participation in decision-making on co-management boards were extremely diverse. Co-management boards typically take a consensus-based approach to decision-making, which the majority of participants found to be an effective way to meaningfully engage board members in this process. Of the 21 male and female interviewees who were either previously or current board members<sup>30</sup>, only one<sup>31</sup> said she had not always had the same opportunities as other board members to contribute to decision-making. She explained that when she first joined the board, she felt that she did not have these opportunities, but that this had changed over time. Survey respondents expressed similar perspectives; five out of six either agreed or strongly agreed that board members all have the same opportunities to participate during meetings. None of the survey respondents thought that the recommendations made by the board they were involved with had failed to take into account the contributions they made during discussions. In regards to the overall process of how decisions were made, one board member

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<sup>30</sup> Staff members were not asked this question, as their position is often not directly involved in board decision-making, but rather to support this process.

was not satisfied; the rest were either neutral (1 response), agreed (4 responses), or strongly agreed (1 response) that they were satisfied with it.

Though participants agreed that board members had equal opportunities to contribute to decision-making, these opportunities were not always acted upon. The reasoning behind this typically fell into the four categories of barriers, which in some ways overlap. As Table 2.4 demonstrates, logistical barriers were discussed most frequently, followed by cultural barriers, attitudes or personalities of other board members, and the skills and knowledge required for the position. These barriers were both experienced and observed by interviewees. Seven participants (24%) thought there were no barriers to their own participation.

**Table 2.4 - Barriers to participation**

<b>Barrier</b>	<b>Number of times referenced</b>
Logistical	19
Cultural	12
Skills/knowledge required	11
Attitudes/personalities of other board members	11

Considering demographic information within these categories provided a number of insights. The 30-39 and 40-49 age categories were most likely to find logistical considerations, such as having enough time to attend meetings, as a barrier. This was not surprising, given that these age ranges are most likely to have younger families and prioritize careers. By contrast, the 60+ category was most likely to perceive cultural barriers or find no barriers to their participation. Unlike age, gender was not a demographic variable that influenced which category of response participants were most likely to give. However, these categories did present gender-specific dimensions; as such, men and women did not necessarily experience barriers to participation in the same way.

### **2.5.2.1 Logistical barriers**

The most commonly-cited barrier can broadly be defined as logistics. As many of the board members involved in co-management also have full-time jobs, the time commitment required for the position can be challenging. Scheduling time and locations for meetings to fit different schedules can also be difficult. For women in particular, the responsibilities within the

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<sup>31</sup> Two board members did not answer this question.

family for childcare added to the challenge of balancing these commitments. Several female board members recognized that they would not have been capable of holding their position if it had not been for the support offered by their families in helping with childcare. As one staff member described, “I know we had one board member that had three kids and she also had a career and she was really, really challenged for time. I’ve never met anybody so busy in my life because she basically had three jobs” (current staff member, personal interview, June 10, 2014). In discussing the reasons why there are not more women on co-management boards in the Yukon, 18% of the responses from survey and interview participants referred to lack of time or interest on the part of women. At the same, there was a general sense that while male board members do face logistical barriers, their time constraints were more likely to be associated with careers.

#### **2.5.2.2 Cultural barriers**

Cultural barriers typically referred to the perceived hesitation on the part of First Nations board members to contribute to discussions in a boardroom setting. However, this response was almost entirely observed on the part of non-First Nations individuals, rather than experienced by First Nations board members themselves. The respondents who made these observations often connected it to historically-based difference in power between First Nations and non-First Nations peoples. In the two instances where cultural barriers were reported by First Nations board members, these barriers had both an age and a gender component. As one female First Nations board member explained: “I know I have a hard time with that, you know to speak out assertively when there’s...elders in the room...you know how we grew up as having men as...the main decision-makers” (previous board member, telephone interview, August 19, 2013). This is not to imply that First Nations culture inherently presents barriers to women; rather, that there are cultural norms and traditions of behavior that influence the participation of both First Nations men and women.

#### **2.5.2.3 Skills and knowledge**

Another set of factors that influenced the experiences of board members were the skills and knowledge required to participate effectively on the board. Co-management boards deal with natural resource issues that require drawing on scientific, policy, and land-based information, and bringing these worlds together can be a challenge for both individual board members and the board as a whole. Understanding government procedures and bureaucracies was highlighted in

particular as a barrier on a number of boards, especially with the RRCs. The perception that women lack certain types of land-based knowledge was seen as a gender-specific barrier, especially on boards that tended to focus on male-dominated activities on the land. This was demonstrated in that 32% of the responses from all participants on why there were not more women on co-management boards cited a lack of women's experiences in wildlife harvesting. This was a perspective held by both men and women. As one female board member described, "I think women see their barrier more as... what do I know about wildlife and the outdoors and stuff" (current board member, personal interview, June 25, 2013). However, men were more likely to use this line of reasoning when explaining the lack of women on co-management boards, whereas women were more likely to attribute it to barriers associated with the appointment or nomination process and the over-representation of men that make these.

#### **2.5.2.4 Attitudes and personalities**

A fourth category of response was that the attitudes and personalities of other board members were barriers for certain individuals in taking opportunities to participate in decision-making. In general, participants noted that more assertive or dominant individuals would at times take over the discussion, so that quieter board members had a hard time participating. This was an issue in particular when more aggressive personalities were in the position of chair. Similar obstacles to collaboration within co-management have been noted by Natcher, Davis and Hickey (2005), who found that non-First Nation board representatives typically demonstrated individualistic tendencies that contrasted with the collectivist behavior of First Nation board members. The resulting lack of a common identity limited the potential for conflict resolution within the Yukon RRC that was the focus of their research.

Both male and female participants noted that the attitudes of certain boards or individual board members had at times been expressed along gendered lines. As one staff member described, "I've seen instances where if a woman is making a presentation around the board, that the guys will talk to each other. But if the guy does the presentation and these guys do that, then they'll look at them...and they'll stop" (current staff member, personal interview, June 10, 2013). A female board member explained how these attitudes affected her participation within a male-dominated board: "I'm pretty independent and I can be pretty assertive, but ...you kind of [have to] repeat yourself and you keep saying...your input over and over before it's heard" (previous board member, telephone interview August 19, 2013). Again, these attitudes were

particularly problematic when they came from the chair, a typically a male-dominated position on co-management boards (Natcher 2013). Several female board members described not being taken seriously or being ignored by the (male) chair of the board they were involved with, in part because of their gender, though other factors such as ethnicity and age were also perceived as playing a role. However, there was also a sense amongst female interviewees that such blatantly discriminatory attitudes are changing, especially with the involvement of younger generations.<sup>32</sup> Nonetheless, given the makeup of these boards, it may be a while before we see this younger representation fully materialize.

Thus, while many of the board members that were interviewed discussed observing and experiencing barriers to their participation in decision-making, these challenges were experienced differently by men and women. However, one underlying theme that emerged from these discussions was entirely specific to the experiences of female board members. Despite acknowledging that board members had equal opportunities to participate in decision-making, a number of women (five out of 21 female interviewees, or 24%) on different co-management boards noted that their contributions to discussions have not always been valued. These women almost unanimously used the language of having to “prove” themselves to predominantly male board members. As one woman explained, “women...they really step it up or they really have to prove, it’s almost like you’re having to prove [yourself] you know and work harder and get acceptance...always work harder, always” (previous board member, personal interview, August 20, 2013). Four out of five of these women were also First Nations, which many of them felt was also a factor in having to demonstrate that they “deserved” to be there. One participant described how age and gender intersected in this regard: “you have to act like a man, you have to talk like a man in a lot of ways, you know especially being a young woman, um, I found that how do I negotiate or navigate in this environment because I’m surrounded by 50 year old men” (current board member, personal interview, August 14, 2013). Women were able to “prove” themselves in different ways; by working harder, establishing a positive reputation, or building relationships with other board members. One woman explained that it was not until she had butchered a moose in front of the other (male) board members, thereby “proving” that she had experience on the land, that she felt she had gained their respect. By contrast, she found it was simply assumed

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<sup>32</sup> The growing awareness of gender issues is reflected in the generational differences of those involved as board members. This is demonstrated within the responses of younger participants, who were more likely than their older



that the men on her board already had credibility based on these experiences. For these women, having to “prove” themselves was a barrier in and of itself.

