

Learning and the Production of Environmental
Community Forestry in British Columbia

by

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Abstract

Community forestry emerged in response to criticism of the industry-dominated governance of forests. Community forest were viewed as a vehicle for greater local participation in forestry. The purpose of this research was to investigate how participation and social learning influence community forest governance in British Columbia, Canada. This study used an environmentality lens to describe community forest governance and investigate how participation and learning influenced the emergent community forest governance. Data was collected through a qualitative case study focused on the Kaslo and District Community Forest Society and involved semi-structured interviews with board and society members, document review, and participant observation.

Disciplinary and neoliberal environmentalities were identified as influential to community forest governance at Kaslo and the participation and social learning that occurred. Findings indicated that participation and learning outcomes have resulted in community forest governance that replicates disciplinary and neoliberal environmentalities, characterized by the professionalization of community forestry management and community acceptance of increasing timber harvesting rates.

Dedication

This thesis is dedicated to Suzanne for her unwavering support and encouragement.

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Acronyms

AAC – Annual Allowable Cut

BC – British Columbia

CFA – Community Forestry Agreement

FSP – Forest Stewardship Plan

KDCFS – Kaslo and District Community Forest Society

RDCK – Regional District of Central Kootenay

VOK – Village of Kaslo

Chapter 1: Introduction

1.1 Background

Community forests in British Columbia emerged in the 1990s in response to criticism of the industry-dominated governance and management of forests. Environmentalists, non-state actors like NGOs, and communities advocated for more community control of forests as an alternative to centralized control of forests (McCarthy, 2006). In 1998, the British Columbia provincial government acted on this by establishing the community forest agreement program, which allowed communities to apply for forest tenures that would give communities the opportunity to manage and benefit from a particular forest area. Community managed forests are meant to improve the socio-economic standing of the communities situated near forests, while also managing the forests more sustainably (Ambus & Hoberg, 2011; Rooban, 2017; Teitelbaum, Beckely, & Nadeau, 2006).

The establishment of community forests follows scholarship in natural resource management that focused on management approaches that are adaptive and/or collaborative in their approach and highly participatory (e.g., Romina, 2014). Adaptive management, co-management and adaptive co-management have been described as possible management approaches to handle the complexity of natural resources and the various stakeholders invested in them (Armitage et al., 2009; Berkes, 2009). These management approaches rely heavily on: 1) the participation of a variety of stakeholders, and 2) individual and social learning that can lead to positive outcomes (Cundill & Rodela, 2012; Sinclair, Diduck, & Fitzpatrick, 2008).

While participation and social learning are often paired when considered in natural resource management situations, they remain separate concepts. Participation does not necessarily result in social learning, though social learning typically requires meaningful participation in order to be achieved (M. Reed et al., 2010). Participatory approaches to resource management can take many different forms and have a variety of different outcomes. Some of these outcomes may take the form of social learning for participants, or improvements to management practices. Participation of local communities can range from consultations, to direct control of decision-making processes by local communities (Agarwal, 2001). Participation by a variety of stakeholders enables the intersection of different types of knowledge, which can provide new insights that breaks from conventional practices which can change management outcomes and lead to learning among individuals (Berkes, 2009). There are a variety of challenges to participation in the management of resources, including: 1) power dynamics, 2) community disinterest, 3) how participation is sought, and 4) competing interests.

Social learning is important to natural resource management because of its capacity to deal with uncertainty by building knowledge iteratively (Berkes, 2009). Reed et al. (2010) phrases this common conceptualization of social learning as “a process of social change in which people learn from each other in ways that can benefit wider social-ecological systems” (p. 2). This iterative process that enables social change is important for adaptive management, because it enables responsive changes, not only in terms of management decisions, but also in potential resource user’s actions. It is argued that social learning that is facilitated through participatory processes can lead to more sustainable outcomes (e.g., Assuah, 2013; Reed et al., 2010).

However, there are still some questions regarding the conceptualization of social learning. For instance, there is still a need to understand the distinction between individual and broader learning (Reed et al., 2010; Moyer and Sinclair, 2015). While social learning continues to rise in prominence in resource management, there is also still a need to describe how social learning can be practically put in place (Medema, Wals, & Adamowski, 2014), and how social learning influences environmental governance.

Genuine participation and opportunities for learning require a shift from conventional top-down governmental arrangements towards environmental governance, which encompasses a broader array of actors, systems and scales (Armitage et al., 2009). Bridge and Perreault (2009) point out, however, that while “[t]he concept of ‘environmental governance’ has been in the ascendant since the mid-1990s” it remains a vague and malleable term that obscures “a broad range of interests and ideological positions” (p. 475). Broadly defined, “governance refers to the fundamental question of how organization, decisions, order and rule are achieved in heterogeneous and highly differentiated societies” (p. 476). A means of analyzing governance as it pertains to natural resources/the environment is by considering the allied concept of ‘eco-governmentality’ or ‘environmentality’. This follows Foucault’s concept of governmentality, or the art of governing. This concept eschews a focus on institutions, by looking instead at the rationality that is comprised of strategies, technologies and programs focused on the “conduct of conduct.”

The rationality that focuses on conducting the conduct of the environment and how subjects interact with the environment has been referred to as ‘environmentality.’

Environmentality is a way to account for the exercise of biopower and knowledge to ensure that subjects have the right “disposition.” In essence, environmentality is an attempt to produce subjects that will act autonomously in a way that is in line with the environmental rationality that is desired.

As Fletcher (2010) makes clear, there are a variety of different environmentalities that are applied to populations simultaneously. He identifies four main environmentalities that are applied to the project of conservation: 1) disciplinary environmentality, which typically follows from the government that uses disciplining tactics to produce the right disposition, 2) neoliberal environmentality, which relies on the disciplining governmentality to produce rational economic actors who can then be shaped by incentives and the profit motive, 3) sovereign environmentality, which uses protected areas to preserve resources and 4) ‘truth’ environmentality, which can be seen in the work of deep ecologists or indigenous peoples shaped by traditional ecological knowledge to interact with the resources in different ways. Each of these environmentalities produce knowledge that guide their rationalities. This means that these differing rationalities are contingent on the knowledge being produced, and so the techniques, tactics and programs that result may provide an indication of the environmentality that is most successful. Fletcher (2010, p. 178) points out that this makes it possible for the production of a new environmentality through “democratic, egalitarian, and non-hierarchical forms of natural resource management in which local peoples enjoy a genuinely participatory (if not self-mobilising) role”.

Community forests that are managed through the participation of various community

stakeholders might provide an opportunity to see the ways in which environmentalities shape forest governance. There is also the opportunity to see the ways in which participation and social learning lead to the production of knowledge, which in turn may produce a new environmentality that might be identified by the techniques, tactics and programs enacted by the community forest management.

1.2 Statement of Purpose

The purpose of this study is to investigate how participation and social learning shape the governance of community forests, by describing the environmentality that is produced through community forest management.

1.3 Research objectives:

1. To examine the range of environmentalities and their accompanying strategies, technologies and programs that influence community forest governance.
2. To describe how stakeholders (committee members, government officials, resource users, industry) participate in governance of community forests.
3. To describe what stakeholders have learned/how stakeholders have been formed as environmental subjects through participation in community forest governance.
4. To describe the emergent environmentality that is articulated by those participating in community forest governance.

1.4 General Methods

This study used a qualitative design, utilizing a case study strategy of inquiry. Research focused on the case study of the Kaslo and District Community Forest Society (KDCFS) in British Columbia. A British Columbia case was selected because the province has one of the longest running and most established community forest programs in Canada. The particular case of the KDCFS was selected using the following criteria: 1) Must have an established collaborative governance structure, 2) An administrative authority that provides opportunities for the broader community to participate in forest governance and management, 3) A variety of resource users accessing the forest, and 4) Documentation must be available or accessible. Data collection methods included semi-structured interviews, a document review and some participant observation. Key informants that participated in interviews included: present and past members of the KDCFS board, KDCFS society members, present and past staff of the KDCFS, local community members, a local government official, and neighbouring woodlot managers. Notes were kept of participant observation, which included a forest tour and a KDCFS open house. Semi-structured interviews were audio recorded. Interviews were transcribed and coded using NVivo software.

1.5 Significance

Social learning and community forest governance have both been the subjects of a significant amount of scholarship. There is still a need however, to see how social learning impacts community forest governance. By focusing on the environmentality produced by community forest governance bodies in British Columbia, this study seeks to determine what role social learning plays in producing environmental rationalities, or if community forest

governance bodies simply amplify the environmental rationalities that are influencing them regardless of community participation and the presence or absence of social learning. By doing so I hope to continue to unwrap the influence of social learning in resources management, which remains contentious.

1.6 Thesis Organization

The thesis is organized into 7 chapters. Following this introduction (Chapter 1), Chapter 2 includes consideration of the literature underpinning this work. Chapter 3 presents the research design and approach I used to collect data. Chapter 4 describes in some detail the Kaslo and District Community Forest Society. Chapter 5 focuses on the range of environmentalities acting on the KDCFS in British Columbia. Chapter 6 focuses on learning outcomes and challenges in the KDCFS. Chapter 7 will draw conclusions based on the objectives of the study and include some future research directions.

Chapter 2: Community Forestry, Environmental Governance, Social Learning and Environmentalality

2.1 Origins of Community Forestry in Canada

As of 2015, 93% of Canadian forests are on public land. More than 85% of industrial timber harvested originates from land managed by provincial or territorial governments (Natural Resources Canada, 2015). The goal of this government oversight of forests is to ensure that forests remain productive long term (Apsey, Laishley, Nordin, & Paillé, 2000; Natural Resources Canada, 2015). Federal, provincial and territorial governments manage these forests predominantly by granting large scale and long-term tenures to forest product companies to manage the forests. This tenure arrangement benefits both the government, because it received revenues while not having to manage operations, and the forest companies, because it enabled affordable access to timber without requiring ownership (Apsey et al., 2000; Bullock, 2010). For example, the BC government issues two types of tenures to forest corporations; area-based tenures, that assign timber rights and management responsibilities to a particular area, and volume-based tenures, that assign a harvest volume that may be taken from common-access forest areas (Ambus, 2016). The industry dominated forestry landscape has contributed to an extraction-focused management style. The mechanization and industrialization of the forestry industry has contributed to large-scale extraction, and increasingly focused on timber extraction for increased productivity (Apsey et al., 2000).

In the 1990s this industrial use and governance of forests was increasingly critiqued by a wide cross-section of social groups including environmentalists, Indigenous People, and labour unions culminating in the protests known as the 'war in the woods'. These groups critiqued

industrial and corporate control for “the perceived mismanagement of public forests, job losses, and the perception of systematic pattern of exclusion of Aboriginal and local level actors from forest-management decisions” (Teitelbaum, 2016a, p. 4). Public pressure and legal reform created the opportunity for new approaches to forest governance structures, many of which that were more community oriented. In British Columbia for example, these efforts resulted in the province’s creation of the of the Community Forest Agreement Program in 1998 (McCarthy, 2006; Teitelbaum et al., 2006).

2.2 Overview of Community Forestry

Community forestry “describes efforts to give communities greater control over nearby forests so that they will benefit from the use of forest resources” (McCarthy, 2006, p. 86).

Community forestry provides an umbrella term that covers a variety of different arrangements that feature communities engaged in forestry. BC’s CFA program is just one example of a community forest arrangement, and it is a relatively new formulation.

While community forests cover about 1.5% of BC’s forest land, globally 11% of forests are community managed, with the highest proportion located in developing countries where 27% of forests are community managed (Molnar 2011). Given the prevalence of community forestry in developing countries, much of the literature on community forestry focuses on the Global South (Gilmour, 2016; Molnar, France, Purdy, & Karver, 2011; Teitelbaum, 2016a). Even though the term “community forestry” acts as a type of umbrella term, according to Gilmour (2016) it excludes privately owned smallholder forests (hence the term “community-based forestry”). My research will not address smallholder forestry, but will concentrate on

community forestry that involves community management of public land (Teitelbaum et al., 2006).

Community forestry focuses on two key elements. The first is community control over both forest management and benefits accrued (Assuah, 2013; Teitelbaum et al., 2006).

Management refers to the potential for participatory governance, which is the local people's ability to "meaningfully participate in decision-making concerning forests in their region"

(Teitelbaum, p 9). This usually represents the devolution of management decision-making responsibilities from centralized government to the more decentralized communities.

Teitelbaum (2016) expands on this notion of devolution by describing how it is strengthened by the transfer of not only management responsibilities, but rights from centralized government to local communities through legal arrangements. Some suggest that this divestment of rights and responsibilities to local groups remains fraught with challenges because of limited capacity at the local level, unwillingness to release control from the state level, and the potential to upset the industrial tenure system in Canada (Bullock & Hanna, 2007; Teitelbaum, 2016a).

The second key element to community forestry is that local people benefit from the forestry activities. This means "that an effort is made to keep benefits that are generated from the forest, be they economic or social, in the community rather than accruing distant shareholders" (Teitelbaum et al., 2006, p. 417). Given this focus on the ends of community forestry, it is unsurprising that community forestry as a whole is often identified by aims that are consistent from forest to forest. This may in part be a result of community forestry being defined "against" normative forestry practices or as an alternative to industrial forestry

(Teitelbaum et al., 2006). While this is true of the two key elements of community forestry, it is particularly true of the assumed ecological benefits of community forests. Many definitions include a specific reference to ecological benefits, or sustainable forest management potential of community forestry (Charnley & Poe, 2007). This is often a significant assumed goal of community forests, that forests will be managed more sustainably by communities than they would be forestry companies (Assuah, 2013). Another common goal of community forestry initiatives is that forests will be managed with multiple uses or interests taken into account (Teitelbaum et al., 2006). This goal is assumed because the decentralization of decision-making allows for a greater multiplicity of voices and interests to be considered.

One particular challenge posed when defining an initiative as a community forest is how “community” is defined. Under the CFA program in BC, “community” can mean any number of different legally constituted bodies. For the purpose of defining “community” in relation to community forests broadly, it is useful to consider Maclellan and Duinker’s (2012) conceptualization of “community of interest” and “community of place” whereby community is either linked to a geographic location/place or shared interest (Assuah, 2013; Maclellan & Duinker, 2012).

The difficulty in defining community forestry in strict terms presents a problem for describing a consistent model, though some see this as a significant benefit. Maclellan and Duinker (2012) describe the malleability of the community forestry model as a useful means of adapting to different circumstances and local needs. The flexibility of community forestry initiatives is perhaps a key reason behind the growth of community forests in Canada and the

variety of forms that they have taken. Community forestry can be adopted by a variety of different community organizations, for a variety of purposes and also account for multiple uses.

For the purpose of my research, I will use the conceptualization of community forestry articulated by Teitelbaum et al. (2006): “A public forest area managed by the community as a working forest for the benefit of the community” (p. 417). This broad definition mostly focuses on the forest management arrangement that devolves decision-making, management and benefits into the hands of local people (Teitelbaum, 2016a). Goals and outcomes of community forestry follow from this basic formation but are not assumed.

2.3 Community Forestry in British Columbia

With the institution of the Community Forest Agreement (CFA) Program in 1998, British Columbia attempted to implement a new system for community-based forestry. In the late 1990s, community forestry in British Columbia was loosely defined as “community involvement in local forest lands for community benefit” (Cortex Consultants Inc., 1996). Support for this approach to forestry in BC is unsurprising, given that more than 40% of BC’s regional economies are estimated to be dependent on forestry activities (MNP, 2015).

Community forestry was and continues to be appealing to environmentalists, labour groups, and First Nations in BC, although for different reasons. While environmentalists saw community forestry as being more environmentally friendly than industrial forestry, labour groups saw community forestry as an opportunity to retain jobs. Some communities saw community forestry as a way to directly benefit the local economy, and Aboriginal groups saw opportunities to restore control over traditional territories (Ambus, 2016). Although this

coalition of groups had a wide variety of ideas, perceptions and reasons for opposing industrial forestry, they coalesced around the common alternative of community forestry (Braun, 2004).

The CFA Program differed from earlier forms of community forestry that existed in British Columbia as an area-based tenure system, as opposed to the handful of pre-existing community forests that were volume-based tenures (Teitelbaum et al., 2006). The CFA program started as a pilot program to trial area-based tenure for managing public forest land in BC. A lot of interest was generated in this pilot, with 80 applications submitted and 10 forest tenures awarded by the ministry of forestry to various communities in 2000 (McIlveen & Bradshaw, 2009). When the pilot projects finished in 2004, they were replaced by five year probationary CFAs that could be extended to last between 25 and 99 years (Ambus, 2016; Furness, Harshaw, & Nelson, 2015). Since 2009, even the mandatory five-year probationary license has been eliminated, to encourage more communities to apply for 25 year tenures (Furness et al., 2015).

It is notable that the mechanism for granting community control over forests still places centralized control within the provincial government (Ambus, 2016). The tenures themselves still bear a striking resemblance to the tenures of the large forestry companies. One of the key differences between the area-based tenures given to forestry companies and those provided under the CFA program are the 'communities' to whom the tenure is granted; according to legislation, CFAs can be held by "municipalities, cooperatives, societies, corporations, First Nation bands, or other legally constituted bodies" (Ambus, 2016, p. 162). CFAs provide exclusive rights to timber harvest, non-exclusive rights to non-timber forest products, and the

“ability to manage for water, recreation, wildlife, and viewscape resources” to the grant holder (Gunter & Mulkey, 2012, p. 2).

The long-running CFA program and the diversity of communities managing forests in British Columbia under the CFA program provides a good case for my study, which looks to see how a community produces different forms of governance around their forests.

2.4 Participatory/Collaborative Governance

Community forestry reflects an attempt to produce a management arrangement that enables local actor participation in forestry decision-making/governance. This participatory approach follows scholarship in natural resource management that emphasizes adaptive and/or collaborative management approaches to address the complexity of socio-ecological systems (Armitage et al., 2009). Centralized management of some resources, like forests, have been shown to be ineffective because of their complexity, which results from the multiplicity of uses, users and systems that surround the resource (Berkes, 2009). This has given rise to the concept of environmental governance, which “suggests we look beyond government, toward public–private–civil society partnerships, as a way of dealing with the shortcomings of single agency, top-down management” (Berkes, 2009, p. 1692).

Environmental governance has emerged as a growing field of study since the 1990s, though it remains vague and obscures “a broad range of interests and ideological positions” (Bridge & Perreault, 2009, p. 475). Environmental governance, according to Bridge and Perreault (2009) broadly “refers to the fundamental question of how organization, decisions, order and rule are achieved in heterogeneous and highly differentiated societies” (p. 476).

Lemos and Agrawal's (2006) claim that "governance is not the same as government", but rather "the set of regulatory processes, mechanisms and organizations" that different actors use to influence environmental outcomes (p. 298). Biermann et al. (2009) define environmental governance from an earth systems perspective as "the interrelated and increasingly integrated system of formal and informal rules, rule-making systems, and actor-networks at all levels of human society (from local to global) that are set up to steer societies towards preventing, mitigating, and adapting to global and local environmental change" (p. 3). Armitage and Plummer (2010) suggest that different environmental governance strategies and definitions share similar operational requirements: "collaboration among heterogeneous actors with diverse interest, institutions that are flexible and nested across scales and levels, and analytic deliberation that develops understanding through multiple knowledge systems; builds trust through repeated interactions; and fosters learning and adaptive responses through continuous feedback" (p. 5). In these latter formulations, environmental governance refers to society-wide, multi-scale and multi-party arrangements that are engaged in the process of managing the environment, though notably they appear to consider a more conservation orientation outlook for this description of governance.

These conceptualizations mean that environmental management and decision-making are not solely in the government's domain or control. Rather, multiple parties participate within the environmental decision-making process. There are a variety of multi-stakeholder governance arrangements and models that have emerged to incorporate local communities in forestry decision-making, "such as co-management agreements, public advisory groups, and municipally run forests" (Teitelbaum et al., 2006). These collaborative governance

arrangements introduce local participation as a strategy to assure that those most affected by environmental decision-making (such as forest dependent communities) are able to influence decisions and that that input accounts for multiple uses and positions (Armitage et al., 2009; Assuah, 2013).

The type, quality and/or definition of local participation in resource governance varies widely, which impacts local influence on resource management. Agarwal (2001) describes a typology of participation that ranges from lower to higher levels of effective participation. Nominal, Passive, and Consultative describe lower levels of effective participation that tend to focus on information gathering that may or may not influence decision-making. Activity-specific, Active and Interactive participation describe higher levels of effective participation that includes involvement in undertaking activities and tasks, which lead to an increased role in influencing decision-making (Agarwal, 2001).

Meaningful participation in resource management is often realized through decentralization and devolvement. Agrawal and Ostrom (2001) describe decentralization in natural resource management as an “act by which a central government cedes rights of decision making over resources to actors and institutions at lower levels in a politico-administrative and territorial hierarchy” (p. 488). This usually results in the shared responsibility for decision-making between the multiple stakeholders and multiple scales, otherwise known as collaborative governance.

Collaborative governance not only needs to incorporate different forms of participation by multiple stakeholders and at multiple scales and consider the level of decentralization, but

must also incorporate and understand different forms of knowledge. Currently, scientific knowledge is prioritized, and it forms the primary means of understanding the environment and natural resources, like forests (Rathwell & Armitage, 2015). As Parkins and Sinclair (2014) highlight, reliance on this type of knowledge can lead to elitist governance processes which exclude stakeholders without the requisite scientific or professional experience and knowledge from participating in decision processes. At the same time, there is growing scholarship that diverse forms of knowledge can make meaningful contributions to environmental governance (Rathwell & Armitage, 2015). Of particular importance is the incorporation of indigenous (also known as traditional ecological) knowledge. The means of incorporating this knowledge is problematic, which has led to efforts to bridge knowledge systems in order to benefit environmental governance (Rathwell & Armitage, 2015).

2.5 Environmental Governance Challenges in BC Community Forests

Agrawal and Ostrom note that while decentralization has become an “important objective of state policy” (p. 486), much that has been written about decentralization of natural resources focuses on the benefits of decentralization versus centralized resource management, while the state’s motives for the pursuit of decentralization have not been properly considered. The authors note that many decentralization proposals equate to the assignment of operational-level actions to communities, which is considered inadequate because all other significant rights continue to be administered by centralized governments.

McCarthy (2006) suggests that the decentralization represented by community forests in BC could be a “thoroughly neoliberal compromise”, whereby granting of community forest

tenures silenced industrial forestry critics, while maintaining the vast majority of forests under industry tenure and maintaining state control over the community forests (p.99). Further, Ambus and Hoberg (2011) note that community forests in British Columbia under the CFA have seen community authority over decision-making mostly limited to operational decision-making. The authors suggest that communities need the ability “to deliberate upon and set broader goals and objectives, and to make and revise rules governing operational decisions accordingly” (Ambus & Hoberg, 2011, p. 937).

Ambus and Hoberg (2011) developed a framework to analyze the devolution of decision-making powers to CFAs, and they found that the devolution of decision-making to communities is modest. Within the CFA, the provincial government has maintained the strategic and tactical direction of community forests, which has limited the ability of communities to manage forests in ways that differ from the industrial model of forestry. Assuah, Sinclair and Reed (2016) also highlighted that the CFA placed constraints on sustainable forest management innovation and management related to non-timber forest products.

Egunyu, Reed and Sinclair (2016) found that in the Harrop-Procter Community Forest social learning was informed and influenced by the government policies around CFAs. This resulted in the professionalization of the forest management group which in turn limited community participation and, most notably, shifted the overall “environmentally conscious” focus of the Harrop-Procter Community Forest to a focus on “running a sustainable timber harvesting and processing operation” (Egunyu et al., 2016, p. 795). Leslie, who has managed the Harrop-Procter Community Forest describes that community forest rights have been limited

and are “expressed in a comprehensive suite of regulations, approved planning documents, and administrative procedures” (2016, p. 315).

These results echoes a conclusion of Bridge and Perreault’s (2009), in which administration in environmental governance can result in the production of a particular social order. As Arts (2014a) describes, it does not appear to matter what kind of forestry governance arrangement is present the practice of “state forestry” endures (p.20). It raises the possibility that the CFA program results in a kind of governance that maintains centralized control, by only devolving limited responsibilities, and is still targeted at timber harvesting. My study seeks to look further into the governance issues surrounding community forests by using an environmentality analysis; this may be useful in analyzing emerging governance arrangements as described further below.

2.6 Social Learning

A set of concepts that have become a key element of community-based and collaborative management of resources relates to notions of social learning (Armitage et al., 2009; Cundill & Rodela, 2012). Many authors have framed social learning as a normative goal of natural resource management (e.g., Assuah, 2013; Reed et al., 2010; Romina, 2014). This frame is being adopted in resources management because social learning is seen as a means of dealing with complexity by building knowledge iteratively and responding to complexity in an adaptive manner (Berkes, 2009; M. Reed et al., 2010).

Reed et al. (2010) offered this common conceptualization of social learning as “a process of social change in which people learn from each other in ways that can benefit wider

social-ecological systems” (p. 2). This iterative process that enables social change is important for adaptive management because it enables responsive changes, not only in terms of management decisions, but also in potential resource user’s actions. It is argued that social learning that is facilitated through participatory processes can lead to more sustainable outcomes (e.g., Assuah, 2013; Reed et al., 2010). Webler, Kastenholz and Renn (1995) identify how individuals participating in resource management leads to social learning, which they characterized as having the two components of cognitive enhancement and moral development. In their study, individuals gained knowledge (cognitive enhancement) while they also worked together with “peers to solve a common problem” (p. 455), thus producing solidarity and mutual respect (moral development). Reed et al. (2010) does caution that social learning should not be conflated with sustainable behaviour, this may be an outcome of social learning but it is not guaranteed.

Reed points out that definitions of social learning are often problematic because they confuse social learning with “the conditions and methods necessary to facilitate social learning or its potential outcomes” (M. Reed et al., 2010, p. 5). This includes the conflation of participation and learning. Reed proposes two key components of social learning. The first is that there needs to be a demonstrable change in individuals involved, which can be a surface level or deeper level change. The second requires situating the change “beyond the individual to become situated within wider social units or communities of practice within society” (M. Reed et al., 2010, p. 5). Social learning in this context would occur if an individual has come to a new or changed understanding, and this changed understanding is transmitted and becomes embedded in the broader network.

Cundill and Rodela (2012) reviewed social learning in resource management literature and found that in the case of collaborative management processes, social learning emerged as a theme as a result of multiple stakeholders being brought together. They also found that much of the literature focuses on two variations of social learning in resource management, whereby social learning results from both active experimentation and reflective practice, as well as deliberation between multiple stakeholders. Cundill and Rodela (2012) note further that both approaches are important, as the experimentation and reflective practice is needed to create feedback between managers and the ecosystem, while the deliberative approach pays attention to social challenges and governance issues.

Single, double and multi-loop learning frames provide a helpful means of categorizing what type of learning is occurring, by describing the different learning-cycles that might be occurring. Single-loop learning is described as the learning that occurs when “trying to correct for an unacceptable outcome or result” by adopting different tactics and applying different skills (Medema et al., 2014, p. 27). Single-loop learning occurs through doing or experimentation. Double-loop learning reflects on the underlying assumptions and rules and whether they need to be changed (2014). Single and double-loop learning, in the context of natural resource management, help stakeholders better understand their actions and their outcomes. Triple-loop learning, or meta-learning, is the process by which stakeholders reflect and understand the ways in which they learn.

Social learning is an important consideration in my study because it describes a process through which different forms of knowledge might be brought together, and through which

knowledge might be produced. Recent studies have shown that social learning in community forests in BC can lead to sustainable outcomes (Assuah, 2013), but can also contribute to an increasing professionalization of community forest management (Egunyu et al., 2016).

Questions remain about how social learning influences and impacts forest governance and particularly whether the sorts of interactions are occurring among participants that are resulting in new thinking on how CFs can be managed.

2.7 Environmentality

Agrawal (2005) writes about forest management in India where decision-making had been handed off from the government to local communities. Agrawal highlights how participation in this “intimate government” transformed the community members participating in the management of the forest. Agrawal uses the term “environmentality” as a “framework of understanding in which technologies of self and power are involved in the creation of new subjects concerned for the environment” (2005, p. 161). Environmentality finds its basis in the Foucauldian concept of governmentality.