### **2.5.3 Critical Mass**

Female interviewees had mixed responses in reflecting on the concept of critical mass, the idea that there is a certain number or percentage of women within an institution that is necessary for their effective participation, within their own experiences. While some generalizations can be made, there were always exceptions to these trends. Nonetheless, this range of experiences provides insight into the relationship between women’s representation and their effective participation within co-management. Women’s perceptions of critical mass typically fell into two categories of experiences. The first group included female participants with experiences on co-management boards where the nominal representation of women was consistent throughout their involvement. The actual number of women on these boards varied from participants being the only woman on a board to having one or more other female board members. However, the one factor they had in common was that this number had not changed. Although these participants acknowledged that there may be some differences in how they related to female board members compared to their male counterparts, they found that the number of women on their board had no influence on their participation in decision-making. Moreover, they did not think that having more women on the board would have influenced this experience. In cases where women made up the majority of board members, female board members not only thought that the concept of critical mass had no application to their situation, but also perceived gender as having no influence on decision-making in general.

The second group was made up of those had been on one or several boards with various levels of female representation. These women had at different points in time been both the only woman on a board, as well as on a board with one or more other women. Moreover, the women who felt they had to “prove” themselves almost exclusively fell into this group. In contrast to the previous category of participants, the experiences of these board members demonstrated more support for the concept of critical mass. These women reflected that the barriers towards being able to participate effectively were greater in cases where they were the only woman on the board. In comparison, they found that having another female board member in the room meant

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counterparts to think that gender is related to decision-making.

they were more likely to have their voices heard. One female board member compared her experiences coming onto a board with a female chair versus one where she was the only woman. She explained that with a female chair already in place, “that authority has already been exercised there, but if you’re coming into an all-men committee, yeah it is different. Big difference. You have to prove yourself. Prove your knowledge” (current female board member, personal interview, July 4, 2013). These experiences did not reveal a specific number of women that created the conditions in which female board members felt their voices were being heard without having to prove themselves. Nonetheless, where women were able to compare experiences with different levels of female representation on one or more boards, they supported the general concept of critical mass leading to more effective participation.

## **2.6 Discussion**

As previously discussed, limited research has been done looking at the relationship between gender and natural resource management in the Yukon. The results presented here offer insight into how this relationship plays out within wildlife co-management institutions in the territory, focusing specifically on board decision-making and the experiences of board members. It is important to note that a key finding of this work is that there is no one shared experience with co-management in the Yukon. Rather, there are diverse experiences that vary between individuals and boards, which in some ways overlap and in others diverge. Exploring these experiences and their diversity reflects the complexity of the socio-cultural and political context in which co-management exists.

The relationship between gender and decision-making within co-management boards is evident in a number of ways. One theme that tied these concepts together was the relevance of women’s representation to board member diversity. Research elsewhere has demonstrated the importance of diversity to institutional efficacy (e.g. Das and Dirienzo 2010), and participants highlighted key aspects of board member diversity that were particularly important for boards to represent. Many participants expressed concerns over the challenges boards face in finding new members to achieve this diversity, particularly with regards to age and gender. These concerns further reinforce the understanding that to manage natural resources effectively, a range of interests and perspectives need to be engaged in the decision-making process. Moreover, the fact

that those involved in co-management identify the importance of board member diversity, yet in many cases struggle to achieve it, underscores the significance of addressing these challenges.

Another aspect of this relationship between gender, decision-making, and co-management tied the representation of women on co-management boards to how decision-making is carried out. Specifically, participants found women's participation facilitated a more holistic decision-making process and more positive institutional culture in which this process could occur. This association of women's representation with a more positive institutional culture is consistent with research in Latin America, Africa, and Asia. Natural resource management groups in these regions demonstrated a similar relationship between the presence of women and norms of collaboration, conflict resolution, and reciprocity (Westermann, Ashby, and Pretty 2005). Such characteristics are central to managing natural resources collectively (*ibid.*). Given that co-management boards are tasked with representing a range of community interests, which at times come into conflict, characteristics like collaboration are key to building trust and enhancing community cohesiveness. These are not only markers of an effective process, but also result in sound environmental decisions (Senecah 2004).

The attribution of these characteristics to female board members reflects one way in which socially and culturally determined gender roles influence resource management institutions. For example, a number of participants reflected that outcomes of women's representation, like improved collaboration, were associated with a woman's role as the mother and mediator within the family unit. The skills required by this role, such as effective communication and conflict resolution, come to be considered typically "feminine" characteristics. This was exemplified by one male participant, who explicitly identified his own style of decision-making, which was less "combative", as more feminine than masculine. The influence of gender roles within these boards was apparent in a number of other ways. For example, the perception that women bring a connection to the grassroots community was, for a number of participants, related to the socially embedded role of women as mothers and nurturers, not just of their families, but also of the community. Similarly, this role was reflected in the logistical barriers that a number of women faced with their responsibilities for childcare.

At the same time, male board members were also influenced by the characteristics that have been constructed as a part of their gender. The ways in which this concept of masculinity plays out is apparent in the role of men as the primary harvesters within a community.

Associated with this role is the expectation that men would prefer to spend time in the “bush” and are better suited to being board members, rather than staff members.<sup>33</sup> These archetypes in turn facilitated an image of co-management boards as an “old boys club” made up of predominantly male hunters and trappers. However, gender roles are not static; several men filled staff positions on co-management boards and a number of women were active hunters, though both groups were in the minority.

The concept of gendered roles on the land has been discussed in a number of northern contexts, though little has been done in the Yukon to understand the influence these roles have within natural resource management institutions. As the participants in this project demonstrated, the gendered division of labour in activities on the land, though flexible, is still very much a part of how First Nations and non-First Nations peoples interact with their environments in the Yukon. Moreover, because experience on the land was an important part of being a board member for many participants, these roles were apparent in the types of knowledge men and women brought to the table or were perceived as bringing to the table. The ways in which co-management boards engaged this knowledge in turn influenced the scope of their decision-making in relation to their mandate.

In theory, the decisions made by co-management institutions are intended to reflect their mandate. Although the mandates of co-management boards responsible for fish and wildlife in the Yukon are diverse, there are a number of common linkages. In general, these boards are tasked with managing not only fish and wildlife populations, but also their habitat, while at the same time providing a voice for the community within this process and protecting the culture of Aboriginal peoples that depend on natural resources. For example, although the purpose of the PCMB is to manage a specific wildlife population (the Porcupine caribou herd), it also sets out to manage its habitat, which expands the scope of its mandate significantly.<sup>34</sup> Similarly, the Salmon Sub-Committee outlines its mission to “provide a fair process for consultation that incorporates **all levels of society** in arriving at their decisions” (emphasis added) (Yukon Salmon Sub-Committee 2014). At the community level, the RRCs are not only tasked with being the “voice” of local community members in the management of fish, wildlife, and forestry resources, but are

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<sup>33</sup> On co-management boards across the North, women are over-represented in staff positions (Natcher 2013). At the time of this study, there were three male staff members on thirteen co-management boards.

<sup>34</sup> The range of the Porcupine Caribou Herd extends from the NWT to Alaska (Porcupine Caribou Management Board 2014b)

also involved with regional land use planning processes (Yukon Fish and Wildlife Management Board 2013). Under the UFA, the YFWMB aims “to preserve and enhance the culture, identity and values of Yukon Indian People” (Government of Canada 2011, p.153). Thus, the broad mandates provided by co-management boards in the Yukon incorporate environmental, social, and cultural factors that reflect the complexity of the management issues these boards confront. Wildlife harvesting is only one piece of this mandate, though undoubtedly a significant piece. However, focusing solely on harvesting activities such as hunting and trapping can lead to the exclusion of other potentially valuable sources of information that are relevant to other aspects of a board’s mandate. Moreover, because hunting and trapping are typically male-dominated activities, this focus can mean women’s knowledge of the land is seen as less relevant to co-management discourse.

Women’s knowledge of natural resources, whether it is gained from running a fish camp or taking kids out on the land, provides a broader perspective of habitat, the changes it is undergoing, and the ecosystem as a whole, all of which are relevant to the broad mandate of co-management boards. The complexity of this knowledge was demonstrated by a study of Teet’it Gwich’in women’s berry picking activities. For these women, a successful berry pick required knowledge of plant life cycles, abundance and distribution of berries, various ecological factors, and ecosystem dynamics (Parlee, Andre, and Kritsch 2014). In narrowing the types of perspectives, knowledge, and experiences considered relevant to their discussion, co-management boards run the risk of narrowing the scope of the decisions that they make. This ultimately has implications for the effectiveness of the board as a whole in achieving its mandate. Furthermore, these findings highlight the subtle ways in which participatory processes can be exclusionary outside of the “developing” world context.

Understanding the experiences of those involved in co-management is a necessary step in gauging the effective participation of board and staff members. Senecah’s “trinity of voice” framework provides a useful tool for this purpose, and using gender as an analytical lens within this framework adds further insight. As previously mentioned, Senecah (2004) argued that effective decision-making requires that stakeholders have access, standing, and influence within this process. Access ensures that participants have the opportunity to be heard. For example, the consensus-based approach taken by co-management boards within this project was for most participants an effective way to gain access. Standing requires that the contributions made by

stakeholders are valued and respected. This was demonstrated by one participant, who was able to gain standing by demonstrating her experience and skills with wildlife harvesting. Senecah defined influence as the type of meaningful participation that provides opportunities to affect outcomes. One example of how this was achieved was by a female board member who found that if she repeated her point often enough, it would eventually be considered important or relevant to the decision being made.

Several of the barriers identified by participants, such as logistical barriers and the skills and knowledge required to be a board member, are issues of access in that they limit the potential for participants to be heard. These issues are relatively easy to address. In contrast, barriers that relate to standing present much more of a challenge (Senecah 2004). Participants that found the attitudes or personalities of other board members to be a barrier to their participation reflected the perception that their voices were not being respected or considered in discussions. In other words, they lacked standing. This is particularly apparent in the responses of women who felt they had to “prove” themselves, the majority of whom identified as First Nations. While these women acknowledged that they had access to decision-making, in that the opportunities for being heard existed, they lacked the assurance that their contributions were valued. It was only once these board members had successfully proven themselves that they gained standing, as well as influence, whereby their participation could affect outcomes. Based on these experiences, it is apparent that ensuring an effective decision-making process on co-management boards requires looking beyond whether or not opportunities to participate exist. Rather, it necessitates understanding how different voices are valued within decision-making, what factors shape the value these voices are given, and what this means for the stakeholders involved.

One question that emerges from this discussion of effective participation is whether or not women’s experiences would have been different if there were more female board members involved in co-management institutions. In other words, does the concept of critical mass apply to co-management boards in the territory? Of the eight co-management boards included in this project, four were below the often-quoted one-quarter to one-third representation threshold. Three fell within the one third percentage threshold, and one was significantly above it (Table 2.2). While these percentages are in some ways misleading, as the total number of board members is on some boards very low, it does demonstrate the diversity of experiences captured within the results of this work. Accordingly, the perceptions of interview participants in regards

to critical mass were similarly diverse. Nonetheless, there was support for this concept where women on co-management boards had had a range of experiences with different levels of female representation. This does not imply that all women who worked with entirely male-represented boards felt marginalized. However, it does indicate that for many women, having greater female representation on a co-management board improved their ability to participate effectively. This finding is significant in that it demonstrates the importance of looking beyond nominal representation when discussing gender and natural resource management institutions. While similar arguments have been made elsewhere (e.g. Arora-Jonsson 2008), relatively little has been done to explore these themes in a northern setting. Based on the experiences discussed here, this is a worthwhile avenue of analysis to pursue.

## **2.7 Conclusion**

In light of the current gaps in research on gender and natural resource management in the Canadian North, this research aimed to explore the relationship between gender and resource co-management in the Yukon Territory. Building on work by Natcher (2013) that identified a paucity of female representation on co-management boards across the North, this research set out to understand what the implications of this gap are for decision-making processes, outcomes, and women's experiences serving on these boards. Specifically, it asked: what is the relationship between gender and decision-making processes on co-management boards in the Yukon? What are women's past and current experiences in participating in decision-making on these boards? Are there factors that facilitate or impede effective participation of board and staff members? Has all of the above affected the nature of the decisions made by the co-management boards? If so, how?

Through written surveys and semi-structured interviews, board and staff members on various co-management boards across the Yukon were engaged in this project. In regards to the first research question, the results of this research found that the representation of women on co-management boards was relevant to decision-making in a number of ways. Not only was the concept of female representation important for improving board member diversity, but it also influenced the process of decision-making. Specifically, the presence of women on boards was associated with a more holistic approach to decision-making, as well as a more positive institutional culture in which effective decision-making could occur.

Furthermore, the knowledge, perspectives, and experiences that women brought to the table, based on gendered roles in the community and on the land, are germane to the scope of the decisions that are made, as defined by the boards' mandates. Experience on the land was particularly important to board and staff members, although these experiences were valued by boards in different ways. In some cases, the focus on typically male-dominated activities such as hunting and trapping led to the exclusion of activities outside of this discourse, in particular female-dominated activities on the land such as processing meat and berry picking. In light of the broad mandates of these boards to not only manage wildlife populations, but also manage habitat, represent the voice of their communities, and protect First Nations culture, these boards risk narrowing the types of knowledge and perspectives brought into decision-making. In addition, the influence of women's representation on co-management boards was relevant to how participants defined a good or effective decision. Consequently, the relevance of these findings to the nature of the decisions that were made was apparent in both the scope and efficacy of decision outcomes. While these discussions often related to women's representation, this concept was tied to broader gender roles, which affected both men and women in the activities they carry out (e.g. women as berry pickers, men as hunters), what was expected of them as board members (e.g. women as better communicators versus "man the hunter" archetype (Parlee, Andre, and Kritsch 2014)), and influenced the barriers they faced (e.g. women as caregivers, men as breadwinners).

The second and third research questions focused on women's experiences and effective participation. In general, the experiences of women on co-management boards were diverse. Nonetheless, several broad themes emerged. It was generally acknowledged that while opportunities to participate in decision-making existed, there were nonetheless barriers to board members acting on these opportunities. These barriers were at times experienced by men and women in different ways. Such differences were most apparent amongst the women who found they had to "prove" themselves on male-dominated boards because of their gender, age, and/or identity. In other words, these female board members lacked standing within the decision-making process and felt their voices were not being valued until they had proven that they "deserved" to be there. These women, as well as other female board members, found that in comparing their experiences between being the only woman on a board and having other women on a board, the former situation presented greater barriers to their effective participation. This



was particularly relevant to the nature of the decisions made by co-management boards in that ensuring participants' voices are being valued is central to a process that affects sound environmental decisions (Senecah 2004).