Governmentality was developed by Foucault in the 1970s to understand “the broad sense of techniques and procedures for directing human behavior” (Foucault 1997, p. 82). This has often been described as the art of government, which Foucault traced back to the 16th century when western societies shifted away from sovereign government over territory and individuals, to government focused on populations (Foucault, 1991). The health of populations became the central concern for government, as it was intertwined with agricultural and industrial production and served as justification for the necessity of governments and public

institutions (Foucault, 1979; Luke, 1995). Foucault uses the term 'biopower' to articulate the form of power "that seeks not merely to impose sovereign will upon a collection of subjects, but instead to legitimate authority through the claim that governance serves to enhance the health and vitality of the subject 'population'" (Fletcher p. 175).

The management of populations was characterized by Foucault's art of government, the "conduct of conduct", which uses a variety of means, techniques, strategies and forms of knowledge to produce subjects who self-regulate and act in a way that aligns with the rationality of government (Dean, 2010; Foucault, 1991; Rutherford, 2007). The rationality of government (governmentality) describes the systematic reasoning, calculation and means of responding to a problem (Dean, 2010, p. 24). Governing the population is only possible through changes to individuals and individual behaviors (Agrawal, 2006). Governments did this by bringing "life and its mechanisms into the realm of explicit calculations" (Foucault, 1979, p. 143). Calculative procedures (such as censuses, fertility rates, agricultural yields, etc.) became central to governing populations because "it was necessary to know that which was to be governed, and to govern in the light of that knowledge" (Rose, Malley, & Valverde, 2006, p. 87). Essential to this calculation is the role of individuals and their relations to each other and to "things"; thus individuals remain central to the aims of governance (Foucault, 1991, p. 93). Making visible the relations and ordering of "things" is then a way to generate new rationalities of government that encompass those "things" (Malette, 2009).

Agrawal (2006) describes that studies of governmentality have the goal "to understand and describe how modern forms of power and regulation achieve their full effects not by forcing

people toward state-mandated goals but by turning them into accomplices” (pp. 216–217). Essential to these analyses of governmentality is the recognition that the creation of these subjectivities is a result of decentralized power; the ensemble of institutions, technologies, discourses, calculations and procedures that occur at all levels in society (Foucault, 1991; Laforge et al., 2016; Winkel, 2012). Agrawal (2006) notes that the attention to the varied “techniques, forms and representations of knowledge” of governance is an important component of a governmentality analysis (p. 224).

Dean (2010) identifies four dimensions of analysis that attempts to understand the assemblage of governmental rationality: 1) attention to “fields of visibility of government,” the ways of seeing, hiding and perceiving (p. 41); 2) the “technical aspect of government,” “the means, mechanisms, procedures, instruments, tactics, techniques, technologies and vocabularies” through which rule and authority is accomplished (p. 42); 3) the production of truth, “the forms of knowledge that arise from and inform the activity of governing” (p. 42); and 4) the formation of identities and subjectivities.

Foucault’s governmentality is a useful lens for considering environmental governance because of its potential for “analyzing the production and circulation of knowledge, technologies, and rationalities of government which appeal to notions of ‘nature’” (Malette, 2009, p. 225). One way to examine this is by expanding Foucault’s biopolitics to include all life, whereby the health of a national population can be shaped and managed by considering the conditions of the environment (Darier, 1999; Rutherford, 2007). This is an extension of Foucault’s consideration of individuals relationship to “things” which he describes as “wealth,

resources, means of subsistence, the territory with its specific qualities, climate, irrigation, fertility, etc.” (Foucault, 1991, p. 93). As such, nature, or the environment, becomes a site that is acted upon by governmental rationalities. It is possible to use Dean’s (2010) four dimensions of governmentality to organize some of the literature focused on environmentality or eco-governmentality (Winkel, 2012).

2.7.1 Fields of Visibility

Braun (1997, 2002) describes the ways in which ‘nature’ and the British Columbia forest is constructed as an entity separate from culture, a formation that works to conceal colonialism. Luke (1996) identifies that ‘nature’ is ascribed a historically and cultural contingent meaning by humans. Agrawal (2006) highlights a discursive belief that “nature is an entity discrete from humans and endangered by reckless human actions”, which leads him to the conclusion that nature needs to, and can, be protected through “careful government” (p. 201). Baldwin (2003) highlights the way forests in the United States were mapped, thus making them visible, bringing them into the realm of calculation, and rendering them as objects of control by scientific means. Winkel (2012) also uses the example of maps that plot biodiversity while obscuring local populations to illustrate “fields of visibility”. These examples from the environmentality literature point to different ways that the environment is perceived or made known in order to bring it within the calculative procedures of governmental rationalities, and thereby enabling the exertion of control over the environment.

2.7.2 Techniques of Government

While the environmentality literature dedicates significant attention to the techniques of government, it is worth highlighting a few particularly relevant examples. Baldwin (2003)

describes sustainable forest management as a discourse and technology of a market based environmentalism. From the mapping of forests that brought forests into the realm of calculation, forests became an object that can be sustainably managed. One of the main techniques for implementing sustainable forest management is through certification by the Forest Stewardship Council (FSC), which relies on profitability through marketability to ensure forests are managed sustainably. Similarly, Goldman (2001) describes how specific workshops and training mechanisms are used by the World Bank to teach “green” market-based discourse and practice to Laotians in order to pursue a natural resource development.

Peyton and Franks (2015) highlight the environmental governance strategy of the Canadian Conservative federal government under Stephen Harper. This technique produced Canadian environmental subjects that were disposed to approve of resource extraction, which was achieved through a variety of tactics of this governmentality such as: “totalizing discourses designed to amalgamate environment and resources within the economy; manipulations of legislative and regulatory apparatuses to favour extractive potential; the management of consent for the purpose of securing certainty over territory; and the promotion of a reductive post-politics that links environmental utility with desired social progress” (p. 455). The strategies of governmentality employed by the Canadian Conservative government shows the variety and breadth of tactics and discourses pursued in order to produce and secure the environment to its resource extractive potential.

The varying techniques, strategies and tactics described in these examples provide some insight into the character of different environmentalities by identifying the ways that they are

employed to produce particular environmental subjects and in that way shape environmental outcomes.

2.7.3 Production of Truth

Luke (1996, 2003) describes the production of 'eco-knowledge', which is a result of the greening of universities, which provides the basis for modern governmentality. Luke identifies how the new generation of resource managers graduating from higher education are shaped by and produce particular forms of eco-knowledge. Luke (1995) suggests that this eco-knowledge "might be reinterpreted as efforts to generate systems of 'geo-power' over, but also within and through, Nature for the governance of modern economies and societies" (p. 57). Bridge and Perrault (2009) build on Luke in describing the production of environmental knowledge and calculative procedures that in turn generate political effects. Braun (2002, 2004) and Baldwin (2003) identify the way that forest politics in Canada privilege scientific, technical language about sustainable forest management, which "privileges corporate managerialism to the exclusion of indigenous peoples' history in discussions about forest futures" (Baldwin, 2003, p. 214). Goldman (2001) identifies how the World Bank adopted a neoliberal rationality which, using scientific techniques, grades the qualities of Laos' resources and territories, and formed the basis for the environmentally sustainable development pursued there. These examples indicate the way that knowledge production is an important way that environmentalities are reproduced and are able to enforce particular governance arrangements.

2.7.4 Formation of Subjects

Governmentality, and indeed environmentality, is predicated on the idea of shaping and forming the conduct of individuals (Foucault, 1991; Malette, 2009). Agrawal (2005, 2006)

describes how community members in Kumoan, India were formed as environmental subjects (people who care about the environment), because of their participation in the regulation of forests. Birkenholtz (2009; 2015) builds off of Agrawal's work to understand how the state has tried to make willing subjects of a neoliberal groundwater conservation in Rajasthan, India, and how the multiple subjectivities of farmers has led to resistance to these efforts. Goldman (2005) highlights the ways in which Laotians are formed into experts of sustainable development, who then become agents of the World Bank's neoliberal projects and policies. Luke (1996) describes how university programs generate various articulations of "eco-knowledge" which leads to the production of students who have learned to see the environment and resources as objects to be managed, as well as a means of managing society and the economy. Through this eco-knowledge, Nature or the environment can be managed to produce material goods, ecosystem services, and/or be conserved by being managed appropriately. Environmentalities seek to develop self-conducting or willing environmental subjects as means to produce and maintain a particular social order. As such, identifying the ways environmental subjects are formed provides insight into the particular environmentalities that are acting on individuals.

2.7.5 Environmentalities

It should be noted that this literature is not describing environmentality as a particular kind of governmentality, but rather environmentality as Agrawal describes; "a specific optic for analyzing environmental politics instead of denoting a particular form of it" (p. 226). This means that there are multiple forms of environmentalities, and that they are dependent upon the "characteristics of the elements constituting" them (Agrawal, 2006, p. 226). Fletcher (2010)

identifies a typology of four main environmentalities that are applied to conservation. The first is disciplinary environmentality, which typically follows from the government that uses disciplining tactics to produce the right disposition. The second is neoliberal environmentality, which relies on the disciplining governmentality to produce rational economic actors who can then be shaped by incentives and the profit motive. Third is sovereign environmentality, which uses protected areas to preserve resources, and fourth is 'truth' environmentality, which can be seen in the work of deep ecologists or indigenous peoples shaped by traditional ecological knowledge to interact with the resources in different ways. Each of these environmentalities relies on knowledge production to guide their rationalities. This means that these differing rationalities are contingent on the knowledge being produced, and the techniques, tactics and programs that result.

2.7.6 Critiques of Environmentality

Rutherford (2007) identifies a criticism of the use of governmentality analyses whereby "the programmes, policies, practices and techniques of rule interrogated by many scholars often appear as completed projects" (p. 300). It is important to recognize that governmentalities are ongoing practices, not an outcome of a particular program. This criticism is based on notions that governmentalities are discrete, complete projects that are either enacted fully or not at all. Rutherford notes that this critique misses the fact that governing is always "contested engagement" and does not emerge as a fully realized project but is developed iteratively and over time (p. 300). Dean also describes governmentality as "a mixed substance and one that only works when alloyed with others" (Dean, 1999, p. 7). This is why Fletcher (2010) notes that the different environmentalities he identifies interact with and act

on subjects simultaneously and in different ways, which produces different outcomes and environmental subjects. Winkel (2012) questions the relevance of governmentality, given the findings that governmentalities “are sometimes contradicted by resistant social behaviour or, more broadly, a ‘material’ reality” (p. 90). However, Birkenholtz (2009; 2015) in his study of groundwater governmentality identifies how resistant behaviour may be linked to the multiple subjectivities of individuals.

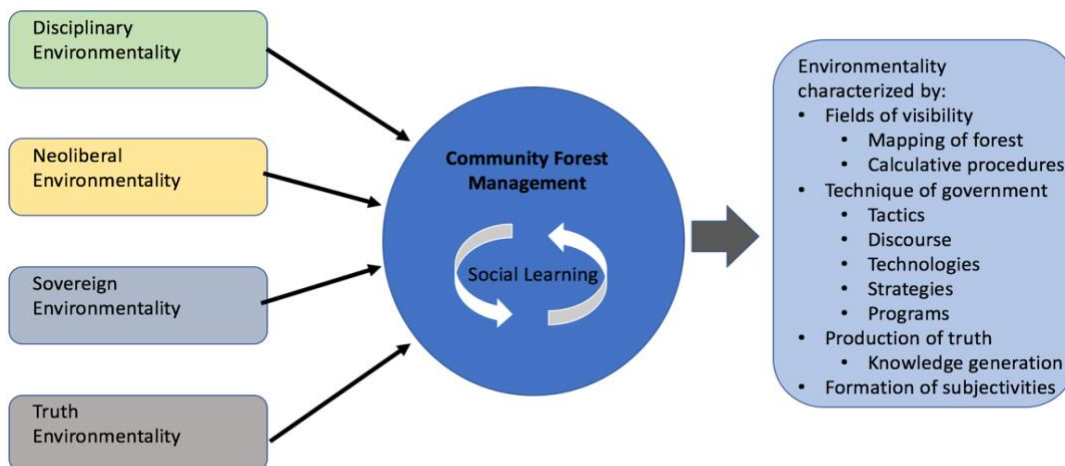
A common critique of Foucault, is that his work tends to eliminate individual agency, as individuals are products of diffused power throughout the social body (Malette, 2009). Resistance is deemed overwhelmingly difficult, to the point where governmentality analyses result in a kind of paralysis (Rutherford, 2007). Fletcher (2010) and Malette (2009) highlight that Foucault was interested in emancipation, and that this is possible “by introducing the historical, contingent and humanly invented existence of varied and multiple forms of rationalities of government” (Malette, 2009, p. 225). Rutherford (2007) identifies the need for more governmentality studies to critique present rationalities and construct counter narratives. She describes this as the most compelling aspect of Foucauldian analysis; “if things are made rather than found, then the possibility exists for them to be unmade, or made differently” (p. 305). Fletcher identifies the potential for what he describes as a “liberation environmentality” based on this participatory framework (Fletcher, 2010).

2.8 Chapter Summary

Figure 1 represents the frame that I developed to inform my study on community forests. An environmentality lens provides a conceptualization through which I might

investigate the different rationalities (characterized by fields of visibility, techniques of government, the production of truth and the formation of subjectivities) acting on community forests. In my study, I will consider social learning a key element in the production of knowledge, which can inform the particular rationality that might emerge at each community forest. With the understanding that environmentalities are never applied as discrete and complete projects, but are rather historically and culturally contingent, with Fletcher (2017) noting that environmental managers often operationalize multiple strategies simultaneously. I intend to look at the type of rationality that might emerge from community forest management strategies, tactics and knowledge production. The calculative procedures, actions, technologies, discourse and forms of knowledge that are used by community members might be indicative of environmentalities that are acting upon community forests. Analyzing these elements might provide insights into whether community forestry, as practiced in BC, produces its own distinct environmental rationality, or whether it is characterized by governmental/industrial/neoliberal rationalities.

Figure 1: Conceptual Framework



This framework has emerged from the literature review. This structure signals a particular environmentality that has shaped forestry in BC. I then sought to show how varied critics of the industrial forest governance model, while often lumped together as a homogenous group, might actually represent a variety of environmentalities, then coalesced around an alternative collaborative forest governance model; community forestry.

Community forestry (as a particular form of collaborative governance) through decentralization and devolvement, invites participation and has the potential to enable sustainable forest management through local control of community forests and the benefits the benefits derived from them. Social learning is posited as a key element of community-based management and collaborative governance because of its promise in producing new knowledge and leading to iterative improvements to forest management, though its role in shaping governance is underexplored. While a community forestry governance model has been implemented in BC, whether this represents a true alternative governance model to the centralized industrial model is being questioned. Eguny et al. (2016) suggests for example, that social learning in the Harrop-Procter Community Forest has led to a professionalized forestry operation resembling industrial forestry. The limited devolvement and decentralization of responsibility and authority to community forests confirms Arts' (2014) observations that "decentralisation of forest management is not so much the transfer of authority from the government to local authorities, but 'control at a distance' ..., which tends to reaffirm power relations and structures instead of changing them", while community participation is about "the shaping of environmentally responsible subjects and the creation of mutual consent around local forestry problems and objectives" (p. 21). These questions about the community

forest model in British Columbia point to the emergent quality of this governance arrangement and suggests that further consideration of this governance is warranted.

Chapter 3: Research Methodology

3.1 Qualitative Case Study Strategy of Inquiry

For the purpose of this research, I examined a case study using a qualitative research approach. At its core, a case study design is a thorough examination of “a single instance or small number of instances of a phenomenon” for the purpose of understanding the phenomenon or other instances of that phenomenon (Baxter, 2010, p. 81). The type of phenomenon being researched using a case study is often a process, organization, place or event (Baxter, 2010; Creswell, 2013). A qualitative case study seeks to understand this phenomenon through the knowledge of people who have experienced or observed the phenomenon. In my research, the phenomenon (community forest governance) is a process that is best examined in a real-life context. This fits with a case study design, because it specifically focuses on a natural situation, rather than relying on created conditions or an experimental design (Cousin, 2005; Creswell, 2013).

As Creswell (2013a) identifies, when it comes to the intent of a case study, there are three variations: “the single instrumental case study, the collective or multiple case study, and the intrinsic case study” (p. 99). The single instrumental case study identifies the phenomenon in question, and then selects an example of that phenomenon that exists within defined parameters to study the phenomenon. Finally, the intrinsic case study design focuses on a particularly unique manifestation of a particular phenomenon, with the purpose being to examine the case and its distinctiveness. A single instrumental case study was used to suit my purposes, as I am more interested in community forest governance as a phenomenon rather than a particular unique instance of community forest governance. This selection means that

the issue of governance will be the dominant focus of my study, rather than a particular exceptional case (Stake, 1995).

While the issue of governance will be the dominant issue I focus on, the case study design allowed me to develop a detailed and holistic understanding, or “thick description” of the case (Cousin, 2005, p. 424). This is important because the context, relationships, and perceptions may influence the manifestation of community forest governance in the selected case. For this reason, case studies are used to address descriptive (“what?”) and explanatory (“how?”, “why?”) research questions (Yin, 2012). By examining a particular case these questions can be examined in great depth and specificity.

While the specificity and contextual nature of a case study design might be considered a strength for testing and developing theory, it is simultaneously the grounds for one of the most significant critiques of case study research design: the lack of generalizability (Baxter, 2010; Creswell, 2013). The bounded cases and in-depth look at the contextual and relationship dependent character of a phenomenon means that research conclusions are considered case specific, rather than being a generalizable theory. Researchers using case study designs typically avoid generalizing, because of the way a phenomenon is embedded within the context and relationships of the particular case (Creswell, 2013).

Baxter (2010) suggests that this criticism is overstated, and that case studies are able to achieve a high level of transferability, the extent to which findings in one case can be extended to other cases of the phenomenon. Transferability can be accomplished through careful case selection, and the creation of useful theory that strikes a balance between being too abstract

and too case-specific (Baxter, 2010). This transferability can be tested somewhat, by selecting a multiple case study, testing the findings across multiple cases, or by replicating a single case study using a different case.

Ultimately, the strength of a case study design rests upon a deep and holistic understanding of the case, which will determine the robustness of the findings. I examined a case of community forest governance with a focus on understanding it in its real-life context and as it is experienced by a variety of people. This shaped my approach and the methods that I utilized to conduct the research.

3.2 Selecting A Case Study

For Creswell (2013a), the selection of the case marks the beginning of the research. In identifying the case, I needed to clearly identify and set the boundaries of the case. For the purpose of my research, I focused on a community forest in British Columbia, because of its established Community Forest Agreement program.

My criteria for case study selection include:

1. An established collaborative governance structure, indicated by a large number of owners, partners or shareholders participating.
2. An administrative authority that provides opportunities for broader community to participate in forest governance and management.
3. Operation for at least 5 years, with a preference for a longer lifespan.
4. A variety of resource users accessing forest.
5. Availability of reports, meeting minutes and other relevant documentation.

A number of potential case study sites have been identified that meet these criteria, as identified in Appendix 1. Kaslo and District Community Forest Society (KDCFS) was selected because it met the aforementioned criteria. Kaslo and District Community Forest Society is operated as non-profit society, which allows for community residents to become members of the society and participate in the direction of the forest. As a result of this broader public participation this community forest is fairly transparent and provide historical minutes, reports and updates on its website, which made public involvement in CF and document review easier. KDCFS is one of the first community forests started under the CFA tenure system, being one of the original pilot projects thereby meeting the longer lifespan criteria point. A more detailed description of the KDCFS can be found in Chapter 4.

3.3 Data Collection

To develop the thick description, I employed a variety of data collection procedures to gather evidence from multiple sources. Having multiple sources of evidence is critical for a case study, in order to triangulate and identify key findings (Creswell, 2013; Yin, 2012). Primary sources of information relied on collection procedures such as document/record review, interviews, and participant observation (Baxter, 2010; Creswell, 2013; Gillham, 2000). These multiple sources of evidence are needed to provide a deep understanding of the case.

3.3.1 Document Analysis

Some document analysis was completed prior to going into the field. First, I conducted a document analysis of the short list of prospective case studies to provide a more in depth understanding of how well they met the case study selection criteria. I reviewed community applications for a CFA, board meeting minutes and annual reports in order to build an

understanding of the community forest's values, practices and how these values and practices match with the community forest's outcomes. Fletcher (2017) has suggested that future environmental studies might focus on the gap between "vision" and "execution" in environmental governance. This document analysis helped shape my conceptual framework for understanding the community's environmental from vision through to execution. The types of documents publicly available for KDCFS included: guiding principles, forest stewardship plans, the community forest agreement, maps, logging reports, financial reports, policies, and board minutes.

3.3.2 Semi-structured interviews

I used semi-structured interviews as the primary method of data gathering, as I aimed to uncover insights into how different individuals interact and participate in the governance of the community forest and should provide insights into the influence that participation has on these individuals.

Interviewing "is a data-gathering method in which there is a spoken exchange of information" (Dunn, 2005, p. 79). Dunn identifies four main reasons to use interviews as a research method: 1. To fill in gaps of knowledge left by other methods; 2. "to investigate complex behaviours and motivations" (p. 80); 3. "to collect a diversity of meaning, opinions and experiences" (p. 80); 4. Interviews empower and give a voice to informants to share their own experiences. Semi-structured interviews use an interview guide to ensure that research objectives are addressed in an interview, while also maintaining flexibility to allow for emergent themes to come out in the interview.

The semi-structured interview schedule I designed allowed me to gather information and perceptions about the environmental rationalities influencing the community forest and its stakeholders. I designed the questions (Appendix A) to provide insights into the discourses, practices, techniques, etc. that informants and, by extension, the community forest employs. I selected informants based either on their direct engagement in management, or how directly they have been affected by the management of the community forest. 22 interviews were conducted, 21 were conducted in face-to-face interviews with participants, while one was completed over telephone. All interviews were recorded, and notes were taken during the interview. Participants interviewed included: present and past KDCFS board members, present and former employees (management) of the community forest, society members, a regional government official, and neighboring woodlot owners. Many of the individuals interviewed have interacted with the community forest in different ways, for example as a board member and also as a neighbouring landowner or were board members but also had interests as a member of a recreation group.

3.3.3 Focus Groups

While focus groups had initially been planned as a research method initially, through engagement with the KDCFS it was determined that given conflicts (often personal in nature) surrounding the KDCFS there was a risk that focus groups would not produce reliable information and cause additional conflict. Therefore, I did not pursue focus groups for this research.

3.3.4 Participant Observation

Participation observation was limited to a short forest tour with one of the co-managers and my attendance of a KDCFS open house that focused on the newly completed Forest Stewardship Plan and planning around wildland urban interface (wildfire mitigation) work that was being planned adjacent to the Village of Kaslo. The open house provided an opportunity for me to see how the co-managers and board interacted with society members, government officials and other interested community members.

3.4 Data Analysis

Essential to the application of my data collection methods was the need to analyze evidence as it is collected. This ongoing analysis was necessary to verify different data sources, and identify different themes and new sources of data (Cousin, 2005; Yin, 2012). Following the completion of the research all interviews were transcribed and then coded using NVivo. NVivo allowed me to sort and arrange my data for analysis. Themes emerged through this coding process and my review of the data based on my objectives and the literature that I reviewed.

Chapter 4: Kaslo and District Community Forest Society

4.1 Introduction

The Kaslo and District Community Forest Society (KDCFS) was selected as the case study for this research. The KDCFS was granted one of the first community forest licenses in British Columbia in 1996. In its current state, it has an area-based tenure in the Regional District of Central Kootenay (RDCK), largely located around the village of Kaslo, with an annual allowable cut of 25,000 m³. It is a society governed by a board made up of nine members, with a staff of three people working part time; a Registered Professional Forester (RPF), a silviculturist, and a bookkeeper. The KDCFS made the transition from a physical office to a virtual one in 2017, when the present management team (the RPF and silviculturist) were hired. At present, the revenues generated by the community forest are used to run its operations, meet its silviculture obligations (including addressing a silviculture deficit), fund wildfire preparedness projects, and feed into a legacy reserve. In the past, money has been used to fund different community projects through grants.

This chapter provides an overview of the history of the Kaslo and District Community Forest Society (KDCFS) and its governance and management structures. A focus of this chapter will be to look at the way different visions have been represented in the community forest over time and how that has impacted the community forest governance over time.

Themes: community forest governance structure, management. Sub-themes: decision making, challenges, benefits, vision

4.2 History of KDCFS Governance

4.2.1 KART - Beginnings

The origin of the KDCFS differs from other community forests in British Columbia, as it was one of the first in the province. As such, it did not need to ‘compete’ with other community forests for the limited number of available tenures. Participants identified a government official, Corky Evans, who suggested that a community forest license might be a possibility for the community. In 1995, the Kaslo and Area Round Table (KART), a community-based resource advisory committee, submitted an application and received the original community forest license. The KART was a pre-existing advisory committee with the stated purpose of focusing on “issues of land use, resource management and environmental integrity” through a multi-stakeholder and consensus-based decision-making process (Mulkey, 1997, p. 145). The KART was largely interested in providing forestry planning recommendations to government and tenure holders on the behalf of a wide variety of constituencies. The constituencies or sectors that KART sought to represent included First Nations, primary forest manufacturers, environment, watersheds, mining, Chamber of Commerce, motorized and non-motorized recreation, local government, agriculture, youth, seniors, economic development, tourism, Fish and Wildlife, local contractors, Share BC and the provincial government (Mulkey, 1997).

Through KART, the community forest planning committee developed the model for the community forest, which was to incorporate an independent society whose board would have final decision-making capacity over the community forest license. The proposal for incorporating the Kaslo and District Community Forest Society in order to manage the

community forest license, was accompanied by a letter. In the letter, the stated purpose of the society was to “largely be directed to philanthropic endeavours, including civic enhancement of the Kaslo area” (Mulkey, 1997, p. 156).

The society that was proposed, and ultimately formed, had a closed membership of 7-10 individuals who made up the board. These were to be the only members, unless they were “replaced by group decision” (Mulkey, 1997, p. 157). The board was originally set up with 9 board members: Seven members at large, selected by the KART community forest planning committee; One member selected by the Regional District of Central Kootenay (RDCK); and One member selected by the Kaslo Village Council. Following from the KART model, the KDCFS adopted a consensus decision-making process.

The newly formed KDCFS applied for, and was granted, a non-replaceable industrial forest license. This was a 15 year volume-based tenure with an annual allowable cut (AAC) of 10,000 m³. The operating area of this tenure encompassed 6,100 hectares in the area around the Village of Kaslo. Originally, the intention was that a local mill had “right-of-first-refusal on a minimum of 50% of the volume of the license at fair market value” with the “remaining volume ... made available to local value-added operators” (Mulkey, 1997, p. 158).

The founding group, emerging out of the KART, were largely interested in pursuing a social forestry approach and tried to practice ‘soft touch’ forestry. The emphasis was placed on forestry practices that were seen to be different than the standard industrial forestry approach of using clear cuts for timber harvesting. Forest operations during this period were focused on selective logging and local economic benefits.

The initial group that got together...wanted to see forestry done differently. They saw it as an economic opportunity without a doubt. But they wanted to put local decisions in local hands. Participant 8

I was one of the first board members, when it first started. ... And it was based more on the board members who really felt, in my opinion, that they were going to change the way that basic forestry was done. Selective logging. Thinking that they could have a relationship with the local log buyers that would be profitable to them. And to some extent that did work out, that's no longer the case. Participant 12

When we first started [the community forest] we talked about integrating values and economic benefits as well as environmental stewardship. But how that gets measured out, it depends so much on the individuals who were there and the guy we had at the very beginning to do some layout. He did these little strips that was very, very light touch... Participant 18

4.2.2 Contentious history of KDCFS governance

As a result of legislative changes to the Community Forest Agreement program, the community forest license changed from a volume-based tenure to an area-based tenure. The process to start this shift began in 2004, and, after a probationary term, the new area-based forest license was granted in 2008. That license, which persists today, was a 99-year license that increased the AAC volume to 25,000 m³ per year, and gave exclusive harvesting rights to the society in a tenure of 34,945 hectares.

The changes to the forest license occurred during a prolonged and extremely contentious struggle over the governance and direction of the KDCFS. The early years of this conflict (roughly 2001-2010) had a formative impact on the KDCFS, and nearly every interview participant referenced this period of the community forest society's history.