These findings offer insight into the social and political context of co-management. It affirms the notion that these boards, councils, and committees are not separate from the social structures and power dynamics that shape needs and interests. Moreover, it highlights the importance of understanding how social variables such as gender, ethnicity, and class interact with one another and come to influence the roles and relationships of those involved in co-management institutions. In practice, the results of this work bring to light the importance of paying attention to social differences such as gender, rather than assuming that a community can be represented as a single, homogenous unit. Accounting for these differences is a necessary step in considering the effectiveness of decision-making processes and outcomes on co-management boards.

However, it is important to keep in mind that simply adding more women will not address the challenges faced by co-management boards that have been identified here. Such an approach only promotes the tokenistic attitude that women's representation is simply a box that can be ticked off a list for achieving diversity. A number of female board members who were interviewed explicitly stated that they would not want to be appointed to a board simply because of their gender. Moreover, the discourse of focusing on male-dominated activities such as hunting and trapping while ignoring certain female-dominated experiences, as well as the perception that women have to prove themselves to fit into this framework, are not issues that can be addressed by filling a quota. These challenges operate at an institutional level; consequently, any meaningful change that addresses these issues has to be institutional. For example, a number of participants reflected that the government bodies that appoint or nominate board members are typically male-dominated. Female board and staff members in particular saw this as a major barrier to women's involvement in co-management. Considering the way in which the appointment or nomination process is carried out, as well as who is involved, might be a starting place for institutional level change to take place. For some, this transition is already underway, albeit slowly, "it has changed a little bit but not so much so that I would say that we're...on equal grounds" (current board member, personal interview, July 4, 2013).

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## CHAPTER 3: CONCLUSION

Natural resource co-management is premised on the idea that common-property resources can be managed cooperatively to meet a communal interest (Berkes and Farvar 1989). As a resource regime, co-management has been characterized as more efficient and effective than top-down, centralized management systems. It has also been promoted as a means to empower and engage local resource users who have typically been excluded from formal decision-making processes. Co-management has been defined and implemented in different ways around the world. In Canada it has largely been used as a means to restructure a more cooperative relationship between Aboriginal peoples and the State in recognition of the rights of Aboriginal authorities to be part of the management process (Notzke 1995). Those involved in Canadian co-management, from academics to resource users and managers, have been working to understand the extent to which this form of co-operative management has lived up to its expectations of efficacy, equity, and empowerment.

In the Canadian North, several key studies have contributed to the analysis of co-management theory and practice, each gauging the relative success of co-management institutions in different ways. Hayes (2000) identifies the strengths and weaknesses of the institutional structure and initiatives of Yukon co-management boards in their ability to effectively create sustainable approaches to resource management. She found that in general the quality of the decisions that were made, as well as the initiatives that were undertaken, were improved by the implementation of co-management (*ibid.*). White (2008) gauges the successes and failures of northern land claims co-management boards in bringing Aboriginal influence into decision-making. He finds that though these institutions still face a number of governance issues, co-management is nonetheless a marked improvement from previous top-down decision-making processes that largely excluded Aboriginal people (*ibid.*). However, Nadasdy (2003a) argues that even though the vast majority of case studies on co-management in the North are stories of success, a more nuanced and critical perspective of co-management is necessary. In particular, he draws attention to the failure of co-management institutions to integrate, translate, and implement Indigenous traditional ecological knowledge (Nadasdy 2003a; Nadasdy 2003b).

Notwithstanding these more or less positive critiques, Natcher (2013) points out that co-management in the Yukon has yet to be examined through gendered lens; an omission that mirrors a larger gap in literature on gender and natural resource management in “developed”

countries more generally (Reed and Varghese 2007). The findings of this project begin to fill this gap by improving our understanding of the relationship between gender and co-management in the Yukon, contributing to both the conceptual and applied aspects of co-management. In doing so, this study demonstrates the significance of a gendered perspective to natural resource management in “developed” countries more broadly.

The first objective of this research was to explore the connections between gender and decision-making processes and outcomes on co-management boards. The results demonstrated that the representation of women within these institutions influenced how decisions were made, as well as the scope of the decisions that were made. These findings were tied to gendered expectations, archetypes, and roles, in particular gendered roles in the community and on the land. The second and third objectives of this research were to understand women’s past and current experiences in participating in co-management boards and what factors encouraged or impeded their participation. Though a diversity of experiences was captured by the results, they nonetheless indicated that while opportunities to participate in decision-making are available, these opportunities are not always taken. In general, male and female board members often experienced barriers to participation in different ways, though these experiences were also shaped by other factors, such as age and identity.

These findings offer new insight into analyzing the implementation of co-management in the Yukon and its capacity to shape effective, equitable, and empowering resource management strategies. In regards to effectiveness, gender was not only an influential factor in shaping the effective participation of board members and the barriers they faced, but it also affected the board as a whole in achieving its mandate. For example, if women’s experiences on the land are considered less valuable than men’s experiences on the land, an important source of information regarding the habitats of wildlife populations may be lost. Moreover, the representation of women on co-management boards corresponded in a number of ways to how participants defined a “good” or effective decision. Similarly, co-management boards in the Yukon, and RRCs in particular, have pursued values of equity and empowerment by aiming to represent the voice of the community in their decisions. While including a diverse set of opinions and interests was recognized by many boards as an important goal, there were still voices being minimized or excluded from board discussions and decision-making. One theme that stood out in this regard was the number of women, most frequently First Nations women that felt they had to “prove”

themselves on boards nominally dominated by men. In this sense, there are still barriers to co-management boards in truly representing the voice of the community.

The exclusion of certain voices from decision-making is not only significant in its own right, but also influences the effectiveness of co-management institutions. Managing common pool resources cooperatively requires building trust and enhancing community cohesiveness, a process that depends on stakeholders feeling that their participation is being valued (Senecah 2004). This in turn facilitates good environmental decisions. Again, Senecah's "trinity of voice" provides a useful framework for laying out how a collaborative and consensus-building process can be achieved for "good" decisions (Walker, Senecah, and Daniels 2006). Ensuring all board members have *access* to decision-making opportunities is a task that has largely been accomplished by co-management boards, but maintaining *standing* and *influence* is far more challenging. Moreover, connecting these concepts of standing and influence to social structures, such as gender, provides new insight into the norms that determine how decision-making is carried out. The concerns voiced by women who felt they had to prove themselves exemplify the implications of participants lacking standing, and without standing their voices have no influence. For Senecah, such a breakdown is indicative of a process that is neither collaborative nor trust-building.

Gendered roles and expectations are not always easy to identify, as they are deeply embedded in the daily lives and attitudes of both women and men (Varghese and Reed 2012). However, this research underpins the importance of understanding the gendered dimensions of the social and political context in which co-management is implemented, as well as how different social structures interact to shape the expectations, processes, and outcomes that influence co-management institutions. These lessons are particularly significant in the Yukon, where little to no work has been done on issues of gender and co-management. However, these findings also support research conducted elsewhere in the Canadian North (Kafarowski 2005; Kafarowski 2009), Canadian South (e.g. Lidestav and Reed 2010), and internationally (e.g. Arora-Jonsson 2009) that demonstrate why the connections between gender and natural resource management in "developed" countries should not be overlooked.

Moreover, exploring these connections has also contributed to our theoretical understanding of common pool resource management. While it is clear that different environmental management regimes are suited to different contexts, this research highlights the



significance of understanding gender and other social structures as a part of that context. Cooperative management regimes such as co-management are not inherently without conflict, and learning about the factors that underlie these conflicts is a necessary step in determining how they can be most effective.

It is important to recognize that local experiences with natural resource management occur in the context of global processes of environmental and economic change (Rocheleau, Thomas-Slayter, and Wangari 1996). Although the impacts of climate change are being felt around the world, these impacts are experienced in different ways by different regions, communities, and peoples. The Arctic is often the first to feel the socio-economic, cultural, and environmental consequences of these changes, typically more severely than other regions (ArcticNet 2014). And while it is often the dramatic, sudden events, such as ice storms and flooding, that bring attention to climate change in the media, the more subtle effects it elicits are just as significant. A substantial amount of research has been dedicated to comprehending climate change and its effects on the North, as well as what these effects mean for future generations. Underlying this work is the acknowledgement that the North is a rapidly changing place that will require innovative strategies for managing, adapting to, and mitigating these changes. It is also becoming clear that in order to do so, northern regions, communities, and peoples must be involved alongside academics, policy-makers, and industries in creating such strategies.

The challenge of leading innovative strategies to deal with the effects of climate change, as well as other globalizing forces, has been taken up by northern peoples in different ways. In the Canadian North, co-management institutions are one tool whereby communities can respond to global changes that affect the environment at a local level. Yet, for management decisions to be responsive to the rapidly changing social, political, and environment landscape in the North, they must be grounded in a wide breadth of knowledge and experiences. The findings of this study demonstrate how gender can play an important role in shaping the perspectives brought into these decisions, as well as the effectiveness of co-management institutions pursuing creative and innovative responses to change. This work has also established that gender is not the only factor relevant to this process. As Kafarowski (2005) points out, “ongoing environmental and political change in the Canadian Arctic requires that all individuals – women and men, elders and

youth participate actively and equally in these processes and that their perspectives and contributions are valued” (p.16).

### **3.1 Future research**

While this research has attempted to begin filling gaps in the literature on gender and natural resource management in the Yukon, there are still aspects of this relationship that have yet to be understood. One such area that requires further research is the informal ways that community members influence natural resource management decisions, and the ways in which gender plays a role in this influence. Research elsewhere (e.g. Cleaver 1998a; Cleaver 1998b; Resurreccion 2006; Arora-Jonsson 2008) has demonstrated that while women may not be represented within formal decision-making bodies, they often utilize informal networks to express influence in this process. Yet in the Canadian North, these networks are poorly understood. The significance of this omission is expressed by Arora-Jonsson: “the commonly held assumption of formal committees and associations as ‘the community,’ fails to show the complexities and inter-dependences outside of these arenas that help to determine outcomes in issues of common concern. This practice excludes others, especially women who are often not a part of formal associations but play a major role in informal village relationships” (2004, p. 363).

What limited work has been done on gender and natural resource management in the North, including this study, has largely focused on formal institutions. Appreciating the complexity of informal networks requires a more in-depth research method<sup>35</sup>, which was beyond the time and financial limitations of this research. Nonetheless, discussions with a number of board and staff members indicated that the influence of informal networks does apply to co-management institutions in the Yukon, even if it is not fully understood. Three general themes emerged from these discussions. First, participants discussed how community members used social ties to board and staff members to express their interests and concerns related to resource management. One staff member stated plainly, “it is definitely an avenue that people use to be heard” (interview with staff member, August 6, 2013). Another aspect of informal influence was political, though it was not always perceived in a positive light. One board member found her own lack of political ties to be a barrier to getting involved on co-management boards:

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<sup>35</sup> Such as collaborative inquiry (Arora-Jonsson 2008)

“appointments to these committees and stuff always depend on who you know” (interview with board member, July 4, 2013).

While neither of these broad themes appeared to be specific to gender, a third category of informal networks did. Reference to women using family ties to influence decision-making was typically mentioned as something that occurred in the past, specifically within First Nations communities. One First Nations board member described how this took place within her own family, “back then, when our relationship to men was different eh? We had to be respectful because they were the decision-makers and all...but at home, we got to see how my mum had a lot of influence in the decisions when my dad went to make decisions, [he] was one of the key decision-makers so...it was discussed around the table before [the decision was made]...So he didn't go there with his own ideas, he went there a lot with my own mum's [perspectives] and our perspectives were in there” (current board member, telephone interview, August 21, 2013). In one case, a participant found that these roles still applied to decision-making within the community. She stated, “it always was like that. The men were in the leadership roles, however they took direction from the women. You look at all our clan leaders it's the same way...it is still that way. Because um it just so happens a lot of the elders in our clans are women, like that are clan mothers...you know the women give the direction” (previous board member, personal interview, September 12, 2013). Thus, while this research indicates that these informal networks do exist, are relevant to co-management institutions, and may in some cases have gendered dimensions, further research is required to understand the extent and complexity of these connections.

The findings of this study demonstrate some of the ways in which gender overlaps with other social structures to shape the way men and women access, benefit from, utilize, experience, and value natural resources (Reed and Varghese 2007; Reed and Davidson 2011). The concept that women involved in resource management institutions have different knowledge and interests is not novel. For example, Reed and Davidson (2011) demonstrate the different experiences of Aboriginal and non-Aboriginal women within the Canadian forestry sector . Despite this, studies on climate change rarely engage Aboriginal women's environmental knowledge (Desbiens 2010). Desbiens (2010) argues “women's environmental knowledge tends to relate to smaller geographic areas, the domain of the household, and resources that do not generate comparable amounts of funding: for example, berries, plants or fish, as opposed to large animals such as

bear, caribou or whales” (p.412). This theme is indicative of a larger trend, in that our understanding of the knowledge of Indigenous women in Canada and the roles they play in shaping their communities is still limited (Parlee, Andre, and Kritsch 2014). For this reason, future research on natural resource management in the Yukon would do well to more effectively engage Aboriginal women and their knowledge of their communities and the land.

### **3.2 Limitations**

Although the scope of this project was based on a broad definition of co-management, it is important to recognize that there are differences in the function and structure of co-management institutions, even within the Yukon. In this sense, while general lessons can be taken from this case study, there are limitations to the universality of applying these findings to other co-management institutions in the Yukon, in Canada, and internationally. As the results of this project have demonstrated, social and political context plays a significant role in shaping the processes and outcomes of these institutions, and it is important to account for the uniqueness of context in different regions.

One of the most visible limitations of this study was the low response rate from the survey. Furthermore, because the surveys were anonymous, it is not possible to determine the geographic diversity of the responses. Consequently, the surveys were not used to verify data. Rather, they were used to supplement data from the semi-structured interviews and suggest themes to investigate in the interpretation of the results. Though a higher number of completed surveys would have contributed to the breadth of information available, the diversity and depth of the semi-structured interviews compensated for this shortcoming. The potential for bias within the surveys that were completed is influenced by the fact that it was written, thereby excluding those without literacy skills. A number of staff members who discussed the survey mentioned this as a potential barrier, which had to be weighed against the benefits of a large geographic distribution area.

Again, because the surveys were anonymous, it is not possible to determine whether or not there was overlap between survey respondents and interviewees. Within the semi-structured interviews, there was potential for self-selection bias. Both past and current board and staff members were invited to participate, though in some cases interviews with female board members were sought out specifically. While participants did represent a range of demographic

backgrounds and experiences, there was a noted lack of First Nations men within the study. Given the research topic, it is possible that this self-selection meant that those individuals who were interested in or aware of gender issues were more likely to participate in the interview. As a result, the data I interpret may not be representative of all perspectives on issues related to gender. This was mitigated to some extent by highlighting aspects of the project that were accessible to a wider audience, such as effectiveness and decision-making. However, there was only so much that could be done to mitigate any assumptions associated with a project related to gender.