Contention around the development and operation of the community forest was anticipated by the founding members of the KDCFS, as Susan Mulkey, the facilitator of the Kaslo

and Area “D” Community Forest Planning Committee, wrote in to the Kootenay Express in 1996: “The issue of forest management has historically been a focal point for division in our community. Through this process the group is required to seek, both objectively and with their hearts, a model that will contribute to the sustainability of our community and treasured local resources. The exercise we are engaged in seems at times less of an application for forest tenure and more of an exercise in community building” (Mulkey, 1997, p. 164).

The conflict around the KDCFS had a significant impact on the society, particularly in terms of its governance structure. This conflict was multifaceted, and often personal, with three interrelated themes rising to the top through interviews and the review of newspaper articles, letters to the editor, and in board and AGM minutes. The first theme was the perception that the original board was largely comprised of ‘environmentalists’ and that this board prioritized environmental concerns while excluding participation from members of the forestry industry. With forestry being a primary industry of the community, and many community members making their livelihoods from forestry, a perceived ‘environmentalist’ community forest board raised tensions.

Following this first dichotomy between ‘environmentalists’ and ‘loggers’, the community forest society was set-up with a closed membership, which received a significant amount of criticism. The closed society was perceived to be exclusionary, and not able to properly represent the communities within the tenure area. The undemocratic governance structure of the closed membership became a significant point of contention between the board and the broader community, and it allowed for concerns/allegations to be raised about corruption and

the overall legality of the society. A major push emerged for the society to open up its membership roll so that anyone could participate, and for elections to take place for board positions, as captured in the following:

The community forest as it was going for the first couple years begin to attract a certain amount of controversy... there was, I think, a perception that there wasn't enough representation of people in the industry. It was seen as a group of not necessarily tree-huggers, but people who didn't see the whole picture. And the whole picture includes the need for people to support themselves through logging and the money that comes to the community and so forth. And maybe these were seen to be too much on the environmental side of things. And I'm having a little trouble remembering exactly how it came about but there was a point where I think there was pressure from the community to say 'this should be opened up' and there should be elections and there should be the chance for other people to get on the community forest board, who would balance out the representation. Participant 6

Calls for the society to open up its membership were amplified by allegations of corruption, particularly regarding the lack of money generated by community forest operations being returned to the community. The original board was generally putting the money generated by the forest operations into a reserve fund. Allegations were made that the original board was keeping the profits for themselves.

... but lumber prices were quite high for a while and they were making really good money and they just put that aside as reserves, sort of for future tree planting or whatever. But a group in town, a more industrial-oriented sort of group sort of said 'well you got all this money that you don't really need. You know why aren't you giving it to the community? Why are you holding it?' And 'why do you guys get to run this whole thing anyway?' So, it was all sort of popular pressure.... And they came out with this phrase 'where's the money?' 'How come you guys are logging it should be making money, you are making money. We're not seeing any of it.' And so, they got the community kind of riled up and this group that was running it called the board. They weren't an elected board; they weren't a society. Participant 14

The opposition to the original board was largely led by members of the forestry industry in the Kaslo area. At this time timber prices were quite high, so forestry professionals were aware of how much money the community forest could be making if it were being operated like an industry timber claim. This was used as a case for both the allegations of corruption, and the assertion that the 'environmentalist' board was incapable of managing a timber claim. The "where is the money?" slogan was effectively used to galvanize support, to not only open up the community forest society membership, but to advocate for the election of forest industry professionals to the community forest board.

The KDCFS relented under public pressure, and at the 2002 Annual General Meeting, resolved to undertake the steps to become an Open Society. This resulted in opening up the membership roll so that any community member could pay an annual \$5 fee to become a society member, which would allow them to vote in board elections held at Annual General Meetings.

[T]here was this meeting in the school where honestly like 400 people showed up in a town of 1000, and pretty much forced the board to change the bylaws and open up the membership to anyone who wanted to be a membership. So basically, to lose the complete control that they had over the society and give it a lot more community input and control. And it was a really tense meeting and people were like, it was standing room only. ... So, from that day on, I think it was 2003, the board became an elected board by the membership. Participant 5

Under the pretext of knowing more about forestry, and the promise to return benefits to the community, a number of forestry industry individuals who were among the principal critics of the KDCFS were elected to the board. Some interview participants described this change positively, because it allowed for more broad participation by the community and

ultimately led to contribution of hundreds of thousands of dollars to community projects and organizations. It was also optimistically considered an opportunity for the 'two' sides, loggers and environmentalists, to hash out the direction of the community forest through board debate and discernment.

I remember logging contractors being on the board probably right from the beginning of the time I was on it, so I don't think I was there before they came on. So, I just saw it as a way that, 'let's have a debate.' We'll have representation from both groups, and we will try to come up with compromises. If there are going to be arguments let's have them in the board, and so on. Participant 6

Other participants described this change as an "overthrow", with the election of some of the industry-connected board members resulting from 'membership drives' at the local mill.

*With a society you have elections and an AGM for directors and what happened was 'the Barracudas', that was their nickname went on a membership drive. And structured it in such a way that members weren't just going to the society and signing up one at a time. There was a block of members who were signed up and then at the very last minute, those were presented en masse. It was a very calculated, very mean-spirited takeover. And these things happen in societies all the time, in fact they happen in corporations all the time. It's hard to defend against. The defence isn't by changing your bylaws. The defence is in the maturity of the organization and the ability to attract quality people to your board table so that you're not going to screw [the] people in the community. ... And keep in mind at the time when I moved here there were three sawmills up the lake, employing three or four hundred families depending on the shifts they had going. And now there's none and they were all shutting down in that period, in the late 90s. And so, there was fear, resentment and in some ways it was an easy story to tell that this community forest is taking your job away. I mean it was really that simple and that's a very compelling story. It's complete b***** but it's a very compelling story. Participant 8*

Part of the problem was they were behind in their cut. They were way behind in it. And the original board thought they could maybe cut a few trees to satisfy the stumpage for the province when you're obligated. There was a lot of ignorance on that board in terms of their obligation to the B.C. coffers. Anyway, we started cutting fir. Fir was high. It was a hundred dollars a meter. We started cutting that. And the money just

rolled in. You know? So, we brought the thing out of its, it was in a funk financially. Brought it out of that. And then we started giving away these large donations or grants to various clubs. A lot of, a lot of things took place. In the end, I think it was \$725,000 in the two and a half, three years that was given away. Well, the people who thought that forestry should not be making a profit. I had one of the former board guys say to me, 'If it's making a profit then you're not doing good forestry.' Now that's an ignorant thing to say. You know why would you bother to go out in and cut a tree down if you're not going to make a nickel out of it. Participant 21

With the abrupt opening of the society membership and the election of industry-connected board members, the conflict around the community forest began in earnest in board meetings, as the 'environmentalists' battled with the 'loggers' for control over the community forest. One notable example of this conflict can be noted in the agenda of a 2003 special General Meeting called to address the "Legitimacy of the Board and some of its members", "Perceived irregularities in accounting", "Operation of the Society in obvious disregard for the Act over a long period of time", and the "Fitness of [the board chair] to sit on the Board".

Board meetings were filmed and aired by a local television station, because they were contentious and therefore generated interest. Additionally, disagreements and conflicts within and around the community forest society were documented in the local paper. Board members representing different constituencies would call their own special members meetings, to try and pass bylaws and rulings to constrain actions taken by the board.

I mean that's been the major history of our organization. We've had quite a bit of conflict in the past. The board works well together now but there are times...you could simplify it to being the loggers versus the environmentalists. And you got to find the right balance and the board has gone back and forth over the years between looking at the forest just as a source of cash for the community and just run it industrially. And

then the other side sort of, 'let's have it for recreation and try and keep it for the future and do things way better than other people are doing.' Participant 14

The changes to the elected board resulted in changes to the board decision-making process. Consensus based decision-making, that was originally brought in from the KART era, was replaced with Robert's Rules of Order. This decision-making process involves a board member making a motion, another member seconding it, and then requiring a vote to pass the motion. This allowed for a majority group to determine the direction of the community forest. As a result, when the 'loggers' gained control of the community forest board, they took a more hands-on role in determining the management decisions of the community forest by giving direct instructions to the management team. This period was characterized by more conventional logging practices, with an eye to increasing revenues.

Well a few of us, we all worked in the bush...a lot of times it was after our board meetings up at the bar... we would come to some conclusion... that's how a lot of decisions were brought to the next board meeting. Participant 21

However, as was detailed in the local paper *The Valley Voice*, Robert's Rules was also used by the 'environmentalist' group to challenge agendas pursued by the 'logger' controlled board:

"Scarlett repeated that he had challenged the chair's ruling. Andy Shadrack got up, a copy of Robert's Rules of Order in hand, and told Cockrell that he had to deal with the challenge."

"Mayhem at Kaslo Community Forest Annual General Meeting", Jan McMurray, The Valley Voice Volume 14, Number 7 April 13, 2005.

After a few years of the 'logger' dominated board, 'environmentalists' in the community organized, and this facilitated the removal of some of the 'logger' board members, and the election of more 'environmentalists'. This was not a smooth transition, and conflict continued to be heated and personal. The tensions in the community were so heated, that at

one special Annual General Meeting, which brought in hundreds of community members (largely in support of the 'environmentalist' group), the board hired security guards to maintain order at the meeting. This was viewed by many to be an intimidation tactic to maintain the authority of the 'logger'-led board.

*...there was one AGM where the people who were antagonistic... and some of them were board members, decided that they would hire a security team from Trail. They brought these guys out, these big burly guys, who were there to keep the order. As though the people who are the tree-huggers, or whatever you want to call us, were somehow going to cause disruption... it was their way of saying we're going to get what we want, we're going to enforce it, and we're not going to take your b*****, you know. It was an intimidation tactic. So anyhow that's how bad things got.*
Participant 6

Interviews revealed that this dramatic AGM clearly had a lasting impact on individuals who have participated in the community forest, as it was referenced by numerous interview participants both in the interviews and outside of the interviews. This incident is indicative of the height of the conflict that has occurred within the KDCFS, as it shows the polarization and the various ways that different groups have sought to gain, or maintain, control of the direction of the community forest.

The contentiousness of the community forest has remained over the years, but seems to have diminished from the period of the early 2000s. This has been attributed to the lack of money being generated by the community forest, and a broader downturn in the logging industry. As the income generated by the forest has been eroded (as will be discussed in the next chapter), there has been a decline in broader community interest in the community forest. While oscillation in the makeup of the board continues, the major changes to the KDCFS governance structure occurred during these previous, formative years.

4.3 Current Governance Structure of KDCFS

4.3.1 Board Structure

The current board structure remains a nine person, volunteer board. There continues to be seven elected positions, with board members serving two-year terms. About half of these positions are elected each year at the AGM through vote by the society membership. The officers of the board are elected by the directors at the first meeting following the AGM. One board member is appointed by the Regional District of Central Kootenay (RDCK), and one board member is appointed by the Village of Kaslo (VoK). Having appointees of the RDCK and VoK was an attempt to maintain arms-length governance and prevent the community forest from becoming simply an income stream for local government.

I think when it was originally set up it was recognized that the activities of the community forest may have significant implications for the village and for the regional district. And it was decided at that time, that one way to address that would be to have appointed positions, so they could put somebody on there. Participant 9

Society membership continues with an annual membership fee of \$5, which enables members to vote in board elections. The board is guided by the *Kaslo Community Forest Board Governance Policy* that was adopted in 2018. This policy details the roles and responsibilities of the board.

There is continued contention regarding the size and composition of the board. Some interview participants suggested there are too many board members, which in their opinion hampers the efficiency of the community forest decision-making process.

It's a nine member board... by the time you run a board meeting and then allow everybody to speak or have input, you've wasted too much time. It's just not a good functioning. So, people who have knowledge and want to get work done at a meeting its very difficult because things happen at a snail's pace. Participant 1

There's a lot of politics when you have a small community and a diverse board, especially one with nine on it....if you ever decide to put any recommendations in your thing tell them: no more than five directors on a board maximum. I don't care how big it is. Participant 20

A vote to reduce the board size was brought to the society membership at an AGM and was defeated. Interviewees indicated that this occurred because some insisted that a board of 9 is needed to allow for a diversity of people and perspectives to participate.

I think about having a balanced board there's things like gender representation, age representation, geographic representation, political representation, you know, environmental and industrial forester. So, with a smaller board you just can't have as broad of spectrum. Participant 9

The two appointed positions were identified by interviewees as potentially problematic for two reasons; the appointed board members are unaccountable to the broader membership, and these positions create a strange relationship with the local governments that they represent (RDCK and VoK).

So, there's two direct appointments. So that circumvents the board and democracy, and these appointees are supposed to somehow report back to the mayor and the RDCK head. To what end? Those people have no control over the community forest.

Participant 11

Other participants were pleased that the appointed positions maintained a connection to the two political bodies. In recent community forest applications, local governments can apply to own and operate a community forest. This was criticized as a mechanism that relegates community forests to just another revenue stream for local government, as opposed to a truly community-based governance setup.

So, we worked with that committee for six months and came up with the society model with a seat for the regional district and for the village to each appoint a representative.

So, an acknowledgement that a linkage was a good idea but to have it really be community-based. I think in a society model is greater democracy. Participant 18

4.3.2 Decision Making

Unsurprisingly (given the history outlined above), the decision-making processes of the KDCFS has changed significantly over time, with different iterations of the community forest making decisions in different ways. In its current iteration, the board takes a more policy-focused role, whereby the emphasis is on approval of policies, budgets, hiring, and oversight of the management team. The management team is then responsible for making operational decisions, as will be detailed below. This contrasts to older iterations, which featured a greater number of forest industry professionals on the board, who were more likely to take a hands-on approach to forest management decisions. As described above in the initial iteration of the KDCFS, the board made decisions based on a consensus model. When the society was opened up and new board members took control, this was changed to “Robert’s Rules”, where motions are forwarded, seconded and passed on a vote. Board decisions are currently still made based on the principle of quorum, with a majority of the directors determining the outcome of any board decisions (Governance Policy pg. 9).

Gosh, it's a standard society with an elected board and that hires a manager. And we were, we were again gone through stages where the board kind of did a lot of micromanaging themselves and you end up with a, sometimes the people who are most interested in in forestry in general are people who have a background of forestry. They may be loggers or were loggers or retired loggers or whatever. So, they're still kind of keen on what's happening, and they can't help but sort of stick their noses in and say you know 'I know about this valley over here and that's good and why aren't you over there?' So, we've tried to back away from that [and] become just a governance board who hires a general manager and leave it up to our managers to make all the day-to-day decisions. And not just day-to-day but you know somewhat long term planning and stuff. So, we're trying to become sort of what, make it easier on ourselves in a way, so we're not having to go around and walk around every cut block

to second guess what our managers are doing and try. But as I say, some people like doing that if they got an industrial background but that right now it seems like we're more of wanting to leave that up to the experts. Participant 14

According to interviews and meeting minutes, the nine-member board focuses on providing general oversight, policy development and approval of budgets. They meet on a monthly basis, receive reports from the management team, and decide on issues requiring board oversight.

The areas of board responsibility as described in KDCFS Board Governance Policy include:

- Strategy Determination
- Developing policies and procedures
- Selection of Management
- Monitoring and acting on direction and financials
- Reporting and Communication

The current management team, which is hired by the board, is responsible for making forest and society management decisions within the confines of the community forest's budget and plans. This management team is comprised of a Registered Professional Forester (RPF) and a Silviculturist, who also takes the lead on managing the society membership and outreach. This team has also hired a part-time bookkeeper and admin assistant.

As professionals, the management team is given significant latitude to plan forestry operations such as cut block layouts, roadbuilding, and silviculture. They take the overall strategic direction from the board but are required to meet government regulations and manage the various budgetary and liability restrictions. The way managers meet regulations is dependent upon the management team and their particular approach to forestry, so it is important that the board hires managers that will conduct operations in a way that is consistent with their overall strategy and vision. Because of this, there has been consistent

turnover, as different boards have different priorities, and different managers have different focuses, as reflected in the following.

The managers know what our aims are for a community forest. And luckily they agree, we've found a pair of managers who share our vision as opposed to our last forest manager. Which was basically a logger, he was a good logger, he knew all the rules, but he had no particular interest in going above and beyond and doing things better, Because this is how you log and that's what we'll do. Whereas this couple that we have now...have the same sort of ideals as the community forest has. Trying to make the forest healthy. Participant 14

4.4 Visions of KDCFS

The vision, or visions, of the KDCFS, as described by interview participants, offers a unique perspective into the governance direction of the community forest in its current iteration, and provides insight into how and why that has changed over time. The vision provides a general indication of the kind of forestry the board would like to practice, and so guides the management team as they conduct forest and society operations. The vision and values as described by former and current board members often varies somewhat from the stated values in the 2019 Policy Manual.

KDCFS mission statement: *“The Kaslo and District Community Forest Society will manage the diversity of values of the Community Forest in an ecologically responsible and fiscally accountable manner on behalf of the people of Kaslo and Area D.”*

Stated Values (Policy Manual 2019)

- Ethical and sustainable forestry practices
- Diverse forest resource development
- Local workforce recruitment opportunities
- Healthy community environment
- Protection of water quality
- Supportive and positive work relationships
- Gender equality and fairness

- Wildfire Safety

Present perceptions of the current iteration of the KDCFS vision follow logically from the broader goal and mission of community forestry in British Columbia, which (as described in Chapter 2), emphasises local control over nearby forests, so that communities will benefit directly from forestry. This is something many participants alluded to in describing the community forest's vision. Some of the perceived benefits identified by participants were clearly identified as economic benefits, either in terms of local job creation, or direct financial contributions from the community forest to community projects and organizations.

Well, the vision. I mean we do have the mission statement which I think is, it's sort of been fairly true running, running for the duration of the community forest. Maintain economic, economically or financially and ecologically functioning system for the benefit of Kaslo. Hopefully sustainable into the future to provide that basis of people being able to live here and doing well. Participant 13

Well I think everybody shared that, that same concept that local people, local values, local jobs, local benefits. Participant 18

What my interpretation of what I'd like to see a community forest be is that its recognizing the local importance of the area that's being logged. And managing it in a way that is not detrimental to the community and is for the benefit of the community. Participant 2

And so, for me it has to do with economics. Run a good tight ship and practice good forestry and that way the resource will be there in perpetuity and provide some economic impetus for the community of Kaslo. Participant 1

As described in Chapter 2, participants also perceived that local management likely leads to more sustainable management of the forest tenure. This often takes into account a variety of different values such as water, wildlife habitat and reforestation efforts.

The vision of the community forest? It's to...try to manage the forest sustainably for, not sure in perpetuity, but for least the next 10-15 years. So, we're trying to log our

AAC. Its set too high we figure, so we're trying to log a little bit less. Protect more water, more animal habitat than was previously done potentially. But we're moving more and more into people's viewscapes too and watershed. So, it's going to be, I think a little bit more public consultation. Participant 15

Well, provide employment, provide good management keep the community safe from fire and bad management and landslides. Pay attention to what's not safe up there. Those are the things I think are really the most important things. Look after water. What they can about keeping water clean, and to keep up to date with silviculture. Plant, plant, plant, plant, plant, and deal with the fire hazard. Participant 17

Well, first thing is a sustainable resource and, I guess, it's harvesting. You take from the forest and you put back. So, wherever you cut, you reforest, planting and silviculture. Participant 22

There's one version of it that's in the constitution which is something like this sustainable forest management respecting all users or something like that. And I think that's close to what the current vision is, it's to do sustainable forest management that respects wildlife, water, recreation and the community benefit from the forest. Participant 3

Documents and interviews indicate that the present vision has shifted to a more long-term vision. This has emphasized building long-term financial sustainability for the community forest by attempting to build a legacy fund and trying to build value-added projects into the community forest.

I do feel like the board's vision and management's vision is in long-term sustainability with how they're doing things. ...They very much are trying to engage the community for direction. And I think we've been seeing year to year plans with our current management... their intention when I see them brought to us, it's with the understanding that the actions of what they do or have now have impacts down the road. And so that to me is showing us that their vision is beyond just the immediate results of income or development. Participant 19

Competing Visions

I think it's just a massive competing group of people with multiple visions. Participant 11

The perceived long-term vision of the community forest is not a new vision for the community forest, as the original board also had a very conservative long-term vision to financial and environmental sustainability. Unsurprisingly, given the conflicts that have engulfed the KDCFS board, the KDCFS vision has been contested repeatedly. The result has been that the KDCFS has had multiple visions, often contradicting previous interpretations of the vision. The lack of a consistent vision through periods of conflict made it challenging for the community forest to proceed productively. This perception was made clear by a number of interview participants.

[P]robably my biggest take on those years on the board was the incredible diversity of visions and that were very hard to coalesce into something productive. Participant 20

Other interview participants identified the ways in which some boards have tried to establish a particular vision for the community forest, only for that vision to be disregarded by a subsequent board.

[O]ver time there's been some boards that have been interested in writing visions, and then there's been other boards that have had other interests, and whatever is written down there they did whatever their vision was. So, I'm not saying that's definitely not been the functionally operating vision for the community forest since its founding. It's absolutely not. It's been going back and forth between a small tenure of industrial forestry back to more of a community forest: all interests, all benefits, kind of perspective on the community. Participant 3

While the different visions were not consistently and clearly stated in official documents or at AGMs, these visions were clear in terms of the practice of forest management decision-making process. The direction that different boards usually took one of two forms; forest management that resembled industrial forestry in order to maximize profits that could be

returned to the community, or forest management that skewed towards selective logging and saving money for silviculture or a legacy fund.

[L]ooking at the land base as a whole with a sense of stewardship. And caring about the water and caring about fire interface and recreation, multiple values. I think there is a real sense of that now. There's some forward thinking. So that was the biggest detriment in the past it was the community forest, but it was trailer trash. It was just, they were just looking to get make the most money. Taking the industrial approach really and putting it on a community forest. Participant 18

Interview participants generally stated that the vision of the board primarily appeared as a binary choice between the goals of environmentalists and loggers. However, there have been additional interests and visions that are represented by the KDCFS. These alternative visions have often been apparent in the approaches of directors elected by various interest groups. Most notable of these has been the emphasis on recreation possibilities in the KDCFS tenure area.

And this is, you will find that there is a very big diversity of opinion... And it was all these factions just milling around and not competing with each other. Or, they were competing for direction. So, it was a hard thing for this community, when I was on the board, it was the direction that was the biggest issue. Some people didn't want a dime to go to the community. If you cut the trees down, we'll spend all the money replanting the forest. Well. If you go through a ton of work like that, you might as well let the government do it because they might plant them too. Other people wanted to put in hardwood forests that you could harvest in 60 years and that would be the community's legacy. Others, you know, wanted to put every dime into the legacy fund and again with a long, long range vision. There was a lot of fractious meetings trying to figure out how to do it. Participant 20

The result of the various competing visions over the years has been an inconsistent direction through which the community forest conducts its forestry management. This has been epitomized by frequent changes to the management team that is meant to make operational

decisions. Different managers are hired by different boards to try to bring a particular vision to fruition.

I'd say more is that when the board changes from time to time the makeup of the board and so it moves a bit between the loggers and environmentalists. And so, when it's heavy on the loggers side they don't like the manager that the previous board hires, so they fire them and hire a good logger and then the board swings the other way. We don't want to log, or we want a more environmentalist thing. Participant 14

Kaslo is a pretty political town. It all depends on the board. So, I know board members go and recruit like-minded board members and then they get on the board and then they don't like the manager. And then it goes in a big revolving circle. So, I think it can be sustainable depending on I guess, who's on the board and if the community at large or those individual factions approve of the managing of the community forest. Participant 15

So, board management is always evolving and kind of flexing type of thing as well. In terms of how much education you have to do. To the different members to bring them, to give them the knowledge to do what governance what they need to do. Participant 13

Interviewees indicated that another reason for the frequent change in management is that different boards have tried to prevent conflicts of interest. An example of this was one decision to refrain from hiring local logging contractors for management positions and attempting to prevent local loggers from being on the board. While this is partly a viable concern, it has also been used to maintain a particular board composition. And while the board has at times maintained a more 'environmentalist' composition, some participants identify this as resulting in a lack of forestry knowledge and expertise on the board level, which has hindered oversight of management. This period of limited management-oversight led to the hiring of managers that have later been found to be managing forestry operations in a way that was inconsistent with the board's vision.

Well for 3 or 4 years we were under contract with an RPF that was employed by a mill, and everything that was done during that time was to the benefit of the mill. There was nothing that was done that was not to benefit for Porcupine Wood Products.

Participant 7

Learnings from these experiences (as described in Chapter 7), coupled with a desire to implement a broader vision for the community forest, resulted in hiring the present management team. This evolution of the community forest vision, and perspective for the future, was described by one participant:

I'd say that it's taken a long time to shape itself. Some of the growing pains came from trying to define the vision. And there are members in the community who have a very industrial concept of forestry and they saw community forestry as a way to make money in the woods and distribute it. They saw the shareholders, the people you have to pay dividends to or wanted to pay dividends to, as the community. And they saw those dividends as being cash. They thought that that's how you benefit the community. You make money and then you give money away. Which is kind of an industrial model. And that their view didn't encompass a number of other issues, perspectives like the social issue, the environmental issue. They had no interest in that. And so, there was, over a period of years, some conflict trying to form the vision. And I think it has evolved to the point where it is... about much more than just cutting down trees and making money. Participant 9

4.5 Community Member Participation

4.5.1 Governance Role of Society Members

Society membership has waxed and waned throughout the life of the KDCFS, as suggested by interviewees and documents. It was originally limited to the founding members of the society, but once it was opened up for broader community participation, there were periods of high interest and involvement as well as periods with low engagement. Varied engagement levels often coincided with the fiscal health of the CF and forestry, as noted above.

Society membership's primary function is to elect members to the board of directors. Thus, engagement tended to be high during periods of struggle, when members are recruited to support the election of particular candidates for directorship. Interest has also been high amongst society membership when the society had significant amounts of money being directed towards community projects, or when forest operations might impinge upon a particular value (e.g., viewscales, recreation trails, watersheds) as captured in the following:

In some ways I want to say we have involved members. But I don't see membership, like society members actively engaging necessarily. Participant 19

I think there's a lot of interest groups that I'm not a part of, that really like what the community forest is doing because the roads create access for new trails. I mean that was another thing that came up at the open house the other day. There's a lot of different interest groups, people who like to ride their bikes in the forest and there's all these other things that they really liked about the community forest. People who do the Rails to Trails, the community forest widened a cross country ski trail for last winter. And there's a small group who's always upset. And there's another group that is always 'yay this is great.' I think it's a really challenging and complicated realm because people have so many different interests and what they want and what they like. So, it's never going to be 'everybody's happy'. It's impossible. Participant 3

Involving members of the community to shape the vision and decision-making of the community forest has been a significant mechanism for determining the makeup of the community forest board. Public pressure from the community led to opening up the membership for all. 'Environmentalist' mobilization contributed to some of the largest meetings held by the community forest, including the infamous AGM that featured security guards. At times, the society membership has been rallied to support different activities like recreation trails, or to support businessmen joining the board.

There were a few board members that were pretty active in recruiting new people or other people in the community that would break up the single vision that I think

seemed to be happening. And so, give it a bit more diversity with bringing the women onto the board but also different backgrounds. And experiences. And knowledge. And I think that's when the switch started to happen. But then of course it took 2 1/2 years or so. Then it was okay maybe looking at new management. Participant 19

Sometimes I phoned them. Sometimes I went door to door. I had a list of people and I said, 'Look here's the vision. Here's what's happening now. Here's what I'd like to see. You know, would you join?' It was only five dollars. 'Would you join and come and vote for this?' And most said, 'yes.' So, I won't say greenpeacers, but a couple of the groups that were against giving any money back, you know, had quite a few members. And, remember I mentioned in order, in a community there are little cliques and divisions. I just out hustled them. Period. Participant 20

Participants identified that engaging the society membership was an important mechanism for shaping the visions of the community forest. Some examples:

I think enough people in the community got involved in electing board members that they wanted to affect the vision and the direction of the community that the greater community wanted it to go. So, it's been a really bumpy ride I guess in terms of getting a vision. Participant 3

The members decide everything. So, if for example you've got, I'll call them 'greenpeacers,' if you have a group of 'greenpeacers' that are community members, members of the community forest. And they are voting, and they put names up to run on the board. So, they put like-minded people up and then they vote on it. So, a small picky group can have a profound effect on the vision and direction the board runs. Because very, very few, you've got two percent of the population voting for this business that's in seven figures and is supposed to benefit the community. You have two percent who are deciding who's going to be on that board and it's their slate of people that they put forward to run. Yes. That's the most amazing thing, is just how contentious that really was. Participant 20

4.5.2 Community Member Participation

Community members participate in the KDCFS in a variety of other ways as well. The KDCFS strongly encourages community input because since it received its area-based tenure license in 2007, consultative participation has been a key commitment of the Management Plan.