As with any interviewing process, responses were limited by the lack of anonymity and the researcher/respondent dichotomy. My position as a Yukoner had the potential to play a role in both of these situations. Being able to establish a personal connection with participants, whether it was through shared experiences or shared acquaintances, provided a basis for building trust with participants. This in turn helped break down some of the power dynamics associated with being a researcher from a southern university. However, other than acknowledging the ways in which this position may affect participants, there is little I can do to change the power dynamics implicit within the privilege associated with being white and educated. In this way, interviews were limited by the potential for participants saying what they thought I wanted to hear, or not feeling comfortable enough to say what they really thought. This could have been confirmed or denied by the survey, had its response rate been higher. Nonetheless, this bias was mitigated by the number of interviews, whereby the repetition of responses gave strength to their validity.

### **3.3 Next Steps**

Moving forward, there are a number of actions that can be taken by those involved in co-management to address some of the practical issues identified in this research. These recommendations require the involvement of both co-management boards and relevant governing bodies. While many of the participants discussed broader challenges that co-management boards as a whole face<sup>36</sup>, the scope of such issues demands a separate discussion in its own right.

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<sup>36</sup> The most commonly cited barrier in this regard was that those involved in RRCs found that their recommendations were not taken seriously by government bodies. Many of those who joined the RRCs in order to make a difference in their community found this reality very disheartening. This in turn raised questions about the

1. Co-management boards should consider providing training for the position of chair. Board chairs play an influential role in determining how the process of decision-making is carried out, yet none of the co-management boards included in this project referred to providing training in facilitation, mediation, collaboration, consensus-building, or other factors that contribute to more effective decision-making. Implementing such training would not only be beneficial to other board members, but it would also build the capacity of the board as a whole to work through challenging or divisive management issues. Although co-management boards would be responsible for facilitating such training, governments may have to be involved in providing the financial resources it would require. In addition to this, ensuring there is turnover in the chair position would allow for new perspectives and approaches to be brought into this process.
2. Co-management boards need to be responsive to the logistical barriers faced by board members. One example of how this could be carried out is by providing greater compensation for childcare available to both male and female board members. This would not only relieve some of the demands placed on board members with young families, but also has the potential to broaden the pool of applicants for boards that have difficulties finding nominees to fill board positions. Again, while the impetus for such a change would have to come from the co-management board, relevant government bodies would also have to be involved in the provision of resources.
3. There would also be value in those involved with co-management boards reflecting on the types of knowledge that they engage, and whether or not it accurately encompasses the board's mandate. Although prioritizing fish and wildlife harvesting activities is a valid focus for these boards given their objectives, it should not come at the expense of other perspectives that make up the "big picture". It is important for co-management boards not to lose sight of other interests within the community and experiences on the land that contribute knowledge of the ecosystem as a whole.

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extent to which RRCs are an effective means of improving the access of resource users and Aboriginal peoples to resource management decision-making. Similar concerns have been voiced elsewhere in reference to collaborative natural resource management arrangements: "in practice the result may not be power sharing, but rather a strengthening of the state's control over resource policy, management, and allocation. Instead of contributing to local empowerment, such arrangements may further marginalize indigenous communities" (Castro and Nielsen 2001, p. 230).

Actively involving these perspectives can occur in a number of ways, via reports, discussions, community consultations, and meetings. One example of how this type of engagement can be carried out within an institution's activities is the Arctic Borderlands Ecological Knowledge Co-op. Though not a management authority, the Co-op brings together community, co-management, government, and academic representatives in the ecological monitoring of the Arctic Borderlands region<sup>37</sup> (Eamer 2003). The goals of the Co-op overlap in a number of ways with formal co-management boards in the Yukon in that its operations are based on cooperative decision-making, the sharing of different types of knowledge (including scientific, traditional, and local knowledge), and community involvement (*ibid.*). Unlike co-management boards though, it is not a part of a lands claim agreement, it involves a broader range of stakeholders, and it focuses its activities on ecological monitoring. While the mandate of Arctic Borderlands is centered on the Porcupine caribou herd, it maintains a holistic approach to ecological monitoring by incorporating a diverse range of knowledge and experiences. This is apparent in the Community Reports it produces. Community monitoring reports provide information such as how much time people are spending on the land, changes in weather, human activity affecting hunting, types of berries being picked, fish size, caribou health, etc. Not only is this approach relevant to the Co-op's goals of managing a specific wildlife population, but it also facilitates an environment in which participants feel their knowledge is valued without having to first demonstrate its worth.

4. The government bodies that appoint or nominate board members need to improve how they communicate and look to fill openings on co-management boards. Although co-management boards are responsible for taking a critical look at how they carry out decision-making and engage different types of knowledge, they have less control over the makeup of the board. Board member appointments or nominations is largely in the hands of Aboriginal and territorial governments. To ensure board members represent a diversity of interests within the community, a wider net that captures this diversity needs to be cast in recruiting board members. Experience on the land was an

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<sup>37</sup> This region includes the range of the Porcupine caribou herd, as well as the nearby marine and coastal areas, which includes the NWT, Yukon, and Alaska (Eamer 2003).

important qualification for many of the board and staff members that were interviewed, but in some cases this translated into a narrow interpretation of the type of experiences on the land that were relevant to co-management boards. Encouraging community members from different backgrounds not only needs to be communicated in how openings on the board are advertised, but also in the qualifications required to fill these positions. This may require changing how a “qualified” applicant is defined.

5. It is important to reiterate that simply appointing more women to co-management boards is not necessarily going to address any issues related to gender that have been identified here. This is not to say that having more women on co-management boards is not a worthwhile goal. Indeed, at the Yukon Aboriginal Women’s Summit, one of the key priorities was to “increase representation of Aboriginal women at decision-making tables dealing with water, land and traditional knowledge” (Women’s Directorate and Yukon Advisory Council on Women’s Issues 2007). Moreover, given the findings here (and elsewhere) on critical mass, there is evidence to support the value of this goal. However, several of the major government bodies responsible for appointing or nominating co-management board members already take into account the concept of gender equality, on paper at least. The Council of Yukon First Nations (CYFN) Board Selection Committee, for example, lists “gender equity” first on its list of criteria for consideration (Council of Yukon First Nations 2007). Though there is not a specific number or percentage associated with this criterion, the Committee is generally aware of gender equality in relation to the number of total seats on the board (discussion with CYFN employee, Whitehorse, Yukon, June 20, 2013). Similarly, the Yukon Government’s policy on boards and committees includes the following section: “1.3.1 In cases where the Yukon Government is the sole appointing authority, and where membership is not already defined by legislation, the Yukon Government is committed to membership on government boards and committees that is representative of Yukon society, including gender, age, First Nations people, youth, visible minorities and people with disabilities. In other instances, the Yukon Government will make best efforts to ensure that nominations and appointments of members to boards and committees ensure representation of gender, age, First Nations people, youth, visible minorities and people with



disabilities” (pers. com. with Yukon Government employee, Whitehorse, Yukon, June 25, 2013). While it is encouraging that these government bodies are aware of gender when selecting candidates, this attitude can easily be co-opted into treating women as tokens of equality rather than valuing them for their contributions to co-management institutions. For this reason, it is important to ensure that opportunities for filling board member positions are structured to be more inclusive to women, so that they both want and are able to participate.

6. Finally, it was apparent that many co-management boards recognize the importance of representing different types of diversity, not just gender, within their board membership. One theme that stood out in particular was the concern over the lack of youth involvement. Several boards discussed initiatives targeted towards engaging youth on the land, but such projects are few and far between. Continuing to pursue such projects is an important role that co-management boards can play. However, they also might consider establishing a seat on the board that is set aside specifically for a youth representative.