Community members, local governments, and the general public will be invited to review and comment on the management plan and forest stewardship plan. Once firmed up, and prior to cutting permit application, proposed roads and cutblocks will be referred to the community and potentially affected local governments.

The public will also be invited to participate on KDCFS committees in an advisory capacity. Local governments (the Village of Kaslo and the Regional District of Central Kootenay) already hold seats on the KDCFS Board of Directors.
(Management Plan 2007)

There are a variety of reasons for this kind of consultation to occur, and this consultation occurs in a variety of ways. There are the multi-jurisdictional issues that require meetings with governments and community members to make a plan. One example of this was the process for harvesting some trees near Kaslo that were infested with spruce bark beetles that was ongoing while I was conducting my research. One of the co-managers describes this process below:

I don't think the beetles per se will present too much of a challenge in terms of forest licensing law. That is fairly straightforward. What's complicated about this one is the multi-jurisdictional planning that has to occur between the village of Kaslo and the regional district. Who have to be educated in the main factors of the main players of what's driving the whole process like the beetles. So, a lot of education. And then there's this other whole aspect of the community and recreation groups consultation that also feeds it. Participant 13

The data show that open-houses and kitchen table meetings provide opportunities for consultation on community forest projects. These opportunities for consultation are of particular interest to community members that are likely to be directly affected by the outcomes. Participants and documents indicated that open houses generally provide a broader overview of project plans, such as wildfire mitigation activities, and are likely to be well-attended by recreation groups, which I personally witnessed at the open house I attended.

And now a lot of it is mountain bikers, they have infiltrated, and they are keen about recreation and mountain biking. So, I was curious about the community forestry meeting last week when they came out to study the woodlot and they invited all the mountain bikers out there. Because they're worried that the interface [wildland urban interface – fire management activities] is going to wreck their trails. They have a lot of power all of a sudden. There were two parts of the meeting there was the mountain bikers and the water users. And the water users were worried about how the interface was going to affect their water. And the mountain bikers were worried about their trails being wrecked. Participant 11

We're having open houses, we're putting in, we're trying for at least four public events a year where we take them out on field tours. Like September, forest week we're trying to do an event, where we have like a little campfire and sausages or something and wieners to roast. And show off our logging or whatever our newest projects. Or doing something with the community for forest week to get them engaged. Participant 13

Kitchen table meetings are more localized and specific and are important when forest activities might be planned near, or in, community watersheds.

So, if we are going to log a block above the community, say Shuttly Bench. We'll kind of target them for a consultation, more like a kitchen table meeting I guess. Instead of doing a broad one. And then we also put maps on the website. You know. What we're doing, why we're doing it. Participant 15

in planning the cutting above Shuttly Bench, the foresters went last fall and they set up what we call kitchen table meetings at somebody's house. And they tried to communicate with everybody in the neighbourhood. Saying, 'come to this meeting and we will talk to you about our plans and let's dialogue and let's make sure we're working together.' And that was pretty successful, and I say pretty successful because a couple people didn't hear about it and felt slighted and sort of complained why didn't they know. So that's one reason because it's hard to communicate. I suggested that if they were members they would have known because we would have had their email to send them reminders and we would have been able to send an email to them. Participant 9

I haven't gone into any community watersheds or logging anything contentious yet. So, it's just trying to work with private landowners or we're logging adjacent to their property, So we are mostly concerned about water above their place. Which is fair enough and I respect that. Participant 15

The above types of consultative participation are examples of the way the KDCFS pursues some of its stated values, including wildfire safety and protection of water sources, among others. There are additional ways in which the KDCFS attempts to encourage community participation and provide information about the community forest and its activities to the community. Most participants highlighted the annual Winter in the Forest Festival, which the KDCFS puts on every year.

I think they've had good community relations because they do this Winter in the Forest every year. Participant 3

I mean Winter in the Forest Festival is sponsored by the community forest but I'm not sure how widely known that is. Participant 4

Field tours provide an opportunity for society members to directly engage with the co-managers or board members about activities in the community forest. These tours were highlighted by a few participants as great learning opportunities about community forest logging activities and potential issues including the spruce bark beetles issue referenced above.

I did a field tour with them last fall, it was during National Forestry week. It was just an incredible beautiful thing... some of the people who were there [were] saying 'why can't we just be like Harrop-Procter or Sifco'. Well for one thing they have different ground. They have different forest types. But at least there's an opportunity to talk about it while you've got your boots on and you're looking at the last block they logged. Participant 18

The fact that I've gone on these walks makes me more trusting of the people who are working...in the community forest than in previous years. I think the fact that they are willing to change their plans because of the input that has been given by community members. They've been way more open to changing their minds and saying if you don't want this in your backyard and then we're not doing it we'll leave it. Like that's been amazing to me so that's a huge change from what we've had previously. Participant 3

KDCFS tries to keep society members and the broader community informed about the community forest through its website and through social media, particularly Facebook. KDCFS

also places ads in the local paper to try ensuring people know what is going on. This online presence has been important since the KDCFS no longer has a physical office. Society members who are interested in board meeting minutes, or other, more specific information, can access that information through the virtual Member Hub hosted in the Mel B Digital Office in Kaslo.

They have a good pretty good Facebook page. We have a community web page and it's very active. ...I think they still lack the real buy-in from the community and I don't think it's because people aren't interested. I think it's just because people are overcommitted, and they're just not engaged. They're not engaged until you're in their backyard doing something and they're like 'wait a minute, I don't like what you're doing.' So, we're not super proactive about being involved. We have one of the highest rates of non-profits per capita in this region. So, there are so many options to be involved. I think there's easily information overload, easily things where people just don't know what's happening even though it could have gone right by them. Participant 10

Through Facebook probably. Right now, there's no office. But even when there was an office people did not drop in. I used to have this idea that it would be like a university extension kind of place. Where people could come say 'my fir tree it looks like this should I cut it down? Is this root rot should I be worried about it?' You know regular people would come in off the street and get advice and it didn't really happen. So direct engagement with the public and the community forest is through friends through Facebook and through articles that are written. Participant 5

Finally, community participation has been achieved through employment opportunities generated by the community forest, including forest management positions that have been locally filled:

when you hire local people to do the managing they have a vested interest in it. When I was there the forestry managers weren't even from this area. Participant 20

I'm really happy we have the management that we have now. Because they're local, they care, I know them, they've got a good history and they're doing their damndest to get planning properly done. Participant 5

Opportunities to engage youth in the community has been mixed over the years. In the past there were efforts to bring forestry lessons into schools:

Like even that forest classroom... it's pretty green on the spectrum of green-brown spectrum. It's pretty environmentally based. That was a whole forest classroom. You know how, how do we cultivate a sense of long term stewardship over the land. As opposed to business as usual, 'let's put a clear cut.' Some of our strategies was 'well you start with the kids.' Start with the kids and then we made curriculum for them for every year between the K-12 school so education for sure. Participant 18

Providing youth with jobs to maintain the community forest trails resulted in youth engagement with the community forest and led to additional community engagement as well.

We had a program where youth were able to do a little trail building and maintenance. The idea was to back off the, the brush from the trail. And the people who live near the trail just got really incensed because they had left like spikes on the side and it looked ugly. And they just piled the brush in like horizontal, like parallel to the trail. So, we got the kids to go back and redo that area and get a little bit more training on it. But also educate the public that that's sort of standard practice is you take your brush and you put it down on the side of the trail and that keeps the erosion and you won't even notice it in a year. And also, there was, just employing youth. For the kids themselves, it gave them a real positive view about what they're capable of. Participant 5

4.5.3 Challenges to Participation

The KDCFS continues to have challenges in mobilizing community participation. Society membership rises and falls given the amount of controversy or profit being generated by the community forest. Participation increases when people are likely to be personally affected by the activities of the community forest, as seen in participant comments below:

Most people aren't that well acquainted with forestry in general. They'll make noise if something's going to impact their personal property. If you log in their watershed or something they'll kind of start coming out to meetings or e-mail you and asking questions and stuff. But most people, most of our members, you know, they're members because they want to make sure that the forest is well run but they're not into details. Participant 14

I think it's a huge challenge unless it's negatively affecting someone. And you also saw that at the open house yesterday people come, and they can be really angry, or they've got all these bones to pick and then they'll show up. But if things are going okay if it's you know 'I'm not going to spend my time'. So, it's difficult to engage people. Participant 3

Participants noted frequently that raising interest and participation is difficult because people are so busy with other things, and that engagement decreases when things appear to be running smoothly.

We have to try and get their attention. Everybody's super busy. And we're trying from different angles to get their interest and getting them involved. Participant 13

Their interested when there is conflict or a problem, when things are going smoothly their interest drops off. And fair enough they're busy, everybody's busy and they have their own activities going on. But the community forest is always interested, the board of the community forest is always interested, in hearing from the public and letting the public know what the plans are or what our plans are. In trying to work with the public so we don't run into conflicts where we start doing something and then they come back at us and say, 'well don't do that.' But they don't pay much attention to open houses, field trips, various communications unless they have a personal stake. Then they'll pay attention but in just a broad general way they're not watching too carefully. And it's often hard to communicate despite efforts so that they are aware of what's going on. Participant 9

An additional challenge is connected to the variety of recreation groups that are involved, as each have their own, sometimes conflicting, agendas. The presence of these different recreation groups was noticeable at the open house meeting that I attended, as there was an apparent dispute between motorized and non-motorized recreational groups using a trail that ran through the community forest tenure.

All the recreation groups are fairly fractured in our areas. It's just too political to a lot of people to organize for recreation. They just want to do their own thing. So, we have all these different factions that essentially just build their own trails for their own purposes. Without consultation of anybody else. So, it's right now it's a bit of a free for all. Other than having the official recreation license in part of our tenure. Participant 13

4.5.4 Lack of First Nations Participation

The KDCFS is one of the only community forest licenses without significant First Nations involvement. This is because there have been no First Nations land claims in the KDCFS tenure area. The KDCFS fulfilled its requirements in the management plan by sending referral letters

to nearby First Nations and by conducting necessary cultural heritage assessments. However, there has been no significant Indigenous participation in the KDCFS. Only one participant raised the issue of this lack of Indigenous participation in the KDCFS:

I think they need to do some work on the First Nations piece. We don't have any First Nations who live here but I have a friend who has worked with the Ktunaxa, he's the anthropologist and is one of their expert witnesses. And we're picking Huckleberries just up on the community forest... But I'll say well they, First Nations, didn't come here to pick. He goes, 'well, of course they did.' I never knew that. I didn't know how much Kaslo and this area was utilized by the Ktunaxa. Or the Okanagan people there. I think to Kaslo, you know, it's a kind of like "well we don't really have any in the area and we do the referrals so let's just leave that be then". Well the Lower Kootenay Band just bought Ainsworth. Ainsworth is in the Kaslo and area community forest. It's in Area D. Not on the harvesting land base but in the community part. So, I think they can do some more work on the First Nations piece. Participant 18

Another participant highlighted the complication of the Treaty process in British Columbia as a reason why tenure changes have been difficult to achieve across the province.

We have in BC, a very unique situation globally in that First Nations never signed treaties and were never defeated in war. So, we've had a treaty process for almost 30 years. And we have ongoing either government-to-government negotiations around the treaties, or court cases defining Aboriginal title and rights. And so increasingly, the provincial and federal claims of owning Crown land are becoming weaker and weaker. And we've had extremely significant court decisions, in particular that 2014 Tsilhqot'in decision, where they awarded Aboriginal title to a First Nation. They literally said, the courts of Canada said, 'oops, our bad we didn't own it you guys did.' So provincial and federal governments are extremely reluctant to open any question about how we do distribute existing tenure. They can keep the status quo going without pushing too many Aboriginal title and rights buttons. But if they were to redraw the map of tenure in British Columbia it would have to involve First Nations. And I completely support that, and I actually think First Nations should be more involved in these things. But that's a barrier. Participant 8

This helpfully contextualizes Participant 18's comments about the KDCFS's acceptance of the present status quo regarding First Nations participation in the community forest, as further

investigation into Indigenous land claims in the tenure area may have significant ramifications on the present governance arrangement of the KDCFS.

4.6 Summary

The Kaslo and District Community Forest Society was formed in the initial wave of community forests, following the ‘war of the woods’ in the 1990s (Hayter, 2003; Teitelbaum, 2016a). In its original form, it closely resembled the broader movement for community forestry in British Columbia; it was a multi-sector, multi-member group, critical of industrial forestry, that founded the community forest as described in Chapter 2 (e.g., McIlveen & Bradshaw, 2009; Rethoret, Rutherford, & Pinkerton, 2016). The KART sought to produce an alternative to industrial forestry, and initially there was some measure of success as the KDCFS adopted different forestry management practices, such as the emphasis on selective logging in irregular patterns, rather than clear cutting. This continued to change with different iterations of the board, resulting in a more industrial approach, with more conventional logging practices and an increasing AAC, which will be further explored in the following chapters.

The provincial government’s devolvement of forestry management responsibilities for an organization like the KDCFS is the mechanism by which local control over local resources is achieved. As discussed in Chapter 2, Agrawal and Ostrom (2001) highlight this kind of decentralization of resource management as a meaningful way to return decision-making to the community. One of the challenges for KDCFS, which has been written about by others studying BC community forests (e.g., Ambus, 2016; Assuah, 2013; Egonyu, Reed, & Sinclair, 2016), was that these new responsibilities also included a requirement for the organization to be a forestry

company, and to operate in areas that featured a wide variety of stakeholders, interests and values. Agrawal and Ostrom (2001) and McCarthy (2006) argue that the decentralization of resource management is not just about ensuring community control over resources, but a means by which the government can continue to exert control over resources. This will be explored further in the following chapter.

Community forestry as a form of collaborative environmental governance is expected to feature local control, which can bring together multiple-stakeholders and interests to benefit the local community (e.g., Teitelbaum, 2016). The conflicts that have embroiled the KDCFS from the very beginning of its history exemplifies that community forestry “is not a panacea for all the difficulties associated with industrial forestry or the failures of existing management systems” (Bullock & Hanna, 2007, p. 84). Bullock and Hanna (2007) explore how conflict acts as a dynamic element within community forests in British Columbia, as “[d]iscord has centered on different visions of forest land use—absolute preservation, new views of use based in ecosystem approaches, and traditional old-style industrial management.” (p. 78). This accurately describes some of the central themes related to the conflicts in the KDCFS that the data revealed. The data challenges one assumption that the community forest model might reduce communicative conflicts between different groups and interests within communities, because a community forest might invite participation and interaction between these diverse groups, thereby allowing for the development of shared understanding (Bullock & Hanna, 2007).

A key characteristic that was raised numerous times by interview participants were the dynamics of Kaslo, which has had a long history as a forestry industry town, but also has significant contingents of retirees, recreationists and environmentalists. The dynamics of Kaslo contributed to the conflicts in the KDCFS because of entrenched personal values, beliefs and interests. This most notably comes to the fore with continued framing of the conflict between 'loggers' and 'environmentalists' who struggled to have their values and beliefs influence the direction of the community forest. The differences in these values were entrenched, and both were clearly visible in terms of the way managing the community forest for community benefits could be achieved. 'Environmentalists' conceived of benefits as environmental or sustainable ends, whereas 'loggers' conceived of benefits as economic or financial benefits that could be delivered to the community. These different interests led to the contentiousness of the different visions for the community forest, which flipped (broadly) between these two viewpoints depending on which group held power or was able to mobilize community membership. These tensions and conflicts do not appear unique to the KDCFS community forest, as Ambus (Ambus, 2016) identifies a number of community forests in BC which experienced turmoil and turnover in their governance based on the board's decisions, noting that this has happened to pro-environmentalist and pro-harvesting boards.

The results of these interviews describing the conflicts in the KDCFS parallel other similar community forest case studies. For example, Teitelbaum describes how the Creston Valley Forest Corporation was formed as a "compromise solution" to implement "careful" harvesting practices in watersheds around the community of Creston (Teitelbaum, 2016b, p. 292). This community forest has also struggled to adhere to its initial vision of implementing

ecosystem-based forest management, with questions about the lack of economic return from the forest being raised periodically. This is a recurring theme, whereby visions that include multiple values, like those described in the data (e.g. sustainable forestry practices, protection of water quality, healthy community environment, wildfire safety), are challenged by economic and governance issues (Rethoret et al., 2016).

The data suggests that after high rates of participation during periods of conflict, especially when the community forest was being profitable, participation has dropped significantly, and there has been a shift in the way community participation is sought. Participation is now largely based around consultation, specifically about harvesting activities to be conducted by the community forest. This follows the broader trend noted above, and explored in subsequent chapters, that the KDCFS has largely evolved into a more conventional forestry outfit, where those who participate are doing so because they expect to be directly impacted by operations. This is reflected by numerous case studies (e.g., Ambus, 2016; Egunyu et al., 2016), but specifically mirrors the findings of Reed and McIlveen (2006), who studied the Burns Lake Community Forest as it transitioned from seeking broad participation and consensus-based decision-making to a more business-driven model, with community member participation limited to those with specific expertise or value in that area.

Chapter 5: Environmentalities

5.1 Introduction:

The literature reviewed in Chapter Two suggests that environmental governance covers a wide array of rules, systems, mechanisms and organizations to guide environmental decision-making. Within community forestry in British Columbia, environmental management and decision-making occurs within a context that is shaped by provincial, municipal and non-governmental rules and interests (e.g., McCarthy 2006, Teitelbaum et al., 2006).

Based on the conceptualization of environmental governance outlined in Chapter two, the purpose of this chapter to analyze and describe different environmentalities as a means of better contextualizing the governance of the KDCFS. Chapter 4 focused on the internal governance structure, conflicts and competing vision of the KDCFS. This chapter considers how those internal governance issues are impacted by different environmentalities that interact with the KDCFS through broader mechanisms and scales of environmental governance.

To understand the iterations of KDCFS governance and the conflicts that have resulted in and through the governance of KDCFS it is useful to consider and use the frame of environmentalities to see the range of influences acting on the community forest. I base the presentation of my results largely around Fletcher's typology of environmentalities and examine the primary environmentalities acting upon the KDCFS and shaping its governance.

The main themes are the three different environmentalities that were encountered: disciplinary, neoliberal, sovereign. The subthemes I have used are the dimensions of

governmentality described by Dean: fields of visibility, techniques of government, production of truth, formation of subjects.

5.2 Dimensions of Environmentalities

Identifying the different environmentalities that act through and on the KDCFS governance is complicated because multiple environmentalities may be present simultaneously and be acting collaboratively or in conflict. As with governmentalities, environmentalities are also difficult to pin down because they are not discrete projects and incorporate a wide arrangement of techniques, strategies and programs. In order to identify the different environmentalities that might be present in the KDCFS case, it is useful to consider the different dimensions of environmental rationalities that emerged through interviews and through document analysis. I do this using the dimensions described by Dean (2010), as noted above, to set boundaries on the analysis of the environmentalities acting in the KDCFS.

5.2.1 Fields of Visibility

Dean identifies the “fields of visibility” as a dimension of analysis for understanding governmental rationality because it describes how things might be seen, perceived and described. This is a useful analysis to consider how the Kaslo Community Forest License is seen, perceived or made known. The most overt way to consider what is being made visible is to consider the tenure itself, where it is located, what is mapped, how it is described and why.

The KDCFS, since 2006 has operated an area-based forest license from which they are to cut 25,000 m³ annually. The area, or rather areas, that the community forest holds tenure over are highly contentious areas, full of watersheds, viewsapes and located mostly adjacent to the

Village of Kaslo or other small communities. The selection of the community forest tenure area was not an accidental decision made by the ministry and the community forest applicants. Interview participants frequently highlighted that the tenure area was a difficult location in which to pursue forestry given the perceived contentiousness of the landbase and the species mix present.

When we first got [it] the ministry said 'ok, so you can have these territories' and give us a map and it's all these blotches on it. And it's like all watershed, all cut over. [O]ne of my fellow board members called it "the guts and the feathers" and I remember saying in a public meeting "yeah, it's the guts and the feathers, but it's our guts and our feathers."
Participant 5

One interview participant highlighted the way the provincial government authorized woodlots as an analogy of identifying why the community forests, like KDCFCS, were granted the tenure areas they were granted. Particularly identifying that contentious areas that were likely to result in conflicts between logging companies and community members were often given to local ownership models like woodlots or community forests.

I think the ministry's intent was to have the locals fight the locals, just like the woodlot program. There's no mystery why the woodlot is right in the Mirror Lake community watershed. There is no mystery why the community forest license is where it is. There's no mystery why woodlot 491 is behind Argenta, 495 was behind Johnson's Landing, 496 is right behind Meadowcreek. These are strategically put in contentious areas, so the locals fight the locals. ... It's fighting, its locals fighting the locals instead of locals fighting the Ministry of forest or BCTS, which is the same thing.... And I'm sure the ministry would just love to turn all of the last watersheds that are BCTS over to communities. Participant 11

With the tenure area established one of the key ways of making that area known and understood is to map it. Mapping has become an important component of tenure management not simply because forest managers can plot future cutblocks and roads, but because this is a way that different values, topographic features, trails and roads can be compiled and

interpreted. There are limitations to the maps that the community forest is able to produce as a small operation. LIDAR, Light Detection and Ranging, uses airplanes and drones to create a model of the topography and vegetation within an area. This tool is used by larger forestry companies to plan roads and blocks but it's use is too expensive for the community forest. The KDCFS uses a local mapper who uses GIS to map out the tenure area.

Well it seems that there's data that's collected over the forest and they've got all these overlapping maps of factors that are existing in the forest. Participant 3

Mapping in this way is how the forest tenure is brought into what Foucault would describe the “explicit realm of calculations” (Foucault, 1979, p. 143). Just as the community forest continually updates its maps and data regarding the forest stock and conditions present within the tenure, the government updates the rules and regulations for sustaining all of British Columbia's forest stock and applies it to the tenure (to be discussed further in next section). This is an example of the government's devolvement of responsibilities to the community forest tenures, a process that, according to participants, is challenging because of the way the government calculates how forests should be managed.

The community forest license has gone through a major transformation because the government is constantly backloading things on the tenure. An example that would be, a recent example that would be the ungulate winter range. Up till now you could average your ungulate winter range restrictions and blend it with tenures near you and if those tenures near you were old growth management patches. And now they said 'no, each area is stand alone.' So, you can't kind of average it out to some nice area near you that isn't going to be logged and you say, 'it's all over there.' Participant 11

While calculative procedures like mapping provide one way for the community forest to be understood, this is not the only way that the community forest is being perceived particularly by members of the community. As a community forest, these perceptions also

shape the governance of the forest. I approached the way the forest is made visible, or understood, by community members by considering how different environmental studies (Braun 1997, Luke 1996, Agrawal 2006), described in Chapter 2, highlighted the way 'nature' was constructed and that this construction enabled particular environmentalities. Interview participants were asked about how they conceived of the forest and its meaning. This line of questioning was meant to uncover what shared/unshared perceptions existed of the forest generally, and to see what these different perceptions hid or uncovered. One of the most common perceptions of the forest was one that emphasized the economic aspects of the forest.

The forest to me means an opportunity for clustered development of small scale value-added wood products production. Participant 12

Everything. It pretty well affects everything that Kaslo is or anything around it. Really. It does much of the economical aspect of people living, living here providing services and it's tied into every aspect of social life here. Participant 13

Well I see it as a long, long-term resource that the community, the community should try and see it as a gold mine in the future. Possibly if you keep it up right and everything. It's a nice legacy to be able to hand down to the next generation. A forest that's in good shape. The trees are healthy. Money to be made off of it but it also provides recreation and everything. Just normal things we'd like to get out of a forest. Participant 14

Other participants articulated a more environmental conservation perception of the community forest. These perceptions still often identified economic or recreation elements of the forest, but primarily focused on a valuation of the forest for its environmental and biodiversity effects.

Well, it's a living ecosystem but I think it's been hugely damaged and compromised by human activity. So, the forest means, an ecosystem that ideally should be respected and cared for and stewarded. And I don't think we've done well at that or even, I think we've done very poorly at that as human beings. A forest represents so many things:

biodiversity, watershed. Last in my mind the forest means resource extraction. Participant 3

The forest is the Earth's lungs. To me that's the primary factor is that it's actually our living and breathing entity that allows us to live on this planet. So that's the first thing. The other secondary aspect to that is home for wildlife, which is part of the bigger environment. That wildlife is essential, that diversity is essential. So, it's all part of the Earth, which enables us to live here. Recreation personally would be my third. I love to mountain bike and run so I do a lot of recreation in the mountains. And 4th, this is from a personal perspective it's a large part of our economy. And that's changed over the years quite a bit. Participant 10

Personally, I feel a lot of want to protect it. And save it. And not change it. But with school and work and the understanding that you know communities and people need... it is an industry, and it is something that we do need in the community. That I have an understanding that things do need, do change. Participant 19

It's the lungs. It's where all the animals are. It's where the plants and trees are. Participant 17

The different ways that the forest is perceived or constructed by community members, who have been involved with the community forest as board or society members, provides some insight into the competing visions for the community forest. The way that the forest is constructed or understood frames how particular environmentalities are articulated.

5.2.2 Techniques of Government

The technical aspect of government according to Dean (2010) is the assemblage of strategies, technologies, regulations, programs and institutions to establish rule and authority. There are a wide array of these techniques of government that influence the governance of community forests generally and the KDCFS specifically. In Chapter 2, I introduced the Community Forest Agreement program that provides some of the guiding policies and regulations that influence the governance of community forests. In this section some of the

significant CFA policies and regulations, as well as other techniques of government, are highlighted through data identifying their impacts on the KDCFS as established by interview participants.

The community forest tenure is where many of the different techniques of government are most visible, as the different strategies, programs and institutions combine to inform the way the community forest is managed. One participant broadly described how the community forest makes its management decisions through the mixture of governmental laws, board policy and professional forest management.

Mostly through the law. I mean we're bound by just the legal requirements of the forest license. But also, by policy that is set by the board. What has been set by the boards over time. So, it's a, it's a balance between the two. And the policies tend to be fairly general in terms of interpretation. It's kind of like a values wish list and so it's left to management to integrate it to the best degree in the forest management. Participant 13

The laws, board policies and management decision-making has changed over the course of KDCFS tenure. One participant who has been involved with the community forest since its inception helpfully describes the different forms the tenure has taken and some of the mechanisms in place for managing the forest. This previous management regime began with the volume-based tenure, which was the only available tenure when the community forest pilot program was started in 1994.

Tenure is called concessions in other parts of the world. This is how government give timber rights on land that is owned by the government to corporations or, in this case, a society. A volume-based says, within the Kootenay Lake timber supply area, which has maybe an annual cut of a million, we're going to give you, at the time, 10,000 cubic metres within this area. But you're not managing that area in perpetuity. Using these chartered areas may move depending on timber availability and wildfire and disease and who's cutting fastest and all the rest of it. So, you're not managing that area. You're managing a stand of trees from when you cut it to when you get to the stage of

silviculture that's called 'Free to Grow' which happens at about 10-12 years. So, you're not actually managing the forest. You're managing the timber values with expectation that the government, in their all seeing wisdom, is managing the broader forest. Participant 8

In the original volume-based tenure much of the responsibility for managing the broader forest health was held by the provincial government, with the tenure holders being legally responsible for their harvest and the subsequent silviculture. The switch to area-based tenures devolved more responsibility to the community forest, in terms of managing a particular landbase for not only timber but other values as well in perpetuity.

Area-based says this area on this map is, you're going to manage it in perpetuity so you're making a long-term investment because you want to come back to that area that you logged last year and you want to come back to it, maybe you thin it in 25 years maybe you thin it again in 50 years and maybe you thin it again in 80 years sort of thing. So, it's a very, very different relationship to the land base. At the time in '94 when this whole thing started that kind of tenure did not exist. All they had was called a NRFL, a Non Replaceable Forest License. A short-term volume-based license. They've learned from that and now the only community forest you can get is an area-based CFA, Community Forest Agreement. And they're also with one or two very rare exceptions bigger than 10,000 cubic metres. 10,000 was too small to even really effectively manage the fixed costs of doing business. Keeping the lights on, building roads, all the rest of it. It's just too small. And now it's 25. Participant 8

While the community forest has an area-based tenure, and has assumed more responsibility for managing the forest, it still must follow the laws set out by the provincial government. The policies, regulations and guidelines for the community forest are established and reaffirmed through different reporting mechanisms, such as the CFA, management plan and forest stewardship plans (FSP).

So, it's the same as any licensee. So, the government mandates 13. I think it's 12 or 13 objectives. They want people to manage for. So timber, biodiversity, landscape level biodiversity, wildlife, species at risk, community watersheds, streams and there's a few other ones. So, it's kind of how we will look after those values, the strategies we will

implement to do that. I just wrote ours to replace the one. So, the government kind of tells you what to write. Participant 15

The location of the KDCFS area-based tenure and the devolvement of responsibility for managing a variety of forestry values has resulted in the community forest having to deal with any conflict arising from timber harvest. A number of participants highlighted that giving community forests the responsibility for managing contentious landbases was an intentional strategy of the provincial government.

So, to me the community forest is a community managed area of land which I see as generally given to the community so that the community can deal with somewhat extreme levels of use conflict in the forest over like water and recreation and so many values in the forest. Especially close around the community so to me the history of the tenure, of these tenures, coming as they did out of the 'war in the woods' is the province being like okay you guys deal with this. So, to me that's a big part of the community forest tenure is. It's the charge that I feel is 'Ok, you guys deal with this.' It's our responsibility to deal really well, effectively and the best way we can with the communities' values close by. Participant 4

One of the key elements that often causes conflict is the ongoing harvesting around the community, which is necessitated by the 25,000 m³ annual allowable cut (AAC) that KDCFS was granted when the tenure was changed to an area-based tenure has been one of the key mechanisms that has determined the management of the community forest. (In the next section (5.2.3), how that AAC was determined is examined.)

Well we had the mandate that we had to cut 25,000 cubic meters of wood. So that was always overriding everything. And then the vision really was to try to manage that volume of wood in the best ecological manner that you could. Participant 20

We're not, we're not given a whole lot of choice. The government insists that we log so many cubic meters a year if we didn't they could take our license away. So, it's not that we can choose to just be a park and have nothing but recreation and not. There's a lot of people in the community who would like to do that. Just not log at all, just let it all turn into old growth forest. But the province won't allow us to do that. But even if it were even

if they did, even if they gave us total free reign you would still have a lot of the community saying 'no, we should log it and make some money out of it. It'll help spread the money around.' Participant 14

The 25,000 m³ AAC is frequently described as an obligation of the tenure license and so drives many of the management decisions. This is the case even as there is some consensus among current board members and the co-managers that the AAC is presently set too high for the land-base.

Well, the reason that I believe that the AAC is too high is because the concept of the AAC is this if you cut that every year you should be able to cut your AAC forever. You know that old saying, that old forestry thing. But it looks like from what understand, and here my source of information is the management team, and so we've been working more intensely on the business plan and when they look forward they're talking about concerns about wood supply. Part of that is economically viable wood supply, which you wouldn't necessarily, which should be one of the deductions from you AAC. Participant 4

The AAC is perceived as an obligation not just because it is part of the CFA but because it is the way the community forest pays the government its stumpage fee. If the KDCFS stops harvesting to their AAC they do not pay the provincial government as much as they possibly could.

Part of the problem was they were behind in their cut. The original board thought they could maybe cut a few trees to satisfy the stumpage for the province when you're obligated. There was a lot of ignorance on that board in terms of their obligation to the B.C. coffers. So. Anyway, we started cutting fir. Fir was high. It was a hundred dollars a meter. We started cutting that. And the money just rolled in. Participant 21

The low stumpage fee the government charges community forests is also a regulation that is perceived to be a benefit to the community forest and so paying the stumpage fee is predictable and affordable.

The government regulations have actually supported it in my experience, for instance, in the forest industry in BC the way the government makes money, and they want to make money, is from the forest is through a taxation that's called stumpage. You pay so much per cubic metre to the government, and in the industrial side of things that stumpage

varies depending on the value of the wood, accessibility of the wood and things like that so the stumpage is adjusted. The community forest has a fixed stumpage rate and it's very low, so it's predictable. It's very low and it's predictable. So, the government has supported community forestry in that way. Participant 9

When it comes to actually harvesting timber the realities of the forest industry in British Columbia plays a significant role in how the harvesting is done, which impacts the management options KDCFS has. The forest companies with the capabilities to harvest on the KDCFS landbase are incentivized to cut large blocks to make the best use of their expensive equipment.

The other thing they made a point of and this is to me a really critical thing that people need to understand about the forest industry here and now. The people that are operating in the woods they have equipment that they have spent hundreds of thousands of dollars on and those feller-bunchers and those things, they're still paying them off ... That's the reason you're not going to find boutique forestry here, because the operators that you can hire to log, they have these machines, and they want to put them to use. That's how they're paying off these machines. You can wish all you want for the high number of jobs per cubic metre but in practice there's nobody that's going to do that kind of small-scale stuff. The people who will do the work for you are the big companies with the big iron. Participant 5

Aside from the AAC, one of the most significant responsibilities of a forest licensee is to restock the areas that are harvested, by planting and ensuring the new trees reach maturity. While there are many rules and regulations about what, where and how to cut trees, it was highlighted by a number of participants that it is the silviculture stage where the legal obligations are most stringent.

And so, you make an agreement there's legal requirements to plant and the trees have to be in the ground for at least 5 years before you... do a regen survey after you plant to you see what your survival is and if the right density is there. And you check your seedlot and all these other things and then once your trees reach 2.5m and the right stocking is there then you can apply to declare it "free to grow". Which means its off your books ... that your legal requirements have been met. Participant 1

The obligation to harvest and then restock those cut blocks is so significant that participants noted that meeting these obligations meant that pursuing any other extra outcomes, be they environmental or social, placed too much of a burden on the community forest management and board.

I think the community forest should actually only deal with its legal obligations and there should be a whole separate group. Maybe a whole separate board or society called 'Friends of the Kaslo Community Forest License' that starts to deal with all these social issues. And you want to separate them because they get mixed in and then all of this work gets done on social forestry and then the ministry comes along and says 'hey, whoa, you've got lots of root rot problem and beetle get with it or we'll take it away. Or we will hand it to someone who can deal with it.' 'Oh, we were dealing with all this other stuff.' And the ministry goes 'who cares about that stuff.' The ministry says they care about it but when push comes to shove it's all about whether you've got trees planted there.
Participant 11

In addition to the legal obligation presented by the silvicultural activities of the KDCFS, there is also a significant financial obligation to replant cut blocks. Silviculture is one of the largest expenses for the KDCFS, it's so costly that it is one of the factors that determines what is harvested and where it is harvested. The financial obligations of silviculture means that the community forest is pushed to harvest high value species to generate revenue, it also means harvesting the most accessible blocks while disincentivizing harvesting on steep terrain or in inaccessible areas because this affects the costs of both harvesting and replanting. These financial constraints have been particularly challenging for KDCFS because their silvicultural liabilities exceeded their reserves and revenue as a result of mismanagement of the revenues that were accrued through forestry. I was told by some participants that this deficit was the result of excessive community grants, while other pointed to poor investment of the legacy fund.

In our situation I guess you have to keep logging too, because of the silviculture deficit.
Participant 15

Silviculture and harvesting expenses combine with other institutional and market realities resulting in a significant impact on KDCFS forestry decision-making. Being a small-scale operation means that the profitability of harvesting is highly influenced by the log market and the infrastructure of the forest industry in BC.

So that being the case if the log market is slow it has a big effect on us because we're far from the mills. Where our hauling costs are higher than the number of the other local forestry operations. Because we're a small operator we don't have a lot of bargaining power, when we're selling logs or competing with other bigger forestry operations. So, the market is, it's constraining. We are constrained by market circumstances. Participant 9

Some participants noted how the legal obligations and economic conditions of the community forestry tenure create a situation where harvesting timber must become the primary focus of the community forest. One participant highlighted how this is intentionally the result of governmental policy.

I think the legal requirements were more compatible at the time with the economic vision. Because I think that's how the government keeps their forest. It's not only economic of course, 'cause they are looking to meet all these other values which are required. But the underlying thing was timber production. And I think that, if you look at the FRPA, Forestry and Range Practices Act, a lot of those mission statements include, you can look at them and they say, 'while not impeding forest production' or something like that. Or timber resource values or something like that. So, I guess the government wants economic value out of it too, in terms of stumpage or however they're going to get their cut out of the forest. Participant 16

While another participant noted that this results in significant barriers to the pursuit of “social forestry” or non-timber harvesting activities:

And the bottom line with these tenures, is that you are really maxed out trying to fulfil the obligations of the tenure just that alone maxes you out. Those board members are burnt out [doing] just a little bit of stuff they're trying to do, to understand what's happening at all. Sabrina and Jeff are maxed out they have enough on their plate just to get the trees harvested and the roads built, and the trees planted. And then you throw on top of all that

interface forest stuff, that's totally extra. All of this what I would call 'Social Forestry' all this recreation, bikes, you know, visual quality objectives, this fire interface. It's all social forestry. Those are all beyond the legal obligations of the forest. And it's taking an incredible amount of time and there just isn't extra money to pay them to do that. It's either volunteer or they're cutting into other things that are really going on, like road maintenance, ditch cleaning, culvert, you know all this stuff, spacing, brushing, thinning, beetle surveys. Participant 11

5.2.3 Production of Truth

The ways in which knowledge about forestry is produced and what kinds of knowledge is privileged when governing the community forest can provide some indication about the types of environmentalities impacting the KDCFS. Environmental governance and forestry within British Columbia largely privileges and relies on professional and scientific knowledge. This section focuses on a few key ways in which knowledge production is made visible through the data gathered in this research.

The AAC remains one of the most obvious constraints and drivers of the community forest decision-making process. For this reason, the knowledge of how the AAC was determined and how it is considered is worth investigating. The AAC that KDCFS presently is required to harvest was identified by many interview participants as being too high for the land base. The way that AAC was calculated was described in some detail by both of the current co-managers. It involved a particular modelling process that was conducted by a forestry consulting company, which relied on the forest inventory information available at that time.

Well it's determined by the modelling process that essentially the ministry has come up with this model. And I think any licensee could go and challenge it and develop their own process except it would be quite a feat to do the statistics and everything else. So that is the accepted model for everybody to use. The ministry uses to set the AAC. And that uses the latest information all of that inventory information and stuff. But the model is, it's put out for a different size population, a larger population sampling than what generally a community forest is. We're much smaller of a size. So, the question is: is the modelling still

accurate for community forests? And so, they've thrown in some kind of reduction factors or buffer factors for community forests. That are supposed to accommodate for the smaller size and whatever. And that is generally used to assess the AAC. When our AAC was assessed, there was still a fair component of the initial one. Of the more like total chance planning kind of strategy. Was a lot more organic not just the completely the modelling but there was three models that were employed at the time. To summarize the information. Participant 13

When the modelling produced three different results, the highest AAC was approved by the government and included in the 2006 application for the CFA. In the minds of some participants these calculations seemed to produce an unsustainable harvest rate which raised some questions about the reliability of this type of procedure. The co-manager suggested that the ground truthing he does is what has led him to believe the present AAC is unsustainable in the short-term but could return to a sustainable cut in the long-term.

So, it's calculated initially, I think, I saw the company Timberland that calculated the company forest AAC, so they ran three different models. Based on, so they take your whole hectares, so say you have 30,000 hectares and then they take away everything above [unclear] and then then take away X number of percentage. So, they apply all the constraints I guess for the wildlife, community watershed all that kind of stuff. And then it will spit out a number of how many operable hectares you have and then your cubic meters per hectare. So, they kind of calculate how many meters you can log sustainably on that plan base and so they did three, or three runs. One was 25 and two were at 20,000 meters. So, they gave that to the government and the government said, 'well you're at 25,000 meters a year.' So, I think we've been, we haven't logged our AAC so far. It's always been a little bit under. They hired me, I guess I did work for them before they hired me two years ago to supervise two summer students. So, we did a lot of walking everywhere. And looking at different timber types, roads, species and stuff. So, in the short term I think we're unsustainable but once we, with all these burns and immature stands get harvestable age, I think we'll be fine. Co-Manager

A number of current and former board members indicated awareness and concern about the unsustainability of the AAC. The board's awareness of the potential wood supply shortfall comes from the information they receive from the professional management team.

Well, the reason that I believe that the AAC is too high is because the concept of the AAC is this: if you cut that every year you should be able to cut your AAC forever. You know that

old saying, that old forestry thing. But it looks like from what I understand, and here my source of information is the management team, and so we've been working more intensely on the business plan and when they look forward they're talking about concerns about wood supply. Part of that is economically viable wood supply, which should be one of the deductions from you AAC. Participant 4

One of the ways in which the BC government has regulated natural resources, including forestry, has been the professional reliance model. In this model, the government sets objectives for natural resources management and then professionals undertake to accomplish those objectives as they see fit. This model is one of the reasons why the community forest employs a Registered Professional Forester (RPF) who is responsible for filing project applications and reports that detail how the community forest is able to meet its obligations.

RPF: Registered Professional Forester. So, you are authorized to make decisions on behalf of companies, for the most part, or a corporation. So, you are supposed to earn the public trust, our profession is supposed to earn the public trust by doing good deeds, managing the forest properly. So, you have to go about it and do about four years of school usually and you get your Bachelor of Science in forestry and then you have two years' work experience. And then you write your RPF exam. Yeah. And so, an RPF is supposed to be the steward of the forest but a lot of times the big corporations are just a puppet in the hands of someone else. Co-Manager

While professional reliance model is the means by which knowledge is often produced and which shapes how forests are managed, some participants noted general concerns about this model (though notably no one indicated concerns about the current management team of the KDCFS). The concerns were that the professional reliance model did not have adequate oversight from the government.

Industry had a big problem with the Forest Practices Code because they thought it was too restrictive and too detailed and was breathing down their neck all the time. And so, then we had this political change over into the professional reliance kind of idea. Which now was sort of thinking that maybe not every professional was holy either and to leave it all up to the professionals which are hired by you know. So that leaves things open to conflict of interest. How could it not be? And it's just a lot less oversight from the government too. I mean government got downscaled to next to nothing in terms of their oversight sort of

function and everything got put on the shoulders of the professional industry basically. Participant 13

The fact that they have to do with the professional reliance model and, again I'll always say that I'm not a professional forester, but I think the professional reliance model is working completely against the original intentions because the licensee will say 'do you know how many research studies I have to do? Like I do more paperwork than I ever did previous to professional reliance.' And I'm like, 'yes I know you do but no one is actually vetting that.' No one is actually, like it's just the professionals signing off on it that says, 'good job' or it says 'yes.' No one is actually saying 'ok, here's your report that says this how you, this is the terrain stability concerns. Here's your operational plan.' No one is overlapping those and that's where community safety comes in. And so that's our biggest demand of the Ministry of Forest in the changes. Is that you need to change that. You need to go back to the ones that are actually responsible for the forest and whether you give a license out or not you still need to maintain authority on ensuring that that forest is healthy. Participant 10

In contrast to the professionalization of forest management the lack of forestry experience and professional knowledge of the community forest board was noted by a number of interview participants. This was highlighted as significant challenge for the governance of the community forest because forestry is “very complex” and so it requires experience to govern a forest in an economically and environmentally sustainable way.

Well, even then, even then because they start off they could be a schoolteacher, they could be a mechanic, they could be whatever, but they have no real forestry experience, so the learning curve is fairly steep. Participant 1

The knowledge gap between the professionalization required to manage the forest and the society membership is even more significant than that between the board and management team. I attended a KDCFS open house that was to present the latest iteration of the forest stewardship plan (FSP) and go over some proposed wildland-urban interface work to be done around the community. The FSP outlines many of the regulations and restrictions placed on timber harvesting in the community forest and outlines broadly how the KDCFS will satisfy these regulations. None of the society members present aside from an elected official

from the RDCK were able or interested in speaking about the FSP, because of its technical nature and lack of specificity.

In some ways the present iteration of KDCFS mirrors the professional reliance model of the BC government, as they require responsible, honest professionals to undertake the management of the community forest, while the board's ability to provide knowledgeable oversight is variable depending on who is on the board. This has led to problems with a previous manager who was working for a sawmill while managing the community forest and was perceived by some participants to have been making community forest decisions that benefitted his other employer.

Well for 3 or 4 years we were under contract with an RPF that was employed by a mill and everything that was done during that time was to the benefit of the mill. Everything. Participant 7

There was a period of time, the previous manager before the current two, was, I felt uncomfortable because he was a good manager, but he came from a very strong industrial background. And he did not pay any attention to the social issues that I talked about. His skill base was in lining up cut blocks and cutting down trees. And he did that capably, but he did no more than that. He was kind of a, he didn't provide us with any service in other areas. And the other thing that was an issue, and this was discussed on the board, was he also, he was part-time with us, he was also part time for a sawmill. And he was the log buyer for the sawmill and of course for us he was just log seller. And I and a number of other people consider that a fairly serious conflict of interest. Participant 9

As noted by Participant 9, another problem with this previous manager was that he was trained and capable at timber harvest forestry, but not necessarily able to fulfill the social forestry components that the community forest desired. This is partially the result of the requirement for the management of the community forest to be professional foresters and manage the forest based on knowledge focused on timber harvest. Any lack of forestry

knowledge on the board or focus that is not directed to the particularities of timber production creates the potential for this type of challenge to occur again. Particularly when it is assumed that the rules and regulations applied to forest management are assumed to cover the other values present in the community forest. One board member described this tension by describing the assumptions built into managing the community forest according to the scientifically determined AAC.

Well to me, one is the relationship between the forest and the annual allowable cut which is both a gift and a burden from the province. When you're trying to get that 25,000 cubic metres off the land do you try to look at how you're impacting other values and whether or not that's going to allow the community forest to do that sustainably into the future. To me that would be sustainable management point of view. For a long time it's been felt that the annual allowable cut is too high for the landbase economically. Which I think we are coming up against it now where it's clearly too high for the landbase. But it's not easy to get that cut reduced. Many boards have not worried about any of that kind of long-term stuff. So, an example of managing to the AAC without paying any attention to that longer-term stuff is just saying 'well, the annual allowable cut takes account all that sustainability crap so we can just cut wherever.' And in essence the forest has been high graded over a number of years. Participant 4

5.2.4 Formation of Subjects

Governmentality is often simplified to focusing on the “conduct of conduct” or the formation of subjects who will govern themselves and act in alignment with prevailing governmental rationality. Environmentality studies, like Agrawal (2005), also focus on how subjects are formed by “technologies of self and power” to govern their interactions with the environment. The ways subjects are formed and the perceptions they espouse can provide insight into what types of environmental rationalities are acting through the interactions with the environment broadly and the community forest specifically.

As has already been identified in Chapter 4, Kaslo has a diverse community that has contributed to the different positions taken by different board members and community members throughout the KDCFS's history. While at times these different positions were reduced to 'loggers' and 'environmentalists' there are wider array of personal motivations that govern individuals and how they interact with the community forest. These motivations can provide some insights into the conduct of subjects within the KDCFS.

Environmentalist motivations often appeared to stem from personal interactions with the forest and specifically watersheds. A society member described the formation of her perception of the forest and how it shaped her perception of timber harvesting.

Living on that farm I think unwittingly I didn't even try to do this, but I developed a relationship with the forest. Because I had to bushwhack up my water line to check my water box sometimes twice a day in different seasons and other than that I spent a lot of time in the forest just following animal trails and exploring and I developed a relationship with the forest, and I loved it. And I felt really heartbroken when people wanted to come and flatten the whole thing and didn't care about that little lady slipper or the orchids over there or the tiger lilies. They weren't important. Participant 3

That formative experience in turn shapes her understanding of the government's mandate for community forests compared to what she believes the KDCFS vision should be. This provides insight into what motivates her to participate in the community forest.

I think to get as much money out of it as you could, given the mandate of community forest from the BC government. I've always been disappointed that the vision has not been one of restoration and protection of our forest. In a way to make it healthier, it's never seemed progressive in that regard. The vision has always seemed to me to be one of more resource extraction. Participant 3

A former board member describes a similar experience in caring about a recreational area and engaging with a logging company as the way he first started engaging with logging

companies, which led to him joining the community forest board. Notably much of the time he spent on the board occurred during some of the most intense conflict between the 'environmentalists' and 'loggers'.

So, there was an area that was being logged there or was being planned for the logging that was an area where a lot of people wander around you know we do a lot of hiking and there are trails that have been built since that go through that area. At that time, it was still just mostly woods that were untouched or not touched in the last 75 years. Obviously there was a lot of activity and cutting down trees all over the place back in the early days to the turn of the century, of the 20th century. And in particular there were some really nice pine trees in that area, and I remember wandering in there looking for things that might have value. And looking as if to say, maybe if we talk to the logging company, and I guess it was probably the local company, T&H logging, I believe, who was doing the logging. And we could talk to them and say, 'could you do the logging but leave certain areas for the better and some particularly spectacular trees are left?' And we did get some cooperation. So that's the kind of thing that I might have been involved in prior to being involved with community forest. Participant 6

Many of the people involved with the community forest are informed by their experiences with forestry. In a town like Kaslo, where forestry has been a major industry for decades, that means many individuals have worked in industrial forestry for most of their lives in a variety of different capacities. For example:

Well I started logging when I was 16. That's what I started out. So, I've been in forestry all my life. I've found it very rewarding. Participant 12

Tree planter. Timber cruiser. Development forester. Appraiser forester. Community forest manager. Participant 15

I worked in forestry and development most of my working life. Participant 21

Participants that had worked or have continued to work in the forestry industry were likely to think about the community forest in terms of its logging or business potential (some of these perceptions have already been identified above in the 5.2.1 Fields of Visibility).

An increasing number of people involved with the community forest are motivated by recreational pursuits in and around the community forest. Recreation most often takes the form of hiking, mountain biking, and ATV trails through the community forest.

I hike a lot and stuff, so I certainly see the recreational side and some of the young people who build the mountain bike trails and stuff through the woods. So, I'm quite active in the sort of trail end things, the recreational end. Participant 14

An RDCK government official noted that the board members the RDCK has appointed have had recreational connections. This highlights that there is a perceived value in having board members with recreational connections.

So, I look for someone who has the capacity to understand things, is visionary but is also practical. And they both tend to have a connection either through, like, Chris and Neal, both have recreational connections on the trails. Participant 10

Unsurprisingly these different backgrounds and experiences provide an indication of the different approaches taken by individuals participating in the community forest. Participants with a forestry background were more likely to highlight the economic potential of the community forest and point to the processes developed by the government and applied using the professional reliance model to pursue harvesting activities, for example:

Well there are members of the board that think you can't cut in certain areas because they're watersheds. And I don't believe in that. I think there's still a process. You can't please everybody for one thing. But the Ministry of forest has a process that they take and you kind of got to follow the same guidelines. And the area of this tenure is quite large and the wood's there. They just got to figure out a way to get it. Participant 22

Participants highlight that community members with an environmental conservationist inclination were more likely to emphasize protecting the forest and disapprove of industrial clear cut logging. For example:

Because the greater public, I'll suggest and that's a perspective not a statistical fact, share that vision. So, there is a diversity of views but the majority of people I think understand

that the environment needs to be protected. That historically logging practices were, could not be maintained, that we're facing issues like climate change that need to be addressed. So, I would say that the majority of the community realized that forestry needs to be done more carefully. Participant 9

My driving force or feelings for forestry or the forest is... I don't want to say protection but to me in a lot of ways it does mean protection. I don't like to see dramatic change. Participant 19

It is notable that most participants described a moderation in their particular views and the perceived views of the community at large. This is largely attributed to the presence of the community forest and participation within it. Some of that moderation comes from lifelong forest professionals, who identify some of the negative aspects of industrial forestry typified by clear-cuts. For example:

I have to admit there was some of them clear cuts I put in. They've grown in by now; they're almost filling up. They were just big ugly checkerboard, you used to fly over them in an airline and you see that checkerboard pattern down on the mountain, and it looked like hell really. But that's just visuals. I don't know. I know it must upset the ecology of the area now looking back at it. And our lack of caribou in this vicinity due to the lichens and mosses. Its moss they like. And I know that old growth harvesting. They used to have a forestry term the Ministry came out with called recruiting old growth. It's an amazing concept. It's gut the valley and then close the road and let it go overgrowth. Participant 21

More common though is the acceptance of typical forestry activities conducted by the community forest by many who would prefer to preserve or protect the forest. This indicates that individuals involved with the community forest, and in some cases the community more broadly, have been swayed to consent to logging and in fact view it as a necessity for the forest. Some examples:

You know, at the beginning I didn't think we should have clear cuts. But I understand why we should here in Kaslo, in some forest types. I understand now that you know the only way we make our money is by cutting trees so. Participant 18

If you took a poll in Kaslo you would find 95 percent of the people that say don't cut another tree down period. They're against cutting the trees. I kind of feel that way too. I

mean we love these forests and we enjoy it for recreation and everything else. But the government mandates that you cut this stuff. You have to cut it; you might as well make some money at it and plow it back into the community and all sorts of worthy endeavours. So, the forest to me, you know, if they never cut another tree I'd be quite happy. But you know we had a job to do and if we didn't do it the government was going to do it for us. Participant 20

Well they probably feel some ownership that they wouldn't otherwise feel. So, it makes them be more realistic. If it's some outside company coming in and logging, well you just protest and, you know, gather your banners and we don't want them. You don't have to sort of think about the other side. It's just like, 'I don't like what they're doing so I'm going to protest and make a lot of noise.' Whereas I think a more mature view is what you get when you own the forest and you have to not only think about this side and, but you also think 'okay well you know if we don't log anything we don't have any money, then how are we going to plant trees or whatever.' So, I think having a community forest, it would apply to any business but when the community owns a business or runs a business, has control of it then they're forced to be realistic. Participant 14

So, it's been a bit of a mixed process in that lots of people think that there are many things that make up the community forest and they're not wrong in saying that, but the overriding criteria is that you can actually make a buck in order to be able to afford to do all those other things. So, you have to learn to practice good forestry before you move on and have your trails and have your mushrooms and your berry picking and all those other nice things that people want to do. Otherwise you'll flounder and you'll become insolvent and you'll lose your license. Participant 1

5.3 Summary

The governance of the Kaslo and District Community Forest is comprised of a variety of rules, systems, actors and organizations. This chapter has identified various dimensions of the ongoing governance of the community forest in order to better detect the different environmentalities that shape and influence the direction and decision-making of the KDCFS. Identifying the different environmentalities provides contextualization for the conflicts that have occurred through the lifespan of the KDCFS, as detailed in Chapter 4. It is clear from the variety of influences and directions that forest decision-making have relied on that there are disciplinary and neoliberal environmentalities acting through and on the KDCFS.

Disciplinary environmentalism, as described by Fletcher, follows from the government's ability to use its authority to enact rules, programs and tactics in order to produce the right disposition towards the environment. This environmentalism overlaps significantly with a neoliberal environmentalism as many of the features of the disciplinary environmentalism are designed to produce forestry as an industry and resource. This disciplinary environmentalism is clearly identified by the policies and legal constraints that act upon the KDCFS as established in the results above. Ambus (2016) notes further that the mechanism for granting community forest licenses still provides centralized control for the provincial government as was borne out in my case.

Participants frequently identified the annual allowable cut as a threshold that they must meet or else they will face repercussions from the provincial government. The AAC requirements are so influential that many participants highlight the AAC requirement while also stating that the AAC is set too high for a sustainable timber harvest. The AAC is clearly a mechanism used by the provincial government to shape the governance of community forests. Erik Leslie, the manager of neighbouring Harrop-Procter Community Forest describes the Annual Allowable Cut (AAC) calculation as a "key strategic forest-management decision" rather than an objective technical calculation. Leslie identifies that the AAC apportionment that is part of the initial offer from the province to community forests shapes the CFA tenure and "narrows the focus and effectively limits the management scope for community forests" (Leslie, 2016, p. 315).