The co-management of natural resources has been implemented in the Canadian North in the midst of a rapidly changing northern landscape. While different communities may experience these social, economic, cultural, and environmental changes in different ways, northern community members are acutely aware of how these changes typically affect northern regions first and most severely. As one board member stated, “I pray for Mother Earth all the time. And everything that walks on it, swims in the water or flies in the air, I pray for it all the time. Because I just think Creator you could not have given all this to us and you know, let it go. Let it get hurt. We’re lucky. I can go down and drink water out of that lake right now. You know not many people can do that anymore. That’s my view anyways, for what it’s worth” (previous board member, personal interview, September 12, 2013). Researchers and practitioners involved in co-management in the Yukon are working to understand how co-management institutions can most effectively respond to these changes, yet there are still gaps in this understanding. As this research demonstrates, gender is not only an important dimension of the social and political context in which co-management operates, but it also influences the effective decision-making of co-management institutions in the Yukon. The findings presented here contribute to the conceptual understanding of co-management, while also offering some direction for how the

practical implications of these results can be interpreted and applied. While there are still unanswered questions about the relationship between gender and co-management, this study highlights the significance of moving forward to pursue answers to these questions.

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## APPENDIX A

### Survey

# Gender and Participation in Natural Resource Management Decision-making in Yukon Territory

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June 1, 2013

Dear Participant,

My name is Kiri Staples, and I am a Yukoner currently working on a Master's of Environment and Sustainability at the University of Saskatchewan. As a part of this degree, I am working in collaboration with my supervisor, David Natcher, on a research project exploring the relationship between gender and decision-making related to natural resource management. It is focused on co-management boards and councils with jurisdiction in the Yukon. The purpose of this research is to examine how male and female board and council members participate in decision-making and the influence this participation has on the decisions that are made. The results of this work have the potential to provide a better understanding of participants' views of effective decision-making, as well as how current decision-making process and outcomes can be made more effective.

This survey is being distributed to all board members, both male and female, on approximately twelve co-management boards across the Yukon. Your participation in this research is completely voluntary. You may answer only those questions that you are comfortable with. The individual responses are anonymous and will only be viewed by researchers at the University of Saskatchewan. Data will be securely stored throughout the project. Once the responses have been combined, the compiled results of the survey may be presented in journal articles, conferences, presentations, reports and the final thesis paper. By filling out the survey, you are consenting to having the information you provide included in this compiled data. Every effort will be made to protect the privacy, confidentiality and identity of individual participants. However, due to the small number of participants no absolute guarantees can be assured.

Following the distribution of the survey, board members may be contacted for participation in an interview and/or focus group. If you are interested in taking part in one or both of these activities, please contact Kiri Staples through the contact information provided below. Once the data has been collected, the findings will be summarized in a report, which will be distributed to co-management boards and other relevant groups. If you have any questions or concerns regarding the research project, please do not hesitate to contact one of the researchers. Thank you for your time.

Kiri Staples, Graduate Student  
School of Environment and Sustainability  
University of Saskatchewan  
Tel. (867) 335-7838 (Yukon)  
E-mail - [kiri.staples@usask.ca](mailto:kiri.staples@usask.ca)  
David Natcher, Principle Investigator  
College of Agriculture and Bioresources

University of Saskatchewan  
Tel. (306) 966-4045  
E-mail - [david.natcher@usask.ca](mailto:david.natcher@usask.ca)

**Instructions**

This survey should take about 20 minutes to complete. None of the information you provide will be traced back to you. Thank you for taking time to share your views with us,

Kiri Staples, Graduate Student, School of Environment and Sustainability

David Natcher, Principal Investigator, College of Agriculture and Bioresources

**Background information**

1. Please indicate your gender

- Male                       Female                       Prefer not to say

2. Do you identify with a Yukon First Nation or other Aboriginal group?

- Yes                       No                       Prefer not to say

3. Which category best fits your age group?

- Under 20
- 20-29
- 30-39
- 40-49
- 50-59
- 60+

4. How long have you been a board member? Please indicate month and year you started.

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5. On the board you are currently serving on, have you ever (past or present) held the position of:

- Chair                       Co-chair

If yes, please indicate month and years you served

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**Decision-making processes and outcomes**

6. What do you consider to be the key elements of a “good” decision made by the board?

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7. Please check the box for each statement that best fits your opinion, based on your experiences as a board member.

a) Board members are respectful of others during discussions

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	No opinion

If you disagree or strongly disagree, please explain why.

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b) All board members have the same opportunities to participate during meetings

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strongly disagree	Disagree	Neutral	Agree	Strongly agree	No opinion

If you disagree or strongly disagree, please explain why.

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c) I am satisfied with the overall process of how decisions are made

Strongly disagree    Disagree    Neutral    Agree    Strongly agree    No opinion

If you disagree or strongly disagree, please explain why.

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d) The recommendations made by the co-management board take into account the contributions I have made to discussions

Strongly disagree    Disagree    Neutral    Agree    Strongly agree    No opinion

If you disagree or strongly disagree, please explain why.

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**Gender and participation**

8. Is it important to have female representation (i.e. at least one woman) on the board?

Yes     No

a. Please explain

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9. Is it important to have **equal** male/female representation (the same number of men and women) on the board?

- Yes       No

b. Please explain

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10. Do you feel that men and women on the board have the same opportunities to participate in board decisions?

- Yes       No       There are no women on this co-management board

a) If no, why?

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11. On many co-management boards in the Yukon, NWT and Nunavut, there are very few female board members. Why do you think this is?

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**Obstacles to participation**

12. Please check the box for each statement that best fits your opinion, based on your experiences as a board member.

a) Meeting times are convenient

Strongly disagree      Disagree              Neutral                  Agree                      Strongly agree          No opinion

b) Meeting locations are convenient

Strongly disagree      Disagree              Neutral                  Agree                      Strongly agree          No opinion

c) Travel requirements for my position as a board member are not a barrier

Strongly disagree      Disagree              Neutral                  Agree                      Strongly agree          No opinion

d) Time commitments to prepare for and participate in board meetings are not a barrier

Strongly disagree      Disagree              Neutral                  Agree                      Strongly agree          No opinion

13. What would help you to participate more actively in decision-making on the board?

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14. If you have other comments or concerns, please let us know:

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## APPENDIX B

### Interview Consent Form and Interview Guide

# INTERVIEW CONSENT FORM



## **Gender and Participation in Natural Resource Management Decision Making in Yukon Territory**

You are being asked to participate in a research project from May 2013 until May 2014 examining the relationship between gender and decision-making on natural resource co-management boards in the Yukon Territory. The purpose of this project is to investigate how male and female co-management board members participate in decision-making and the influence this participation has on the decisions that are made. The results of this research have the potential to provide a better understanding of participants' views of effective decision-making and the role gender may have in this process, as well as how current decision-making process and outcomes can be made more effective.

### **INFORMATION ABOUT THIS RESEARCH PROJECT**

**Project Title:** Gender and Participation in Natural Resource Management Decision Making in Yukon Territory

**Researcher(s):**

Kiri Staples, Graduate Student  
School of Environment and Sustainability  
117 Science Place  
University of Saskatchewan  
Saskatoon, SK S7N 5C8  
Phone: (867) 335-7838 (YT) or (306) 966-2222 (SK)  
E-mail: kiri.staples@usask.ca

**Supervisor:**

David Natcher, Associate Professor  
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University of Saskatchewan  
Room 2D08, Agriculture Building - 51  
Campus Drive  
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Phone: (306) 966-4045  
E-mail: david.natcher@usask.ca

**Purpose and Objectives of the Research:**

A recent study by David Natcher found that on many co-management boards across the North, women are a minority within the board membership. The project we are working on will build on this finding by asking the question: does gender affect decision-making on co-management boards? We will be looking specifically at co-management boards with jurisdiction in the Yukon. We are hoping to get a better idea of what both male and female board members think about how decisions are made on these boards, whether gender influences these decisions and whether this process can be made more effective. While the research will focus on finding more about women's experiences on co-management boards, the experiences of male board members will be an important part of this discussion about gender. This project will ask the following questions:

- a) What are women's past and current experiences in participating in decision-making on co-management boards in the Yukon? How do board members perceive gender in relation to effective participation and decision-making?
- b) Are there obstacles that women face in gaining voice in decision-making on co-management boards? If so, what are they and are they different from the obstacles that male board members face? What strategies do board members use to overcome these obstacles?
- c) Are there ways that women influence natural resource decision-making outside of their position on co-management boards? If so, what are these ways of influencing decision-making and are they accessed by men as well?
- d) Have (a), (b) and (c) affected the decisions made by the co-management boards? If so, how?