The sophisticated mechanisms for ensuring sustainability laid out in the different agreements, plans and policies also appeared to have convinced some past board members and community members that forestry practiced by the community forest would be appropriate and sustainable if these rules were followed correctly. The creation and use of the regulations and procedures that apply to the community forest bear similarities to the ways that Peyton and Franks (2016) identified Stephen Harper federal government using tactics of manipulating “legislative and regulatory apparatuses to favour extractive potential” (p. 455).

McCarthy (2006) described how community forests in BC represent a “thoroughly neoliberal compromise” because it maintains industrial forestry in BC while silencing critics. This bears out when considering the that highly contentious forested areas in my case study have been granted as tenure to the community forest. Participants understand this as a way to have “the locals fight the locals” while the harvesting still took place. As Chapter 4 discussed, the conflict between ‘loggers’ and ‘environmentalists’ did play out in the community forest with both sides controlling community forest at different points to varying degrees. Even when the board leaned more heavily in an ‘environmentalist’ fashion, the requirement to harvest the AAC meant that the community forest had to act as a forest company.

This outcome was highlighted by Arts (2014) who identified that ‘state forestry’, i.e. conventional forestry practices prevail even in different governance arrangements, such as a community forest governance model. This is because the government devolvement of forest governance responsibilities is actually a means of “‘control at a distance’ by the state to solve wicked policy problems locally, which tends to reaffirm power relations and structures instead

of changing them” (Arts 2014, p. 21). Arts continues by identifying that formation of environmental subjects described in environmentality literature (e.g., Agrawal 2005) can be identified in this process of downloading forestry responsibilities onto locals, which builds consent as locals are shaped into responsible subjects. Agrawal (2006) describes this formation of subjects through governmentality as turning people “into accomplices” (p. 217).

The data gathered revealed that many participants who got involved with the community forest for environmental conservation reasons, and to counter industrial forestry there is a general acceptance that logging is a necessary part of the community forest. There is no community forest without logging. Despite critiques of the industrial model of forestry much of the logging carried out by the community forest resembles the industrial model, as in my case. This is due to many of the constraints identified in the data for example: legal obligations require the KDCFS to log its AAC, economic constraints require that they log in the most profitable way they can. All of these bear out Agrawal’s critique.

Fletcher describes that a neoliberal environmentality uses incentives and the profit motive to produce subjects that will act in a particular way. Neoliberal environmentality relies heavily on the disciplinary environmentality of governance to create conditions for this rationality to flourish. Many of the legal obligations, rules and provisions described in the disciplinary environmentality section above served a secondary function in promoting a neoliberal environmentality. These different mechanisms played a significant role in supporting or thwarting the different visions that were competing within the community forest board and its membership. A former woodlands manager of the KDCFS in describing the two predominant

visions of the community forest identified them as “protective”, that is conservation-oriented and “economic”. The data shows that those participating in the community forest with a “protective” understanding of the forest were likely to understand that the benefits they wanted to realize from the community forest could only be achieved if the community forest remained economically viable.

The market realities facing the community forest often determine the forest management options. In the past, strong timber markets enabled the board to focus on harvesting for high profits and returning those profits to the community through grants. With the log market slowing, logging prices continue to determine forest decision-making because valuable logs must be harvested in order to pay for the liabilities the community forest has, such as silviculture or wildland-urban interface expenses. So even when the community forest is not pursuing the overtly profit-driven model that would see economic grants being returned to the community, the KDCFS is highly incentivized to maximize their profits in order to maintain the license and pursue different programs. This necessitates some of the conventional forestry practices implemented by the community forest, as described by participants, because these are the most economically viable forest operations. These findings again confirm some of the findings of Arts (2014) and McCarthy (2006).

The disciplinary and neoliberal environmentality also can be seen acting together through the professionalization of forestry that is necessitated by the legalities and policies of managing a community forest (M. G. Reed & McIlveen, 2006). The professional reliance model of the BC government along with the calculative procedures required to plan and report on

forest management results in community forests relying on professional foresters to undertake the management of the community forest. This represents a devolvement of authority from the provincial government to professional foresters who work in the forestry industry, Parkins and Sinclair (2014) discussion of the patterns of “structural” and “procedural elitism” also helps to describe the way that the production of truth via professional expertise contributes to particular environmental governance outcomes. The professionalization of the community forestry activity as described to me ensures that the government’s policies and procedures are set to be followed but it largely excludes participation by laypeople like community members and even board members. The outcome of this is that many of the management decisions that are under the authority of the community forest to act on must be made by forestry professionals.

Finally, the “protective” or environmental conservationist perspective resembles the sovereign environmentality that Fletcher describes. Sovereign environmentality seeks to produce protected areas to preserve resources. The data shows that interview participants were likely to become involved with the KDCFS because of a desire to protect the forest and that this is still a motivating factor for some. However, this sovereign environmentality is not able to exert a significant amount on the governance of the community forest because the neoliberal and disciplinary environmentalities are so all encompassing and together override the sovereign environmentality. This is most notable in the data that shows that all participants understand and accept that timber harvesting must be a component of the community forest tenure. This outcome is supported by literature which suggests that undermining or at least supplanting “protective” governance arrangements was an intentional outcome of the CFA

program. For example, McCarthy suggested that CFAs were “targeted towards areas that had seen some of the strongest opposition to industrial forestry” and that environmentalists would have preferred that these areas become parks, but this was unlikely to occur so community forestry was a “preferrable alternative” (2006, p. 96).

The data shows that a combination of disciplinary and neoliberal environmentalities are having the most influence on the governance of the KDCFS. This appears to be the case no matter whether the governance structure is controlled by “loggers” or “environmentalists”, as the realities of the community forest license constrain the KDCFS from other environmentalities like the sovereign environmentality.

Chapter 6: Learning

6.1 Introduction

Chapter 5 described how the governance of the KDCFS is shaped by different environmentalities that act on and through it. This chapter will explore whether the participatory community-based governance of the KDCFS has resulted in learning, what learning has occurred, whether community participation allows for social learning and what are some of the challenges to learning. This chapter will provide some indications of an emergent environmentality that differs from the disciplinary, neoliberal and sovereign environmentalities described previously.

To begin, I consider data that points towards social learning outcomes and what participants perceive as success or progress for the community forest. Next, I explore how broader community participation is engendered by the KDCFS, and whether that participation provides opportunities for social learning to occur. Finally, I describe some of the most significant challenges to social learning can be identified specific to the KDCFS.

The main themes I have used that emerged from the data: Learning, Success or Progress, Challenges. Subthemes include: Execution, Silviculture, Value-added products, Governance Structure and Management.

6.2 Social Learning

Social learning, as discussed in Chapter 2, has become an important theme in natural resource management literature because of its potential for building knowledge iteratively to respond to complex problems (Berkes, 2009; M. Reed et al., 2010). This is accomplished

through experimentation, reflective practice or deliberation between stakeholders, which is often made possible through active participation (Cundill & Rodela, 2012). Social change then is realized when individual learning becomes diffused to larger groups of individuals or a community (M. Reed et al., 2010). In this section consider learning outcomes that were identified or inferred through participant interviews.

6.2.1 Governance

Governance was a theme that emerged when participants described what they had learned. Though what was learned about governance was somewhat varied. This section will provide a bit of an overview of the governance learnings identified. Given the KDCFS's history of conflict (described in Chapter 4) it is unsurprising that many participants described learning about politics, conflict and working with people they disagreed with. Here are some examples of participants describing learning about people and their opinions:

As a director I learned about people. Opinionated and kind of bullheaded and stuff at times. Participant 22

I've learned that it's a tough place to sit and be on the board. I mean because you have a responsibility to work to consensus. Sometimes you have to learn to keep your mouth shut and let other people speak and [come forward] with their opinions no matter how weird they might be. Participant 1

Well to me the ideal is to have somebody who comes from a for-profit industry point of view listening to someone, respectfully, that there are other values in the forest besides the timber values. And making room for those other values, that takes people finding people who are really good at listening. That's always the tricky part. Because people are concerned about the sustainability of the forest and the forest stewardship in their watersheds, they're not always well-informed. And they can see the other, the industry people as straight out the enemy. And industry people can see the environmentalists as straight out the enemy too. It's tricky to get people on the board that can get their minds changed a bit. Participant 5

Participants described learning about politics in order to try to influence the governance of the community forest. These participants often highlighted this in terms of conflict and power issues.

I've learned quite a bit about politics. Because with an elected board and this goes back to the greater controversy, you have to be political and it's made me more appreciative of politicians in general. If you have a program that you want to pursue you can only do it if you are in power. First and foremost, if you're not in power then you can't do it. So, because it is now a political board, it's not much of an issue recently, apart from finding people to run, it's not that we're fighting over seats on the board. But when we were fighting over seats on the board everything you did you had to think of through a political lens. 'How will this play out in public?' I want to get my colleagues elected so as I do things I need to think about how I will proceed. So, I've learned that. I've also learned that there are, and I'm going to be frank and classify them as, still in this world today, thugs and tyrants. Who, if they get their hands on power can be dangerous. It can be very dangerous cause I sat on the board with some people like that. So, I know they're there. So, I think what I've learned about the governance structure is that it's a tenuous thing. And you need to be cautious and this applies not to just to the community forest, but I generalize that to politics in general. You need to be cautious about what's going on around you in the world because it can change. Participant 9

Be nicer, to be nicer to people. And not to make assumptions people you know. When people make accusations about conflict and self-interest and those thing kind of things, political kind of stuff, don't assume that they have all the facts. Check it out get a few sources yourself. Politically just to be a little bit more careful, cautious. And that I can get along with anybody whether they're a rabid environmentalist or a logger who all he wants to do is pay off his equipment and make lots of money. I've worked with both and I find them both interesting. Participant 5

It was one of the most challenging jobs I've ever had. Only because there are so many different opinions on things and it's hard to know what to do with that. Like how to bring it all together. Especially when the opinions don't match. So, I think that's what made it the most challenging. And yet very rewarding, because the benefits, like when the benefits started to flow to the community it was really great to see. That those values were going back into the community, which is the whole point of a community forest. That they have control over it, and they can decide what they want to do with any money that's made. And it's great because the community benefits directly, both through jobs and through whatever income is generated, if that's how the board chooses to handle things. Participant 16

Some participants highlighted that they learned how important governance is. That the governance model, which was often at the heart of the conflict because of the competition for board control, also allowed for the community forest to survive the conflicts.

I think that Kaslo is such a wonderful example about how important governance is. That individuals in a small town can make a huge difference. One person's opinion or their leadership can make it go this way or make it go this way. I'm proud of the fact and proud of the model, the society and the seat reserved for the two political bodies. I like that. I think it's a there's a lot of strength in that model. Participant 18

Resilient communities are going to be the ones best positioned to not only look after themselves but also to provide models to others about how it can be done. And so, anybody who's good at something has had to work really, really hard to get there and had overcome obstacles. That's the same for organizations, and that's the same for communities. And I believe we've, through the community forest, learned a lot and are structuring things differently not just around the board table but around how we do everything. And it's often not spoken but I know because a lot of the same people are involved whether it's trail management planning, or food security stuff, or whatever it is, they're having the conversations upfront around how do we structure this so that it can work. And that is an outcome of having the crap beaten out of us. Participant 8

The above learning outcomes largely point to instrumental learning by individuals achieved through experience. Individuals experienced the conflicts and learned to alter their own approaches to the conflict. There are some hints that some of the individual learning has been transferred to the community forest more broadly, this is more clearly seen through recent indications that the KDCFS is evolving its governance structure. This process has been driven by some members of the board and will hopefully enable better working relationships.

Certain people have driven it towards a better governance structure in the past three or four years. Participant 15

I do think, you know, in terms of whether or not this organization has the effect of building capacity, in terms of how well people are able to function as a board. I think that is something that is happening in the current situation. And I think that this board has been

pretty successful in figuring out ways it can walk along together. It's pretty good working relationships. Participant 4

One of the key developments of the recent board direction is to try to ensure the board is focused on oversight and policy development rather than being directly involved in management decisions. The intention is to eliminate some of the micro-management of the managers so that they can make forestry decisions, while the board can focus on higher-level conversations and policies. This development has clear implications for forest management, which will be covered in the next section. Participants described this development as an outcome of learning more about governance and structure:

I've learned a lot about... governance and the structure. Or at least how we've structured it from a heavily involved working board to hiring professionals to do the job and trusting them to take that on. That we can be more successful, so letting go of some of those responsibilities and thinking that we have as board members all the answers. That it must be vetted through us and stuff, I don't know if that's popular in other communities but in Kaslo it definitely has been on many different boards. Because we're just a group of doers or something. We just get super involved and then we're not quite as effective. And I think by being on this board it's made and seeing the transition from where we were when I first came on for the first six months to where we are now is significant. And that structure that like governance and management structure is really I think the key to that change. Participant 19

It used to be that the board was a lot more involved in the day-to-day management and now they do it more as developing policy and allow the management team to manage most aspects. Participant 2

Well, at the moment I would say that we are a policy based governance board, which I've played a big role in pushing us towards. I like governance. So right now, the board adopts and approve, a work plan and a budget for management and management agree to follow the work plan and the budget and if they need any of those things changed then they have to come back to the board and explain why. So that the idea of that, and I'll just say how I understand it, the idea of that is that the board can set strategic directions with management implementing. In practice, I think it's important for management to clue the board in about what directions are available and reasonable because it's a very complex thing, the forest and all the rules that go around it. Participant 4

While participants indicated that this has contributed to a positive working climate around the community forest, others noted that this might not be a permanent change. As discussed in Chapter 4 there have been numerous shifts and changes at the board and management level, so it might be difficult to assume that the shift to a more policy-driven board is a fully realized outcome or if it has just occurred now during a stable moment at the community forest when there is not a lot of community pressure on the board (see below in 6.2.3).

I'd like to think that right now the board is working very well together. There's no conflict, no raised voices at board meetings or anything. So, I would like to think we are learning and moving in a good way for governance. But it might just be that we're just a nice little sweet spot right now. And five years from now maybe there'll be people shouting at each other over the board table again. So, it's hard to know whether we're actually learning and evolving in a good direction or whether we're just happened to be in a nice spot right now. But I think this thing of getting out of micromanaging and sort of trying to hire people then let them do their job is it's a really good move. But then again it means hiring the people that agree with you and if the board composition changes then they won't like these people we've hired because they won't be in agreement with them anymore. Participant 14

But there's only one or two that have the longer term outlook on what is financially viable, what should we be doing as a business to make all these other things work. So that the diversity of the community is addressed to their wants and needs, what they expect out of their community forest. So, I'm saying there's so much time wasted with 9 opinions, they only meet once a month, so they've moved on to say well we trust our managers to manage and we just looked after making policy well after a while that gets pretty dry and really how much policy needs to be made. Participant 1

6.2.2 Forest Management

Many participants noted that they had learned more about forestry and forestry management. This was developed through participating in the oversight of operations and alongside forestry professionals that worked as management or were members of the board.

And another one would be more and more people over time are getting a real understanding about what it's like to run a forestry outfit here. Participant 5

So, I began to learn quite a bit about the management of the forestry at that point, because the community forest had to have people working for them, who would be the management. The forest management people. I mean, we were not forest management people ourselves. Most of us didn't have much background in forestry. There were however contractors on the board who did know forestry and made a living from it. Participant 6

You know, at the beginning I didn't think we should have clear cuts. But I understand why we should here in Kaslo, in some forest types. I understand now that you know the only way we make our money is by cutting trees. Participant 18

One of the ways that learning about forestry management has been realized in a tangible way is the focus on hiring managers because the board at times has struggled with the complexity of forestry management. This participant highlights how the learning curve around forest management for many board members is too steep, so there needs to be a bit of a separation between management and the board with management taking on forest management responsibilities.

So, they have accumulated a bit of an understanding of and history of what there is and of forestry. But overall it's just because of the, there's just so much knowledge that is getting lost. And it's a constant learning curve for [board members]. Training up new people to trying to function in that whole planning. And this is a reason why it's so important that the board sort of sticks with a governance role that they're supposed to have and don't get involved in the management. Because the learning curve is just way too steep for that to happen unless they are actually forest managers by profession or whatever but that leads to a huge amount of confusion. If that is, that is mixed up. So, it's really important that there is a separation and it still is a lot of work to deal with the understanding of, to have the oversight of it all to come up with the values and the policies that drive it all. To understand how it all fits together and how things are being affected by the policies on the ground level. Participant 13

Participants identified that they had learned from past experiences that not all professional forest managers are the equivalent, and so they identified a need to hire “good managers”. Participants indicated that the manager that is required is one that can bring knowledge and experience to handle some of the complexity and intricacies of handling the economic and

regulations of forest management. This was a perception held by participants who had a strong forestry background, for example:

Well I think they've learned, mostly from their mistakes that not all professionals are created equal. And like lawyers or doctors there's some good, some mediocre and some not so great. You know? And that's the way it works with people that you hire. So maybe you get part of what you need or what you want from the board level from your management but it's never really 100% of what you want so then you get tired of it and you decide to terminate that contract and move onto something fresh, you try again. It doesn't mean that everything the manager did was poor. And because you have turnover on the board, they have different ideas about what they want. Managers have their own set of guidelines professionally that they want to try to adhere to that may or may not work with the wishes of the board. And lots of time the manager isn't really that concerned. They've put wood on the table, fiber, but they don't necessarily look at the economics of it. And most of the board members, for the most part in my memory, have little or no expertise at the economics of it either. Participant 1

To have good managers, to pay attention to their finances. Their obligations for the future. Participant 17

So, there's some real challenges there. But to try to explain that to a board of people, who are trying their best, about how the scaling system [works]. So, the governance thing is kind of interesting in terms. The last two years they finally hired two people. Sabrina and Jeff as managers and they kind of freed them up to be a little more flexible. Participant 12

Hiring a management team that was local and understood the vision and values of the community forest was also a learning outcome for some participants. As described in Chapter 4, the previous manager had strong industrial forestry ties, and this meant his focus was largely on timber development rather than a more rounded forest management style.

The managers know what our aims are for a community forest. And luckily they agree, we've found a pair of managers who share our vision as opposed to our last forest manager. Which is basically a logger, he was a good logger. He knew all the rules, but he had no particular interest in going above and beyond and doing things better or something you know. Because this is how you log and that's what we'll do. Whereas this couple that we have now they just got a good feeling that they share, they really do have the same sort of ideals as the community forest has. Trying to make the forest healthy. Participant 14

I've learned it is really important to have good managers who are strong in their understanding of things. I think I've learned that, I've always thought it, but it's being reinforced all the time. That the management objective should not be simply getting wood. Management objective should be what's coming 80 years from now. And that's not just wood. That's animals and water. Participant 17

A decision was made to terminate [previous manager's] contract and new managers were hired. They are both local. Sabrina has worked for the community forest for many years on a contract basis. Her expertise is silviculture and reforestation, and so she sort of focuses on that. And the other young forester, Jeff, his focus is on block layout and harvesting. And they make a good team and they're very well organized and they provide us with clear, effective communication about their activities and plans. And they pay attention to more than just the industrial aspect of the forestry, which I'm very pleased about. Participant 9

As highlighted by the last participant quote above, the clear communication provided by the managers is an important skill they bring to the community forest, because the management team is the primary source of information regarding forestry for the board. As participants identified they provide most of the information regarding forest management issues and are therefore a source through which the board learns.

They have their ears much closer to the ground, so they know what's going on in the province in general. And what mills might be closing up in the near future or something like that. So, they have more information than we do just because they're in the industry and they're always talking to other people and stuff. And so, they can help us find, gather information if we want to make a decision and we feel it sure would be nice to know this. Well, we can ask our managers if that information is out there and maybe they can get it for us and say 'here, here's what, we made, we made a few inquiries with some other community forests or even the regular log, it's not just community forests. They are also in touch with people with woodlots and just private companies that are logging stuff. Participant 14

I learned a little bit about forestry for sure. I certainly didn't go into it knowing everything and I still don't know a lot. I'm more concerned about some different things now. Climate change and the hydrology is more important now than it was then because we're realizing that we had two incredibly dry years in the last two years before this one, where it's absolutely made us fearful that we are all going to be in a great conflagration of forest fires pretty soon. So, let's look at forestry a little differently than say 10 to 15 years ago. And everybody's talking about climate change. Participant 6

It is also from the managers that participants have learned about issues like the possibility that the AAC exceeds a sustainable level for the landbase:

But it looks like, basically, we'll probably run out of wood in 5 years and my source of information from that is the management team. Participant 4

Management has also helped inform the board about silviculture, and in particular planting a species mix that might be more adapted to climate change. As one participant noted about the drafting of the management plan in 2006 there was work being done to try to build climate change resiliency into the silviculture of the community forest.

I remember when we did do our management plan there were people who were very concerned about climate change at the time. And at the time there were people on the board who were climate deniers. It was fairly new at the time, in terms of public awareness. Now it's all over the news every day but in 2006, which was 13 years ago, it was still it was out there, but it wasn't like everybody was on board with the idea. So, I remember incorporating into the management plan the idea of planting multiple species so in a changing climate we were a little more resilient to change. Participant 16

While the silviculture of the community forest has not always been sufficient (as described in Chapter 4), with the present managers silviculture has become one area where the KDCFS appears to be operating differently as compared to other forest companies. This specifically relates to the species-mix composition that the KDCFS chooses to plant. Here the silviculturist describes how she chooses the species mix for the community forest:

I would have to say it's probably from my perspective and maybe that's because I'm more focused on the silviculture to some degree. It's to invest more into future improvement of forests. And you know hopefully ongoing intensive silviculture to aim for a higher grade value logs. And the mix of species that hopefully makes the best out of the big unknowns we have right now with climate change and everything else. I mean this is getting into quite an interesting time period. And the broader we can go the better of us. That's sort of my perspective in terms of diversity. Not everything will work but at least some of it will

work. And so, in silviculture definitely that's the sort of investment we're making, is very broad multi-species. And we try to leave as many options as possible for the future. So, I think that's the most far reaching procedures we're having in place. Silviculturist

The silviculturist linked how pursuing and maintaining this silviculture program, that results from the vision of the community forest, requires ongoing education of the board. This is because the board may change and the economic factors surrounding silviculture are complex, which is why the KDCFS had silviculture issues in the past.

Well for me, on the silviculture end it's, what I look at, the typical industrial practices and I look at the value sets that I get from the board, from the policies. And I overlay them, and I see where I can improve the industrial model to more satisfy the higher standards of what people, directors, and members think that forestry, that community forest should be functioning as or represent. Economy is always sort of the limiting factor of course, to what can be done. To improve things that way. A learning curve with the society, as it's always new. It's an ongoing piece of work. Because the boards change, the board's different depending on who's on the board and the mindsets on it. So, board management is always evolving and kind of flexing type of thing as well. In terms of how much education you have to do. To the different members to give them the knowledge to do what governance they need to do. Silviculturist

The board and society members described learning from the management team, and particularly from the silviculturist about the particular silviculture practices that the KDCFS is engaged with that separate it from conventional forestry companies. As these examples indicate this is where individual learning from managers has been communicated and learned by others associated with the community forest.

So, from what I know, I think that the outlines of the OGMAs, the way that the Old Growth Management Areas are outlined is a product of the founding board's vision particularly. And the reason I say that is, I was just learning this the other day from Jeff [co-manager - RPF], they're delineated to protect some of the domestic watershed areas. But that would have been some kind of combination of community interest and political sway at the time. In terms of practices, I think that we have higher standards in our reforestation, which is partly from being a community forest and partly from Sabrina's [co-manager – silviculturist] amazingness. But I think that the way that the species mixes are chosen and

that kind of thing, would not be standard in the industry because I think that they're not chosen by a price, they're chosen by the effect of climate change on the forest. But in terms of the actual logging practices, we might do a little bit extra in terms of controlling rotten stuff, but we don't do anything radical and it has to do with expense. We don't do any horse-logging or anything like that and I don't know that we ever have. Participant 4

I think on the logging side, it isn't that much different than an industrial logging thing. It's more on the silviculture side, the replanting and brushing and trimming and stuff that we can spend more money making sure that the next crop of trees grows well and stuff. Participant 14

The visions I mean another great one is with planting and the silviculture side of it. I know that they are, they're planting, or they plant for diversity of species. So, they're looking at and they are communicating with climate specialists because they're looking at how what our forests will be in 5, 10, 20, 50, 100 years because that's what we have to plan for. Participant 19

One notable finding appeared to be the level of trust placed on the current management team.

This has likely contributed to the willingness for board and society members to listen and learn from these managers.

Not as much as I'd like I've taken it upon myself to actually get books out of the library about forestry and I try to do some reading. But at those meetings I wish I would learn more actually. I have learned a lot from the silviculturist I've gone on walkabouts with her and I've listened to a lot of her thinking, a lot of her understanding of the forest and I've learned a lot from her. So, she's been the most educating for me in particular. So, I think that's fabulous. So, here's a person here who's finally been hired by the community forest who is able to communicate and she's educating in the fact that she communicates well and so, yay! That's a great bonus. Participant 3

I just think in Kaslo and we didn't always have good professionals. I think having Sabrina and Jeff is the first time we've really had people that I trust. Participant 18

While the present management team earned near universal praise from interview participants there remains an open question about whether that will continue. As the history of this community shows, changes at the board level and changing interests has often resulted in the replacement of management. So, the longevity of the forestry outcomes, such as the silviculture program, and the ability for the board members to learn from the management

team and whether this learning is carried on as the board and/or management team changes, remains an open question as one participant noted as a possibility:

if the board composition changes then they won't like these people we've hired because they won't be in agreement with them anymore. Participant 14

6.2.3 Mobilization

As described in Chapter 4, the past conflicts within the KDCFS have continued to cast a shadow over the community forest. This was evident when asking participants about what they had learned through their participation in the community forest. For example:

I have learned that there are more divisions, conflicts, old grudges, fractious issues than I ever dreamed possible in a community that's only got a thousand people. Well, fifteen hundred regionally. And that actually shocked me more than anything was how divisive the politics, which always spilled over on to the board. How divisive the politics were. There were major groups that were always at odds with major groups and within each of those groups there were factions and divisions and stuff like that. That's still, that's still an issue today and I don't know, I mean it probably is stuff to do with forestry, but I don't know if that's a typical thing at all. Participant 20

Others highlighted that they learned about politics, as described in 6.3.1. A part of this political learning was understanding the importance of community engagement and mobilization to affect the outcomes of the KDCFS:

*And engagement isn't just like having a meeting and saying 'here's our plans what do you think? You've got 30 days.' Engagement is capacity-building. Helping people understand what the opportunities is, what the risks are. How to move it forward so you can truly get people involved. And it's really hard to do that when you're also trying to be a logging company and pay back loans and all of that sort of stuff. So, I think the only reason we still have a community forest here is the incredible hard work of volunteers, who have taken ridiculous amount of s*** and abuse in community. And not just from mean-spirited people who want to treat it like their own logging company. But even by people who don't really want to get involved, don't really want to learn about it, and just want to b**** and complain about stuff all the time. And I increasingly think those are the toughest people on any issue. The people who've just got their mind made up, they're not really interested in learning about anything based on facts. And any community has got a lot of those people and that's why the capacity building and the governance piece, the outreach is so*

important because you need to work really, really closely on those issues. And the successful ones have done a remarkable job of doing that. Participant 8

There were a few board members that were pretty active in recruiting new people or other people in the community that would break up the single vision that I think seemed to be happening. And so, give it a bit more diversity with bringing the women onto the board but also different backgrounds. And experiences. And knowledge. And I think that's when the switch started to happen. But then of course it took 2 1/2 years or so. Then it was okay maybe looking at new management. Participant 19

Sometimes I phoned them. Sometimes I went door to door. I had a list of people and I said, 'Look here's the vision. Here's what's happening now. Here's what I'd like to see. You know, would you join?' It was only five dollars. 'Would you join and come and vote for this?' And most said, 'yes.' So, I won't say greenpeacers, but a couple of the groups that were against giving any money back, you know, had quite a few members. And, remember I mentioned in order, in a community there are little cliques and divisions. I just out hustled them. Period. Participant 20

These examples show how there has been an understanding that community mobilization can be achieved by transmitting particular ideas about the community forest to community members. To some extent this indicates that participants viewed social learning as an important element of achieving particular outcomes or a particular vision.

The data shows that there are examples of ways that this community mobilization has really contributed to the conflicts in the community forest. In Chapter 4, I highlighted the example of how the phrase “where’s the money?” became a slogan for community members wanting to open up the community forest society and pursue an economic vision of the community forest, whereby profits were returned to the community through grants. This is one way that a particular message has been disseminated through the community that contributed to the changing of the governance structure, through the opening of the society. In my interviews and in off the record conversations I heard conflicting opinions about whether

money was being held back by the community forest board during this time, so there is at least some question to the veracity of the “where is the money?” claims that contributed to this movement. Another example was also covered in Chapter 4, whereby environmentalists mobilized community members to hold large confrontational AGMs such that the pro-logger board at the time hired security guards for a meeting.

These examples of community mobilization are relatively clear indicators that there are occasions when particular messages and perceptions of the KDCFS board or management manifest in community actions. During the present calm at the KDCFS that kind of learning or engagement does not appear to be happening in a significant way, as one participant highlighted:

It's hard to really nail that down for people, because a lot of the times when I'm at an AGM or listening to somebody talk I feel like they are reframing their prejudices most of the time, or just restating them. You know people tend to see the same thing that they've seen before, which means in that case they're not learning. Participant 4

While there is an apparent lack of community engagement or mobilization at the KDCFS at the moment this is not due to a complete lack of effort by the KDCFS to seek that engagement as I will explore below in Section 6.5. Participant 4 highlighted the current lack of mobilization to “the lack of controversy and don't forget the lack of money.” This explains why some view the lack of community mobilization as an indication of success:

Odd as it may seem, I think when there isn't a lot of public attention that's a measure of success. Because that means people are satisfied with what's going on. People don't generally devote time and energy unless they want things to be different. So, if they don't want things to be different that in a sense is a measure of 'oh it's going okay.' Participant 9

6.2.4 Value-Added Products

The need for KDCFS to move beyond simply being a small-scale dimensional lumber logging outfit was brought up a number of times by participants. This requirement for value-added products or processes becomes more apparent when considering how participants described how they would determine the community forest's success or progress (see below section 6.4). Here I reveal data showing that participants have learned about the need for value and what they have learned regarding such products or processes.

Well I think that we have to improve the function of the community forest license. And where I'm focused is small scale value-added wood products. Furniture makers. Fuel pucks. Bio char. The single biggest barrier there is the market. Like I was saying we are a dimension lumber driven organization. Participant 12

Something that's out there is like non-timber values. So much is emphasized in timber values. There's so much that is non-timber values. Could we have a great huckleberry crop out of a cut block? Could we have fantastic mushrooms out of a cut block? Could we have recreational values that come from a cut block? And so much of it is just looking at the price of wood instead of looking at it like, 'what else does this bring for us?' And whenever we're investing in things we need to keep that question in the back of our minds like could this lead to something else? Participant 7

So, things could be integrated you know you could be using all the lower value wood for log homes or something or some value-added process. So, this would if the community was organized you could do bigger creative things, but everything is just left to the whim of the system. Participant 11

You got to say that the community forest needs a plan, especially for small scale value-added wood products to create local employment. Shipping the logs out really doesn't create any local employment. So, the challenge then is to find, is to get the resources. That's a provincial responsibility as far as I'm concerned is: marketing value-added wood products. Participant 12

There were some indications that the community forest was working with other community forests to explore value-added possibilities and other mutually-beneficial ways of working together.

So, we did that last December, we met with the Southern Six which was great. Just informal, organized it, went to Creston. Looked at their fire interface logging. Yeah it was really good. So hopefully we can do the same this year and typically everybody's super busy until about December. So, it seems to be a good time. Yeah, very important. I hope we can network more in the future and certainly that if we're looking for some value-added kind of a thing. Just because none of us have got a timber resource that is large. Kind of like a major licensee where we can't build a superstructure of any sort of a thing. But if we all stuck together that our, with all our wood supply, sort of the same idea. We might actually come up with a fair amount of volume that actually does make some impact. Participant 13

At the time I was conducting my research there was a business plan in development that was hopefully going to provide road map to identifying opportunities for value add and acting on them. This planning process was highlighted by a number of participants. For example:

I'm hoping the business plan will help us identify opportunities where we might diversify our hand with things like possibly a small sawmill possibly. I don't know if you're familiar with this, this expression NTFPs, non-timber forest products. Mushrooms, huckleberries, various things that might be out there that you can harvest that have some value. And it's possible that some of those might be enhanced. So, the business plan maybe tourism and recreation. Maybe we can look at the tenure that we have and identify opportunities where we could put in infrastructure for instance that would enhance tourism, which then benefits our community. So that would be another way that community forest could contribute to the local economic activity. And so, I'm hoping the business plan will help us find and explore some of those options. Identify them with an eye on that the market, do it in a careful and considered way rather than just throwing work at things and hoping that it will work. Participant 9

One of the biggest difficulties in implementing a value-added project or process is that it is time-consuming and challenging work and the KDCFS board and management is already occupied by fulfilling the obligations of the community forest (as described in Chapter 5). Participants described that they thought it would require a passionate individual or group, possibly from outside of the KDCFS, to pick up this kind of project and take it forward.

it's an entrepreneurial activity. You have to have somebody who wants it badly and is willing to make it happen. Participant 18

If you want to do anything in some of these small communities you need a spark plug. And somebody that will take it on. And see it through. And I just don't think there was the will to do that. It's a lot of work. And you have to have business partners to get into some of these things. Participant 20

6.3 Identifying Success or Progress

Participants were asked how they would determine success or progress in the community forest, in order to understand what values participants cared about and to identify how participants reflected on the community forest's programs, activities and outcomes. The identified areas provide an indication about the areas that the KDCFS prioritizes evaluating. This therefore suggests the areas where the KDCFS might learn and that it will largely be instrumental single-loop learning.

6.3.1 Economic or Financial Success

The most common response to measuring success or progress in the community forest related to the economic or financial outcomes of the organization. The financial success of the KDCFS can be broken down into two interrelated themes. First, many participants highlighted the importance of the financial sustainability of the organization.

Well, just not going bankrupt helps. I'm not too concerned with you know giving cash to the community. Some, a lot of community forests do operate with a considerable profit and they can then give that money to their community and that cash goes over very well with the community. Where we've been given a kind of a poor forest area. A lot of it's been kind of logged out, all the good stuff's been logged out. We're kind of left with guts and feathers of the operation and so it's hard for us just to break even. So, we're not making a lot of profit. Some years we make some, some years we lose some. I don't see making a profit as being necessary. But we have to make enough profit to cover our office expenses and general sort of things or else we're going to go bankrupt and once again the community would lose the thing. So just staying afloat that's the big thing because I say we have kind of a poor mix of trees and steep hillsides and are a long way from the mills. Participant 14

Secondly, many participants identified the importance of the community forest succeeding financially so that financial benefits could be returned to the community.

Well from a business point of view. Which is the way I always looked at it when I started was, 'You know, is this enormous effort actually benefiting the community financially?' Because that's why we started to do it in the first place. Participant 20

The way those financial benefits could be returned to the community was somewhat varied in the responses. Some participants identified successful logging in order to return to the practice of delivering grants to community projects:

I think a well-run community forest is got the wood's moving, the planting silviculture, everything's going ahead. And they've got funds to invest in the community as well. Donations. It doesn't make sense to have community forest and cutting trees and if there's no benefit to the community. If it's just there, somebody has a job alright. But if it's not giving back to the community then I don't think it's worthwhile. Participant 22

Other participants identified financial success as involving a value-added component:

For me personally I think the success would be if the community forest actually put something in place that did in the end create some form of monetary return. That wasn't just based on resource extraction but also the secondary means of feeding money back into the community through offspring opportunities. To multiply the output. We have sort of been running a single output of taking the resource out, which is a bit of a third world country kind of a thinking. Resource extraction and it's just a one way kind of thing. But I think the, for me, the ultimate success would be if we could actually put something in place that sort of had some feedback loops where, I guess you could call it value added, that we could amplify the benefits of having that resource. Participant 13

Other participants highlighted local employment as the indicator of financial success and that financial success did not necessarily require an emphasis on logging profitably or giving grants to community projects.

Financial success is one. But financial success needs to include employment and as an example the Slocan community forest, they've done very, very little logging. They've aggressively pursued wildfire risk reduction funding, they've bought their own equipment, they've trained their own people, they have semi-permanent staff, like maybe 15 people working in the forest... Their bottom line from logging is not very much but we need to look at a bottom line that includes employment. And the forest industry, especially a small

outfit like ours, if all you're doing is cutting logs and selling logs, you're guaranteeing that your employment per unit, whether it's cubic metre or a truck load, is going to be as low as little as you possibly could. And that's not a flaw in the system that's how the system was built. It's to squeeze out the primary producers and concentrate all the profit with the people who own the means of manufacture. Which is why that element, the employment, that manufacturing piece needs to be done. I think it needs to be an outcome of the engagement and needs to reflect what the community wants, wants to see. Participant 8

Well, provide employment, provide good management keep the community safe from fire and bad management and landslides. Pay attention to what's not safe up there. Those are the things I think are really the most important things. Look after water. What they can about keeping water clean, and to keep up to date with silviculture. Plant, plant, plant, plant, plant, and deal with the fire hazard. Participant 17

6.3.2 Sustainability or Forest Health

The health of the forest was another important measure of success that emerged in the data.

Participants who identified this as one of the measures of success often highlighted that that depended on a long-term view of the forest, and thereby linked it the idea of sustainability. To some extent this was linked by participants to financial sustainability as well, because silviculture and forest operations are so linked to revenues of the community forest.

How would I measure it? I think the first metric would be the state of health of their tenure area. What's the state of the forest? In terms of where they've harvested versus replanting that kind of stuff. I think that would be the primary metric because the forest is their job. Participant 10

It achieves it by looking at the long-haul. Not what's going on this minute or this decade or this multi-decade. It looks at it from a multi-generational way and if it's ever looked at it like well it's good for me. Participant 7

I'm more concerned with just if we're doing the replanting and the forests are growing well so I can look ahead 80 years or so and say in 80 years there's going to be a nice forest here for the community. You know will provide jobs and provide recreational things. So as far as indicators of that we're on track with our values. I'm just looking at what's the health of the forest going to be like in the long term. Participant 14

I think it's through long term strategies. You know demonstrating that they are thinking about this area-based tenure as a landscape unit. That they're thinking about connectivity, that they're thinking about where they can harvest in five years and 10 years

and 15 years and 25 years. Where they can harvest in 75 years. Having a sense of where the roads have to go in order to meet all those objectives for harvesting. And freaking saving money for the roads that have to get built and really employing best practices and strategies like, a good road should sit for two years before you try to drive on it. And you're not just like, 'Okay let's go harvest.' You know some of, some of those things and I think they're in that way but also you know the fuel mitigation stuff is really, really important. Participant 18

6.3.3 Community Engagement

Community engagement was identified by several participants as a key element to the past success of the community forest and success moving forward. This was because community engagement was vital in ensuring that the KDCFS acted in a way that was amenable to the community.

Well I think it's been a success even during the bad times. Because at least the community was aware that it was running the show to some extent. ... I think it was a net benefit because the community at least needed to participate and needed to find out what the hell was going on. And have some control over it. So I'm very much in favour of community forest. Participant 6

Well, I think one way is we're still around. And there's other community forests that have been through equally bad stuff and in some cases even worse. And I think we need to celebrate the fact that people found a way to dig down deep and have those conversations to make it keep going. But that's a pretty low bar. But I think given the history it's an important bar to acknowledge. I think ultimately the measure of success would be an output of community engagement and saying what truly are the community values and what indicators, measurable indicators, do we want to monitor so we could determine our success. And I can have an opinion on that, but I think ultimately with community forest you want to crowdsource a set of indicators and measures of success so that you can do that. Participant 8

Given that community engagement has often occurred during periods of conflict at the community forest, success was considered by some to be consent or approval of the ongoing activities of the community forest.

Well for me successful is meaningful. Where the community feels that they have made, their concerns have been taken into account. Participant 19

Yes, I guess if most people are okay with what we're doing. If we can run plans by people and they're open to talking about it. And they're not with their pitchforks out. We don't have, I saw some past reports, you have a poll and 70% of the people are OK with everything and then there's all different rankings for it. Participant 15

The community engagement aspect, that community connection. How well do people know about it? How bought into it are they? Participant 10

Odd as it may seem, I think when there isn't a lot of public attention that's a measure of success. Because that means people are satisfied with what's going on. People don't generally devote time and energy unless they want things to be different. So, if they don't want things to be different that in a sense is a measure of 'oh it's going okay.' Then the other things are more objective measures like our bottom line, did we meet our budget? Are we maintaining our cut control? Is the forest in good shape? Have we done things to sustain the forest? So there's a number of objective measures and some subjective measures. Participant 9

6.3.4 Governance

In Section 6.2.1 the learning around governance gives an indication about what participants perceived successful governance would look like. A few participants also identified governance outcomes as measure of success. These measures had two basic streams. First, was the community forest operating with a board that did not have a conflict of interest:

...the actual governance structure. Which is how democratic are they operating? How well is that board structured so that you have a good mix of experts and community leaders who may not have knowledge but have a really good understanding of process? Process is probably the number one killer of any organization. If you don't get process you're not going to get anywhere. So, I think for quite a long time they had very, there was a lot of conflict in because it was personal interest in the community forest, not process from the community perspective. So measuring how that shifted would be a good metric. Participant 10

I would look to the board and I would measure the success of the community forest by how little the board has to gain from whatever the community forest is up to. Participant 7

Second, was the community forest generating enough community participation to fill the board with capable individuals:

Actually, a success would be having at least seven people on the board. If you're having trouble getting seven people on the board you gotta look at the model and revisit it. Participant 5

Are people joining the board in droves? Participant 11

6.4 Challenges to Learning: Complexity and Lack of Continuity

The complexity of community forest management highlighted by participants indicates that there is potential for social learning to build iterative knowledge to deal with this complexity. Multiple participants spoke about the complexity of forestry and how that complexity made the governance and management of the community forest challenging, which emphasizes the need for learning. However, the history of conflict in the community forest has led to a lack of continuity which has prevented iterative learning from taking place in the KDCFS. Many of those perceptions related to forestry management and the rules, regulations and economic constraints that made running a successful operation successful:

...it's a very complex thing, the forest and all the rules that go around it. Participant 4

In forestry, it's not only complex. It's extremely difficult to make any money if you make one mistake along the way and so you have to be completely integrated from the marketing, to the silviculture, to the contractor, to the road-builder. Everything has to be so in line and precise. And if you don't line up those things, you're screwed. Something will fall through. Participant 11

As described in Chapter 5, the governmental and economic constraints that the community forest operates within were affirmed to be challenging enough that for some participants the priority of the community forest should be to learn to practice good forestry before moving on to “social forestry” concerns.

You know they want to hug the trees and there are many of us here who have made our living cutting them down and replanting and so on and so forth. So, it's been a bit of a mixed process in that lots of people think that there are many things that make up the

community forest and they're not wrong in saying that, but the overriding criteria is that you can actually make a buck in order to be able to afford to do all those other things. So, you have to learn to practice good forestry before you move on and have your trails and have your mushrooms and your berry picking and all those other nice things that people want to do. Participant 1

On the other hand, one participant highlighted that some of the complexity of forestry, and in particular community forestry, was the incorporation of non-timber values in the understanding of forestry.

I think in those early years we were caught in the conflict between people from that former industrial model and people who understood in a more, a broader idea of what forestry was about, community forestry, and that was the fight. I think what's happened is more and more people have caught up to the, I'll call it, the contemporary understanding of forestry. That it is more complex than just cutting down trees. And that enhanced understanding of forestry has caused a reduction in the conflict because you would be hard-pressed in the modern community to find people who would still support just that simple stark industrial attitude. There are still a few around but they're by far in the minority and their influence has dissipated. Participant 9

Adding to the challenge of understanding and practicing good forestry is the time-scale that forestry occurs on. One participant highlighted this time-scale as a challenge because it made it difficult for people to understand what could be good or bad forestry practices because the feedback loops are too long.

Everything in the forestry business is a cycle is one hundred years. You know that every time you plant a tree to the time you harvest it. Or whereas in farming, it's one year from the time you plant it to the time to harvest it. And so people can relate to farming, they can relate to fields which is sort of the equivalent of a clear cut. But it is a field of wheat or something you think, people think it's beautiful. You know this nice square in the prairies. But you know you try and grow, you try and cut down, to harvest a square of clear cut and knowing that in 100 years it'll be beautiful forest again or whatever. But people can't get their head around that. It's hard because of the scale, the time scale and everything. It's difficult working, trying to get people to sign on to something when the benefit, you know, let's spend extra money right now instead of giving money to the community for a new ice plant at the curling rink or something that they desperately need. Let's really get this forest in good shape for a hundred years from now. Which way you're gonna go? We need, the curling rink needs repairs right now. You're telling me something that's going to

look really good, but we'll all be dead by the time that happens. It's a hard sell. Participant 14

This participant draws attention back to the conflict that has occurred within the KDCFS through its history, highlighting the more economic benefits vision vs. the environmentalist vision. This conflict has been a fairly critical barrier to iterative social learning because as the board has swung back and forth from vision to vision coupled with the revolving door of managers and board members, there has been a significant lack of continuity. This was identified by participants as a problem for the community forest's ability to learn:

How can you transfer what everyone's learning all the time into the future? Right now, there's no mechanism. The manager leaves, he's disgruntled someone takes over and burns them. Every manager comes in has a different idea, does different things. So, the challenge is continuity of intelligence over the land. And that's what the forest deserves: its 100 to 200 year old program. It needs proper management. And how do you ensure that with the community forest license with a revolving board and revolving managers? Participant 11

Where say I've had, like say a lot of the woodlot owners have had their woodlots for 35 years. So, they get to know their plantations, they get to know the whole area. And they have a tie to it. It's like a, what you would call it. They care about every corner of their land base, because there's a real attachment there. Whereas just being a director for 2, 4, 6 years, yeah there is and there isn't. Maybe the odd individual there is but. Participant 1

For the most part because everything is revolving all the time. Like the board is constantly changing except for a few diehards that keep coming back. So, they have accumulated a bit of an understanding of and history of what there is and of forestry. But overall it's just because of the, there's just so much knowledge that is getting lost. And it's a constant learning curve for training up new people to try to function in that whole planning. Participant 13

In addition to the lack of continuity, the different positions and perceptions of forestry that have been embedded in the community made it challenging for learning to be diffused into the broader social unit, thereby making social learning difficult.

Oh well I don't know probably that it's really, really difficult to organize people. And that, you know, quite often decisions aren't made for necessarily for the greatest good or what

makes the most sense. Or it's just decisions sometimes quite often are made because of whoever is plugged into the scene at the time. And it's quite a reactionary thing. So, what have I learned. I don't know. It's a bit difficult to organize people. It's super difficult to organize people. Participant 13

Like when you're trying to change something. These small communities you'd think that could turn directions on a dime. It's like trying to train an elephant to tap dance. It's a real process because of that. Participant 20

6.5 Summary

In this chapter I have identified some of the key learning outcomes that have occurred through the community forest. While Chapter 5 described the way that different environmentalities have shaped the governance of the community forest, this chapter has looked to provide data to understand what, if any, affect learning and participation have had in shaping the governance of the KDCFS. In particular, I have looked for evidence of social learning that might contribute to iterative, adaptive governance of the community forest.

One of the key findings of this chapter is that learning has contributed to the professionalization of the KDCFS, which follows the findings of other researchers of community forestry in British Columbia (e.g., Egnyu, Reed, & Sinclair, 2016). This is best exemplified in the combination of two of the significant governance and forest management learning outcomes. On the governance side there is the recent development of the board to be more policy-oriented and to provide oversight to the management team, rather than micro-managing forestry decisions. This development necessitated the hiring of “good managers” (professionals) who are able to manage the community forest appropriately and keep the board informed about operations. The immediate result of this is the development of a capable

forestry operation. This is further confirmed when considering that the most common measure of success was the financial viability of the community forest.

The data provides a useful insight into what kind of learning has occurred at the KDCFS that has contributed to the professionalizing the governance and management of KDCFS. Almost all interview participants described learning something through their involvement or participation with the community forest. This is consistent with literature that indicates that participation is a mechanism for learning or transforming individuals (e.g., Agrawal, 2005; Reed et al., 2010). Most of the learning outcomes described in the data fit into the category of single-loop learning, that is learning that occurs through change that seeks to affect a particular outcome (Armitage et al., 2009; Keen, Brown, & Dyball, 2005; Medema et al., 2014).

Many of these single-loop learning outcomes identified by participants point to informal individual learning rather than social learning. For example, participants described what they had learned about governance identified learning to work with others and/or get better at politics to maintain control of the board. Participants learned individual skills (i.e., listening) to better manage conflicts on the board as opposed to this learning resulting in a formalized conflict resolution process. This indicates that the conflict and power issues engulfing the KDCFS resulted in informal, experiential learning. Though the lack of transmission of this learning from individuals to the wider community indicates that social learning was not widespread (M. Reed et al., 2010).

Participants highlighted learning from past experiences with managers that they did not think were managing the community forest appropriately. Hiring “good managers” was another

example of this single-loop learning where participants wanted to modify skills and activities to achieve better forest operational outcomes. The current managers were hired to accomplish this, and participants trust them because they are local and are managing not just the harvesting appropriately, but the silviculture and society as well.

The few examples of social learning outcomes described have been achieved because of the trust in the current managers that interview participants. The silviculture program and the AAC exceeding a sustainable margin for the landbase are examples of single-loop learning outcomes that were learned by the managers and spread to the KDCFS board. This largely supports the assertion made in co-management literature that “social learning takes place through deliberative processes involving sustained interaction between individuals, and the sharing of knowledge and perspectives in a trusting environment” (Cundill & Rodela, 2012, p. 11).

There are indications that social learning is or may be achieved through the community participation activities described in Chapter 4. Interview participants did describe learning from community forest activities (i.e., field tours, open houses) though how widespread this is given the low community participation continues to be a question. This participation that largely revolves around consultation, with the KDCFS management seeking to inform community members about operations. Engagement is largely about building social license for forest operations and ensuring that the community is not upset at the actions of the community forest. Here again a trusting environment, based on trust of the KDCFS management and board, could lead to social learning occurring through these ongoing consultative processes. This again

is in line with the assertion that social learning can be achieved as a result of a trusting environment (Cundill & Rodela, 2012; Medema et al., 2014).

Participants identifying that they had learned KDCFS needed to add value-added products in order to “improve the function of the community forest license” are another example of single-loop learning. This is because they are attempting to address some of the problems of being a small-scale operator, by altering their existing management strategies or actions rather than by reflecting on or “challenging the assumptions upon which those strategies are based” (Armitage & Plummer, 2010, p. 12).

A theme that emerged from these learning outcomes, was that participants identified individuals as both driving different outcomes and as a requirement for changes to occur at the community forest. “Certain people” were noted to have helped drive the governance structure to its more policy-oriented format. The silviculturist was noted as a highly influential in moving forward with a progressive silviculture program. Participants described the need for an individual or group to drive the development of a value-added project.

One learning outcome that seems to suggest that communicative, rather than instrumental, learning is occurring relates to the mobilization of the community. While participants articulated learning about the different conflicts and politics of the community, the actions of the community during these mobilizations suggests that engagement resulted from the communication of a particular vision or values that the community rallied around. This is also the learning that comes closest to representing a double-loop learning, whereby

community members were mobilized to action because they were critical of the values and policies of the KDCFS at those times (Medema et al., 2014).

The data shows that participants would assess the success of the KDCFS that were organized in four themes: 1) economic/financial success, 2) forest health, 3) community engagement, 4) governance. These themes largely follow the learning outcomes that have been outlined. The most common response focusing on the economic or financial sustainability of the KDCFS suggests that participants are focused on viewing success based on incentives, which supports the findings of Chapter 5 that indicates that the KDCFS is influenced by a neoliberal environmentality. The description of how these areas might be evaluated for success indicate an instrumental approach to evaluate progress. These markers of success suggest that participants are more likely to achieve single-loop learning outcomes while evaluating progress and reflecting on the work of the community forest. This is because these markers of success are more interested in improving the function of the community forest operations rather than success resulting from changed assumptions or values.

While most participants identified learning something through their involvement with the community forest, there is only one example of double-loop learning revealed in my data and no apparent examples of multi-loop learning occurring. This may be because the KDCFS exists within the government's community forest program that was not designed to be a learning program, and so KDCFS was not designed to be a learning organization (Egunyu et al., 2016; Nenko, Parkins, Reed, & Sinclair, 2019). When taken in concert with the findings described in Chapter 5, the lack of intentional multi-loop learning processes results in learning

outcomes that largely focus on fulfilling the CF license commitments and if/where possible satisfying the community's desires. Even then the mobilization of the community is constrained by the context of the community forest, with conflict being intra-community and any changes to the board still result in a necessity to meet the obligations of the community forest license.

The lack of continuity resulting from board changes and the turnover of managers was identified as a challenge to learning. This is in line with literature that suggests that social learning requires time to achieve different levels of learning (Egunyu et al., 2016; Pahl-Wostl et al., 2007). This lack of continuity has prevented iterative social learning from taking place and potentially poses a challenge for the KDCFS in the future if stability is not maintained.

The lack of iterative and multi-loop learning occurring at the KDCFS means that there is a significant challenge understanding the complexities of managing the community forest. These complexities include understanding the market, silviculture, harvesting and legal obligations of the license. This contributes to the need to rely on professionals to operate the community forest (Egunyu & Reed, 2019; Parkins & Sinclair, 2014).

Chapter 7: Conclusion

7.1 Introduction

Community forest governance and social learning have both, separately, been the subject of significant study, however there is still a lack of scholarship on how social learning impacts community forest governance. Given this, the purpose of my study was to investigate how participation and social learning shape the governance of community forests, by describing the environmentality that is produced through community forest management. It was guided by the following objectives:

1. To examine the range of environmentalities and their accompanying strategies, technologies and programs that influence community forest governance.
2. To describe how stakeholders (committee members, government officials, resource users, industry) participate in governance of community forests.
3. To describe what stakeholders have learned/how stakeholders have been formed as environmental subjects through participation in community forest governance.
4. To describe the emergent environmentality that is articulated by those participating in community forest governance.

To address these objectives, I selected the Kaslo and District Community Forest Society as a case study. Data was collected through semi-structured interviews, document review and some participant observation as outlined in Chapter 3. My conclusions are organized around each of the objectives set for the study.

7.2 Range of environmentalities

From the data, I was able to identify two primary environmentalities that act together and separately to influence the governance of KDCFS; a disciplinary environmentality, and a neoliberal environmentality.

Data revealed that the disciplinary environmentality follows from the provincial government's authority to enact strategies and programs that result in a particular disposition towards the governance of community forest. This disciplinary environmentality is characterized by the features of the KDCFS tenure license, which is granted by the provincial government, thereby retaining a measure of control over the community forest program. The tenure license area, described to me numerous times as "the guts and the feathers", is a highly contentious landbase because of the watersheds, viewscapes and proximity to residential areas. Participants identified that the community forest was granted this tenure because it resulted in the local conflict over the management of forest rather than locals opposing forestry operations undertaken by the province or industry.

The data also shows that the legal and regulatory obligations in the tenure are based on calculative procedures decided upon by the provincial government, and these then determine many of the forestry operations of the community forest. This is best exemplified by the AAC, which many participants felt was an overriding requirement of forest operations. Ostensibly these types of regulations ensure that the community forest is managed sustainably, while simultaneously maintaining timber production from the community forest. In order to meet these obligations, professional knowledge and management becomes necessary. This in turn

results in relatively conventional forestry practices continuing, because control is maintained by the provincial government by holding authority over the tenure license (e.g., Ambus & Hoberg, 2011; Leslie, 2016). One final outcome and indicator of this disciplinary environmentality is the formation of subjects into willing accomplices as participants, even environmentalists, understand and accept that the KDCFS has to log to maintain the community forest tenure. This finding is consistent with Agrawal (2006) who showed how a disciplinary environmentality formed environmental subjects participating in community forestry in India.