**Supported by:** Association of Canadian Universities for Northern Studies (ACUNS), Resources and Sustainable Development in the Arctic (ReSDA), Social Sciences and Humanities Research Council of Canada (SSHRC), University of Saskatchewan, Yukon Research Centre

## **CONSENT FORM INFORMATION**

### **Potential Benefits:**

This project has the potential to benefit both co-management boards and board members. It aims to identify strategies for more effective participation within co-management boards based on women and men's experiences in decision-making. It also has the potential to identify and address barriers to participation that board members, in particular women, may experience. These factors can contribute to improving management decisions based on a more diverse range of participant perspectives, which has implications for the social and ecological sustainability of these decisions.

### **Procedures for data collection:**

Interviews with both past and present co-management board members (male and female) will be conducted by the graduate student researcher. Interview analysis will take place at the University of Saskatchewan. Where possible, interviews will be held in the communities where co-management boards are based. In cases where regional co-management board members are from communities outside of the Yukon, interviews will coincide with meetings taking place in Whitehorse (or other Yukon communities). Interviews may take anywhere from 30 minutes to an hour.

Please feel free to ask any questions regarding the procedures and goals of the study or your role.

### **Potential risks and right to withdraw:**

The expected emotional, psychological and social risk for participants in this research is minimal. However, if participants have experienced stress or anxiety on co-management boards, reliving these experiences through interviews or focus groups may cause emotional harm or discomfort. Participants should only answer those questions that they are comfortable with. If necessary, the researchers can provide participants with recommendations for relevant support resources, such as counseling services.

Your participation is voluntary and you can answer only those questions that you are comfortable with. You may withdraw from the research project for any reason, at any time without explanation or penalty of any sort. In this case, all data (i.e. notes, audio tapes) will be destroyed. Your right to withdraw data from the study will apply until the research results have been released, after which point it may not be possible to withdraw your data.

**Confidentiality:**

Your anonymity and identity will be protected throughout the research process. Any identifying information, such as your name, address or co-management board that you are a member on, will be confidential. If you agree to take part in the project and sign a consent form, your identity will be referred to by a random number or pseudonym. Only the information you provide, and consent to, will be made publicly available. You will have the opportunity to review a transcript of the interview to ensure you are comfortable with information that will be released.

Data will be collected and transcribed, and then stored in electronic form. All physical data (including paper copies and audio tapes) will be stored in a locked file cabinet in a secured office of the Principal Investigator at the University of Saskatchewan. All paper materials will be destroyed after five years after the completion of the study. All information with names will be deleted with numbers or pseudonyms being replaced in the electronic copies. Every effort has and will be made to protect the privacy and confidentiality of participants. However, due to the small number of participants no absolute guarantees can be assured.

**Use of information:**

Upon signing the consent form participants agree to allow the information gathered in the study to be reported in journal articles, conference presentations, or funding reports. Although we will report direct quotations from the interview, you will be given a pseudonym, and all identifying information (i.e. co-management board you are a part of) will be removed. The information will be communicated as broadly and effectively as possible, including but not limited to presentations to co-management boards and community-level institutions (i.e. Yukon College). In addition, plain language reports will be written and distributed to co-management boards. All written material deemed appropriate for public dissemination will be made available through the Resources and Sustainable Development in the Arctic newsletter and website, <http://dl1.yukoncollege.yk.ca/resda/>.

**Questions or concerns:**

Please contact the researcher(s) using the information at the top of page 1 with any questions and concerns you have, or to obtain results from the study. This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office [ethics.office@usask.ca](mailto:ethics.office@usask.ca) (306) 966-2975. Out of town participants may call toll free (888) 966-2975.

**Consent**

I have read and understand the description of the project provided. I have had an opportunity to ask questions and my questions have been answered, and acknowledge that I may withdraw my

participation in this research study at any point until results are released. I consent to participate in the research project and a copy of this consent form has been given to me for my records.

\_\_\_\_\_  
*Name of Participant*                      \_\_\_\_\_  
*Signature*                                      \_\_\_\_\_  
*Date*

\_\_\_\_\_  
*Researcher's Signature*                      \_\_\_\_\_  
*Date*

**Other Points**

The researcher/interviewer would like to use an electronic recording device during the interview, and with your consent would like to create an audiotape of the session. Please be aware that you may shut off the audiotape at any time by indicating to the interviewer you would like the tape to be off or to erase any portion of the interview you do not feel comfortable with.

Do you agree to the use of an electronic recording device during the interview?

\_\_\_\_ Yes

\_\_\_\_ No

Please mark below how you would like your information to be identified within the research study?

\_\_\_\_ The researchers may use my first name in their study from the interview information.

\_\_\_\_ The researchers may NOT use my first name in their study from the interview information.

\_\_\_\_ I would prefer the use of a fictitious name of \_\_\_\_\_

Do you want to review the transcript of the interview prior to analysis of the findings?

\_\_\_\_ Yes

\_\_\_\_ No

Thank you,

\_\_\_\_\_  
(Signature of Participant)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature of Researcher)

\_\_\_\_\_  
(Date)

## Interview Guide

Interview Number: \_\_\_\_\_

Location: \_\_\_\_\_

Date: \_\_\_\_\_

Duration: \_\_\_\_\_

Gender: \_\_\_\_\_

Co-management board:  
\_\_\_\_\_

Current board member     Past board member

Chair     Co-Chair     Board member     Staff \_\_\_\_\_

The purpose of this interview is to discuss gender and participation in decision-making on co-management boards in the Yukon. In general, we will be talking about:

- Your experiences on the co-management board
- Women's representation and participation on the board
- What you think about the process of how decisions are made on the board
- Barriers to participation on the board
- Opportunities to influence natural resource management decisions

1. Do you identify as First Nations/Inuit/Metis?

2. Which category best fits your age group?

- a) 20-29
- b) 30-39
- c) 40-49
- d) 50-59
- e) 60+

3. How long have you been a board member (month and year started)?

4. In your experience on the board, do you think it is important have women represented on the board you are a part of? Why or why not?

5. On many co-management boards across the North there are very few women represented as board members. Why do you think this is the case?

- a) What effect do you think this has, if any, on the types of decisions and recommendations that are made by the board?



- b) Do you think having more (or less) women on the board would lead to different outcomes?
  - c) (For women) Do you think having more (or less) women on your co-management board would have an effect on your participation in discussions and management decisions?
6. In your experience serving on the board, do you think you have had the same opportunities as other board members to contribute to decision-making? If not, why do you think this is?
7. What barriers, if any, do you think board members face in participating on co-management boards? These barriers may be practical (such as lack of child care, lack of financial compensation) and/or institutional (i.e. lack of respect from others, certain attitudes or expectations)
- a) Are they different from the barriers that (opposite gender) board members face?
  - b) What strategies, if any, do you use to overcome these barriers?
8. Outside of your participation on the co-management board, are there other ways you influence decision-making related to natural resource management in your community/region?
- a. If yes, what are they?
  - b. Do you think (opposite gender) use this resource to influence natural resource decision-making as well?