The neoliberal environmentality differs from the disciplinary environmentality through the use of incentives and profits, rather than direct authority, to produce subjects that engage in the community forest governance. This neoliberal environmentality was characterized by the economic realities of the community forest and the different incentives that could be realized through the community forest. As described by participants, to generate the revenue required to pay off silviculture liabilities, hire logging contractors, and manage the community forest, often necessitates the harvest of the most valuable stock. The motivations of past iterations of the board to also provide grants to the community from “profits” was a significant incentive to harvest as profitably as possible, and now harvesting continues to be incentivized in order to pursue new programs like wildland-urban interface work.

The neoliberal and disciplinary environmentalities worked together through the governance of community forestry in BC. This is so because the provincial government is pursuing a forestry strategy that seeks to maximize the profits through the harvesting of timber. The professional reliance model associated with foresters and mentioned by

participants is a kind of devolvement from the provincial government to professional foresters to provide oversight of forestry in BC to ensure the sustainability of forestry practices. It prioritizes professional knowledge and results in calculative procedures that are designed to maximize outputs, as indicated by the high AAC of the KDCFS. The outcome of this is the continuation of state forestry (Arts, 2014b).

There is one more environmentality that was identified through the data, a sovereign environmentality, though it's effects were limited. A sovereign environmentality, as described by Fletcher, is one that seeks to create protected areas to preserve a resource. The data shows that many of the groups and individuals, particularly those with an environmentalist outlook, participating in the KDCFS are motivated by what might be described as a sovereign environmentality. The impulse to preserve or protect the forest around the community can be seen through the mobilization of society members in response to "logger" dominated boards and the election of "environmentalists" to the KDCFS board. However, the effects of this environmentality are limited because the neoliberal and disciplinary environmentalities and their accompanying strategies and programs "max out" the KDCFS resources and ability to do anything else. This appears to have been a strategic outcome of the CFA program, as McCarthy (2006) describes that the program targeted areas with strong opposition to industrial forestry with community forestry being the only alternative available to environmentalist groups.

7.3 Participation

The data shows that participation in the KDCFS has been highly variable in terms of who participates, how many stakeholders participate and how stakeholders participate. Initially the

KDCFS was founded as an outcome of the KART, a multi-sector resource advisory group, after the opportunity was presented to it by government officials. This group was comprised of a number of individuals and groups which were critical of industrial forestry, which mirrored the creation of the CFA program as a result of criticism of industrial forestry throughout BC (Ambus, 2016). The KDCFS during its first years was a closed society, which meant that participation was limited to a nine member board. This board was comprised of members of the KART, as well as one representative from each of the RDCK and the Village of Kaslo. Initially this board pursued a program of selective logging with the plan to build a legacy fund for the future. This initial period where the society was closed was identified by participants as a reason for mistrust in the organization, with participants stating a preference for an open society though the way that transition occurred was problematic. Had the KDCFS opened the society up on its own terms there might not have been the same kind of backlash, as the level of distrust might not have been amplified as much. On the other hand, McIlveen and Bradshaw (2009) describe that the Burns Lake Community Forest owes much of its success to a small group committee/board members who conducted the operations of the community forest, while participation was largely involved only in the design process.

Members of Kaslo's forestry industry began participating in the KDCFS through the mobilization of community members, which led to the KDCFS transforming into an open society where society members could elect board members. During this period the governance structure of KDCFS shifted away from a consensus-based decision-making model to Robert's Rules of Order, using a majority rule board model. This resulted in the forestry industry members of the board, who were voted in by society members, pushing to pursue a

conventional forestry approach to generate revenue that could be returned to the community through grants.

Community members were mobilized in great numbers by the 'environmentalist' and 'logger' groups on the board to participate in the KDCFS. This participation included voting in board elections, voting on special provisions, attending and contributing to AGMs. The data suggests that participation at this time was a result of the confrontational environment at the KDCFS and interest in the revenue that was being generated through the forest's activities. After the revenues of the community forest dropped and the conflicts subsided, community engagement decreased. The dynamics of the Kaslo and Regional District of Central Kootenay were amplified by the KDCFS, particularly the longstanding logging industry community and the large environmentalist contingent that lived in the area. The decline of the logging industry in the area has been a contributing factor to the lack of conflict in recent years as there are not as many 'loggers' left.

Different stakeholders maintain an interest and participate in the KDCFS, either through participating in consultation opportunities (e.g., open houses, kitchen table meetings) and by voting for board members. Some of those stakeholders that continue to participate are environmentalists, trails and recreation groups (e.g., mountain bikers), neighbouring land/woodlot owners, and watershed users. These stakeholders are generally consistent with the National Survey of Forest Advisory Committees (Lindgren, Sinclair, Nadeau, & Teitelbaum, 2019). The data suggests that the KDCFS takes a fairly active role in consulting and engaging

these different groups of stakeholders through field tours, open houses and kitchen table meetings. At this time there is no significant meaningful participation by First Nations groups.

The nine member board in place at the KDCFS is meant to provide an opportunity for a diversity of people and perspectives to participate in the community forest. While participatory or collaborative governance models have the potential to allow for decision-making that is inclusive of a diversity of perspectives and deal with conflict (e.g., Armitage, Berkes, & Doubleday, 2007; Bullock & Hanna, 2007) using such approaches has not always achieved such results as my data shows. The KDCFS was a site of significant contention for much of its existence, as different groups fought over its direction. This type of intra-community conflict, or lack of social cohesion, has been identified as a reason for the lack of success in other community forests in BC (McIlveen & Bradshaw, 2009). At the same time the data shows that meaningful participation in the KDCFS has been limited to the extent that the devolution of responsibilities from the provincial government has required particular knowledge and skills to actively participate in the management of the community forest. This is consistent with the findings of Egonyu et al. (2016) in the neighbouring Harrop-Procter Community Forest. The professionalization of forest management is also being identified as an outcome of participatory forestry efforts in the Global South as well (e.g., Lund, 2015).

7.4 Learning

The data revealed learning has been occurring at the KDCFS as participants identified several learning outcomes. The learning outcomes were broadly summarized in four categories: 1) governance, 2) forest management, 3) community mobilization, and 4) value-added

products. Notably, the learning outcomes were largely indicative of single-loop learning resulting through change that is trying to affect outcomes rather than underlying values or assumptions. Assuah (2013) found that learning outcomes of the Wetzinkwa Community Forest Corporation, another community forest in BC, were also primarily single-loop outcomes. Egnyu et al. (2016) suggests that CFA policy provides the framework that guides learning, which provides some insight into why learning centers on outcomes.

Governance learning outcomes identified through the data related to learning how to work with others, a better understanding of politics and governance responsibilities. These learning outcomes were linked to individual experiential learning that occurred through the conflicts that have occurred in the KDCFS and are largely related to trying to achieve better results through participation in the governance of the community forest. One of the ways these governance learning outcomes have been realized in the KDCFS is the recent development of the board into a more policy-focused body, rather than the more hands-on working board, which it had been in the past. Shifting to a policy-focused board that sets strategic directions is one of the ways the board has attempted to deal with the complexity of forestry operations, which is then placed into the hands of capable forest managers.

While participants described learning about forestry management, the most significant learning outcome identified was the importance hiring “good managers” so the board could delegate operational decision-making to those managers. This learning outcome is a confirmation that the professionalization of forest management is an outcome of the community forestry in BC described previously by Egnyu et al. (2016) and is an extension of

the learning to be a more policy-driven board. This professionalization is also an indication of the elitism within participatory environmental governance that Parkins and Sinclair (2014) describe. Notably, the data shows that the KDCFS has recently learned the importance of hiring managers who are able to manage for more than just timber harvesting. Participants identified trusting the present managers, which resulted in participants learning from the managers about silviculture and issues regarding the AAC. I conclude that this is an indication that some social learning among the Board is occurring, as this learning is transmitted from the individual managers to the broader KDCFS board.

The data also shows that there have been times when communicative learning has resulted in the mobilization of the community to become actively engaged in the KDCFS. These moments largely occurred during periods of conflict when community members were mobilized either by economic interests or environmental concerns to participate in large numbers that affected the governance of the KDCFS. It appears that these incidences of community mobilization occurred because of efforts to engage community members to critique the values and policies being espoused by the KDCFS during those times, which suggests that these may have been double-loop learning. Participants described the relatively low community engagement with the KDCFS as an indication that the community is generally amenable to the present vision and forest operations.

Many participants described the need for the KDCFS to develop value-added products, which indicates that participants have learned that being a small-scale market logger is not financially sustainable. A number of participants described the different products and processes

that they had learned about that could be options for the KDCFS, however participants also identified that they lacked a motivated individual to really propel a value-added venture forward. Learning about value-added products indicates that the participants are particularly concerned about the financial sustainability or profitability of the KDCFS, which was confirmed by the way that participants described how they perceived success.

In addition to the identification of these learning outcomes, the data showed how participants would determine whether the community forest is successful. Responses to this revealed what areas participants are focused on monitoring and evaluating, which gives an indication about the direction of future learning outcomes as monitoring is essential to learning and adapting. Most participants highlighted economic or financial sustainability as the most important determinant for the success of the KDCFS. This follows the learning outcomes focused on value-added products and professional management, it also suggests that the participants have been shaped by the neoliberal environmentality whereby financial incentives, which in this case mean the survival of the society, are front and centre. Achieving financial sustainability is likely to be a result of single-loop learning as the focus is about whether the KDCFS is achieving the correct outcomes, rather than reflecting on the underlying values and assumptions in forestry.

The data shows that the lack of continuity in the KDCFS vision, board and management has been a significant impediment to learning, and specifically social learning. Lack of continuity in community forestry in British Columbia is a reoccurring event and this often affects the direction of a community forest. Assuah (2016) identifies that the Wetzinkwa Community

Forest Corporation has had turnover on their board as a result of decisions based on the use of an industrial forestry model rather than ecosystem-based management; McIlveen and Bradshaw (2009) describe that a community forest proposal by Nuxalk First Nation lacked community support and a turnover in leadership led to disinterest in the proposal. The turnover in these areas has prevented the kind iterative learning that is required to understand and manage the complexity of a community forest. It has also prevented the establishment of a long-term vision and plan that could enable learning that moves beyond instrumental single-loop learning. That community forests in BC have not been structured as learning organizations, further results in learning occurring incidentally rather than by design.

7.5 Emergent environmentality

This study seeks to describe the emergent environmentality of the KDCFS in order to determine how, or whether, participation and social learning has affected the community forest's governance. As environmentalities are not applied as discrete and complete, and are therefore contingent on conditions that they encounter (Fletcher, 2017), identifying the environmentalities interacting with the community forest governance, and conditions resultant through participation and learning, provides an opportunity to describe the emergent environmentality of the KDCFS as described by Figure 2 below.

Figure 2: Updated Conceptual Framework



The emergent environmentality that surfaces from the data is largely a combination of the disciplinary and neoliberal environmentalities described in Section 7.2. This is described below by using the four dimensions described in Chapter 5: Fields of Visibility, Techniques of Government, Production of Truth, Formation of Subjectivities. The emergent environmentality to be described should not be understood as a complete rationality, and there are some indications that these environmentalities have been and continue to be contingent, which will also be described.

The data suggests that the “fields of visibility” dimension, that is the way the community forest is described and perceived, is largely consistent with and dependent on the calculative procedures and mapping that are required by the provincial government. While some participants perceived of the forest in environmental conservation terms by highlighting their values of biodiversity and ecosystems, these perceptions are generally taken into account in the forestry management plan through the way that values are mapped and calculated. The data shows that the tenure, which encompasses viewscapes, recreational areas, watersheds and

more, was understood to be under community control and that presents an opportunity for economic benefits to be realized because of the accounting for those other values.

My results show that the effect of the disciplinary and neoliberal techniques of government on the KDCFS was the professionalization of the community forest management. The legal and regulatory obligations, combined with the economic realities of being a small-scale forestry operation has meant that the KDCFS, like other BC community forests (e.g., Ambus, 2016; Egonyu et al., 2016), needs to rely on professional forest managers to handle these complexities. The need to hire good managers was even identified as a learning outcome, which suggests that some of the learning that occurs at the KDCFS reinforces the disciplinary and neoliberal environmentalities acting on the community forest governance. The AAC, which many participants identified as too high for the landbase, continues to be an obligation that the KDCFS feels compelled to try to fulfil to some extent. The results of the different rules, obligations and economic realities means that KDCFS operates similarly to a conventional forest outfit in terms of its timber harvesting operations. Notably the KDCFS appears to now be planting a greater variety of tree species while meeting its silvicultural obligations, which suggests that learning to innovate within the confines of the provincial regulations is occurring to some extent.

As the data shows, key components of the tenure license, such as the AAC, have been determined through the calculative procedures implemented by the provincial government. The KDCFS is then also required to follow the professional reliance model to ensure that they are accurately meeting the requirements laid out in their tenure agreement. As such, this

privileges particular forms of knowledge that inform the governance and decision-making of the KDCFS. As many participants pointed out, the managers are a key source of knowledge about the health of the forest and the forestry operations, with many participants identifying that they had learned from the current managers. The lack of continuity in vision, board members and management that has occurred through the KDCFS history has been an impediment to learning and building knowledge, which further favours the knowledge held by formally trained forestry professionals. Another element challenging learning, particularly double and multi-loop learning outcomes, is that the community forest program in BC has not been set up to maximize learning. The result of this is learning, or knowledge production, that is largely instrumental single-loop learning that does not challenge the values of the neoliberal and disciplinary environmentalities, but rather results in learning that adapts to these environmentalities. An example of this would be the learning that emphasized the need for value-added products to improve the economic productivity of the KDCFS in order to produce more profit while also meeting the requirements of the tenure license.

Among the most significant indications that the emergent environmentality of the KDCFS is one that resembles a combination of disciplinary and neoliberal environmentalities is the way individuals have been formed as subjects to act in particular ways in relation to the community forest. One example of this was the transition from a closed board to an elected board, with the change in decision-making protocol described above, which was the result of participation by community members who wanted to see monetary outputs of the KDCFS. The election of experienced industrial foresters to the board was viewed as an attempt to maximize the profits that could be returned to the community, which indicates that community members

were likely informed by a neoliberal rationality. A different example is seen through the data that shows that participants with an environmental conservation perspective all perceived timber harvesting as a necessary component of the community forest operations. This has occurred through participation in the community forest and was informed by financial incentives (e.g., the financial sustainability of the KDCFS, funding of programs of the KDCFS) and by the perception that the tenure might be taken away by the government if they did not harvest timber.

While the data points to how successfully the neoliberal and disciplinary environmentalities were acting on the KDCFS, particularly compared to the sovereign environmentality, there are some interesting points that show that this emergent environmentality is historically contingent and not inevitable. This is most visible through the competing visions for the forest described in Chapter 4, which has had varied impact on the execution of forest management in the KDCFS. The mobilization of community members at different times based on their perceptions of the values of the KDCFS resulted in tangible changes to the board and the resultant forestry management. This suggests that double-loop learning could result in broader participation and push the community forest governance in different directions, at the KDCFS mobilization once resulted in a more economic incentive-focused direction and once resulted in a more environmental conservation-focused direction. The governance outcomes from mobilization and double-loop learning are not necessarily going to result in a significantly different emergent environmentality, like the liberation environmentality described by Fletcher (2017), but like the mobilization around the War in the Woods there does seem to be potential for different governance arrangements to be produced.

These different governance arrangements presently appear to be limited to the neoliberal and disciplinary environmentalities that act through the community forest program suggesting that McCarthy's critique of the devolution of responsibilities to community forests as a "neoliberal compromise" that maintains the industrial forestry governance arrangement is correct (McCarthy, 2006).

7.6 Future research

One of the significant governance limitations of the KDCFS and as a result my study, is the lack of First Nations, or Indigenous, participation in the KDCFS. This is a relatively unique situation in BC as most community forest have First Nation participation (e.g., Ambus, 2016; Assuah, 2013). First Nation participation could potentially have altered the governance arrangements and the emergent environmentality, particularly in areas of BC where community forests are located in unceded territories. This will be important to consider in future research.

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Appendix 1: Community Forest Selection

Compiled from Assuah, 2013; Assuah et al., 2016; British Columbia Community Forest Association, n.d.; Gunter & Mulkey, 2012; Rooban, 2017

Community	Administrative authority	Owners, Partners and Shareholders	Board Structure and number of board members	Legal structure/business model	Documentation availability
Dunster Community Forest Society	Society	Owned by Society members	Seven directors. One permanent position held by the Simpew First Nation. Six directors elected at annual general meeting.	Non-profit incorporated in 2005 so community can manage community forest. Full-time general manager.	Forest stewardship plan, board meeting minutes, financial statements and legal documentation available on website
Kaslo and District Community Forest Society	Society	Owned by Society members	Nine directors, seven elected from the membership, one seat reserved for Village of Kaslo, one seat reserved for Area D appointee.	Non-profit society with membership paying \$5 annually. Members must be residents or landowners in area and 18 years or older. Consulting and contracting firms hired for timber supply surveys and for harvesting.	Meeting minutes, treasurer's reports, woodland manager reports, planning and financial documents available on website. Some documentation appears to be out of date.

<p>Cheakamus Community Forest</p>	<p>Limited Partnership</p>	<p>Three partners - Resort Municipality of Whistler, Lil'Wat First Nation, and Squamish First Nation have equal shares</p>	<p>Each partner appoints two directors</p>	<p>Three equal partners oversee the management and operation of the forest under the auspices of the Cheakamus Community Forest Society, an independent, non-profit organization. Richmond Plywood acts as the operations contractor.</p>	<p>Meetings minutes, annual reports, planning documents available on website</p>
<p>Creston Valley Forest Corporation</p>	<p>Corporation</p>	<p>Five shareholders include Town of Creston, Wildsight, Erickson Community Association, the Regional District of Central Kootenay, and the Kitchener Valley Recreation and Fire Protection Society. Each shareholder holds 20% or a one dollar share of the Creston Valley Forest Corporation.</p>	<p>Nine directors: each shareholder appoints one director, five at-large directors.</p>	<p>Creston Valley Forest Corporation governed by 10-member board. Full-time forest manager reports to the board for all forestry and business management. Part-time office administrator reports to the Forest Manager and is responsible for all business administration.</p>	<p>Policy manual available online</p>

Cherryville Community Forest	Society	Regional District of the North Okanagan and the Spltasin First Nation are partners. Partnered	Community- based board with representation from other community institutions.	Non-profit Cherry Ridge Management Committee manages community forest. Cherryville residents are eligible for membership in the society.	Policy and bylaws available but no meeting minutes or reports.
Harrop-Procter Community Co-operative	Co-operative	Shareholders are co-op members and have one share.	Eleven directors are elected from the co-op membership for 2-year terms.	Management committee (three board members), forest manager, and office manager	Newsletter and updates available
Sunshine Coast Community Forest	Corporation	District of Sechelt is 100% shareholder	Up to 10 directors recommended through Nominations Committee and approved by the shareholders for 1-year terms.	Corporation with volunteer board composed of community residents. Appears to be operated by a general manager.	Board biographies, meeting minutes, bylaws, policies, annual reports and financial statements available

Appendix 2: Draft Semi-Structured Interview Guide

Introduction

- What is your role in forest management?
- How long have you been involved with the community forest?
- What was your motivation for getting involved in the management of the community forest?
- What does the forest mean to you?

Vision

- How would you describe the vision of the community forest? What are the values expressed in that vision?
- Who was involved in formulating that vision? What reasons did they have for creating that vision?
- Describe how the community forest achieves or fails to achieve that vision?
- How has that vision evolved over time?

Forest Management

- How was the forest managed before the community forest agreement?
- Who was involved in the application for the community forest agreement?
- How would you describe the governance of the community forest?
- How are forest management decisions made?
- What decisions and management activities does the forest management team have authority to act upon?

Techniques of management

- What types of information do managers rely on to inform their management decisions? Where does the information come from?
- Can you describe the strategies, practices or techniques used in managing and operating the forest?
- What management and operational activities are most successful for the community forest? Why?
- What are forestry practices have been put in place that are inspired by the vision of the community forest?
- Are there any decisions, activities and practices that are undertaken independently from that vision?

Participation

- How do community members participate in or engage with the community forest?
- Are there specific opportunities that enable or promote broader participation in the forest?
- What challenges do you face in getting people involved?
- What does the community think of the forest? How has that changed over time?

Learning

- How do you measure the success or progress of the community forest?
- How do you respond to challenges and new information?
- What have you learned from your involvement with the forest?
- How does the management team learn?
- Have you received training in the operation of the forest? Where did this training come from?
- Who have you learned from?
- What organizations or individuals have been influential to the way the forest has been managed and operated?

Appendix 3: Sample Interview Consent Form

RESEARCH PARTICIPANT INFORMATION AND CONSENT FORM

Interview



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http://www.umanitoba.ca/academic/institutes/natural_resources

Title of Study: "Social Learning and Governance in Community Forests in Canada"

Natural Resources Institute, University of Manitoba, 301 Sinnott Bldg., 70 Dysart Road, Winnipeg, R3T 2N2

Principal Investigator: Aaron Janzen, janzena8@myumanitoba.ca, XXX-XXX-XXXX

Research Supervisor: Dr. John A. Sinclair, John.Sinclair@umanitoba.ca, 204-474-8375

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

Purpose of this Study

The purpose of this study is to investigate how participation and social learning shape the governance of community forests. This will be done by describing the programs, practices, strategies and values of the community forest, as implemented and understood by the community forest management team, community members, board members, government officials and resource users. Through this approach the study will examine the common belief that community forestry represents an alternative forest governance approach in contrast to conventional models of forestry that are heavily industrialized.

The research objectives are: 1. To examine the different policies, practices, strategies, and factors that influence community forest governance. 2. To describe how stakeholders (i.e., committee members, government officials, resource users, industry) participate in governance of community forests. 3. To describe what stakeholders have learned through participation in community forest governance. 4. To describe the emergent community forest governance model that is articulated by those participating and interacting with the community forest.

Participants Selection

You are being asked to participate in this study because you are a community member or stakeholder of the Kaslo and District Community Forest. Your participation in and understanding of the community forest makes you a valuable source of information and your insights and observations are important to this research.

A total of 15-20 participants will be asked to participate in individual interviews.

Study procedures

If you agree to participate in this study, you will be asked to participate in an individual interview at a mutually agreed upon location that is convenient for you. The interview will feature semi-structured questions with people who know something about the topic of interest. Interviews are ways of finding out people's thoughts and ideas about a specific topic. Participation in the study will be for one session with a maximum length of 1 hour.

Aaron Janzen, the principal investigator, will be the interviewer that will ask questions and facilitate the conversation. You will be asked some questions relating to your experience with the community forest and its governance. What you tell me will help me to better understand the community forest and its management. The interview will be recorded with an audio recording device if you consent to the use of one. If you do not wish to be recorded, or wish to stop being recorded at any time during the interview, the investigator will take notes. The audio recording will be transcribed, and the interview will be analyzed with other information gathered to draw conclusions about the research topic.

You are not required to identify yourself by name or identifiable characteristics that connects you with information you provide unless you choose to be identified. If you choose to remain anonymous, a pseudonym will be used in place of your name on the transcripts and any reproduction of the information you give. All recordings, notes, and transcripts will be stored in password-protected computer files and hard copies will be kept in a locked cabinet. No other person except the principal investigator, the supervisor, and auditors for the University's ethics

review board will have access to the data you provide. This data will be destroyed within three years, after the completion of the research thesis and the dissemination of results through academic presentations and publications. A summary of the preliminary results of the study will be provided within two months of the interview, your comments and feedback on these preliminary results is welcomed but not required. A final summary of the research results and an electronic copy of the completed thesis will be available if you are interested.

Risks and Benefits

There are no anticipated physical risks to participants. You are free to not respond to questions you find uncomfortable and the interviewer is knowledgeable and bound to confidentiality.

Being an interviewee may not help you directly, but information gained may help the community forest being studied and other community forests understand effective governance and management strategies. The study results will be made available to the BC Community Forest Association and other interested community forests. Specifically, this research may help community forests to 1) better facilitate community participation and learn from that participation, 2) effectively pursue the vision and mission of the forest, 3) understand the influences and challenges that undermine achieving the vision of the community forest.

Payment for participation

You will receive no payment or reimbursement for any expenses related to taking part in this study. Refreshments will be provided.

Confidentiality

I will do everything possible to keep your personal information confidential. Your name will not be used at all in the study records or in reporting the study findings, unless you want to be identified with what you say. A list of names and addresses of participants will be kept in a secure file so we can send you a summary of the results of the study. If the results of this study are presented in a meeting, or published, nobody will be able to tell that you were in the study. Please note that even if you do not want to be identified as the speaker, your words may be used to highlight a specific point.

The University of Manitoba ethics board may need to check the study records to make sure that the research is being conducted properly. All of these people have a professional responsibility to protect your privacy.

All records will be kept in a locked, secure area and only the principal investigator, research supervisor (and possibly university ethics board as described just above) will have access to these records. Anyone with access to your records is professionally bound to respect their confidentiality.

Voluntary Participation/Withdrawal from the Study

Your decision to take part in this study is voluntary. You may refuse to participate, may refrain from answering any questions or discussing any issues you prefer not to, and you may withdraw from the study at any time prior to the completion of the data analysis 2 months after the completion of the interview in [10/19], after which your data will be part of a thesis. If you decide to withdraw from the studies your interviews transcripts, recordings and handwritten notes will be destroyed immediately after receiving your notification. You may withdraw by contacting the principal investigator or research supervisor, and there are no consequences for withdrawing.

Questions

If any questions come up during or after the study, contact the principal investigator (contact details found on the front page).

For questions about your rights as a research participant, you may contact The University of Manitoba, Joint-Faculty Research Ethics Board Human Ethics Coordinator at 204-474-7122.

Feedback and Dissemination

Results from this research will be disseminated at academic conferences, by publication in academic journals and a Master's thesis. A copy of your transcript will be made available for your review within 2 weeks of the interview and you will have 2 weeks to make any corrections, changes or withdraw all or part of what you said. In addition, a brief summary of the results (1-3 pages) will be made available to participants in the study that request them two months after the interview has occurred. Please indicate how you wish to receive this transcript and/or summary:

sent to e-mail address:

_____.

sent through regular mail to the following address:

_____.

sent to a community organization:

_____.

not interested in receiving the summary of results.

Permission to Quote

We may wish to quote your words directly in reports and publications resulting from this.

Consent: Please indicate the following	
<input type="checkbox"/> Yes <input type="checkbox"/> No	I agree that the researcher may use a digital recording device to record the audio of the interview.

<input type="checkbox"/> Yes <input type="checkbox"/> No	I agree to be quoted directly (my name is used). (Please, feel free to answer this item at the end of the interview)
<input type="checkbox"/> Yes <input type="checkbox"/> No	I agree to be quoted directly if my name is not published (I remain anonymous). (Please, feel free to answer this item at the end of the interview)
<input type="checkbox"/> Yes <input type="checkbox"/> No	I agree to be quoted directly if a made-up name (pseudonym) is used. (Please, feel free to answer this item at the end of the interview)

Consent Signatures:

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

The University of Manitoba may look at your research records to see that the research is being done in a safe and proper way.

This research has been approved by the Joint-Faculty Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Coordinator at 204-474-7122 or humanethics@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and reference.

Participant signature _____

Date _____

(day/month/year)

Participant printed name: _____

Researcher's signature _____

Appendix 4: Ethics Approval



Human Ethics
208-194 Dafoe Road
Winnipeg, MB
Canada R3T 2N2
Phone +204-474-7122
Email: humanethics@umanitoba.ca

PROTOCOL APPROVAL

TO: **Aaron Janzen** (Advisor: **John Sinclair**)
Principal Investigator

FROM: **Julia Witt, Chair**
Joint-Faculty Research Ethics Board (JFREB)

Re: **Protocol J2018:091 (HS22400)**
Social Learning and Governance in Community Forests in Canada

Effective: March 14, 2019

Expiry: March 14, 2020

Joint-Faculty Research Ethics Board (JFREB) has reviewed and approved the above research. JFREB is constituted and operates in accordance with the current *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*.

This approval is subject to the following conditions:

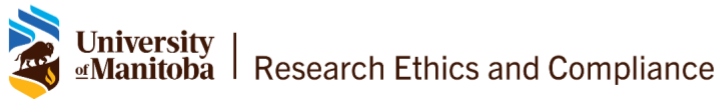
1. Approval is granted for the research and purposes described in the application only.
2. Any modification to the research or research materials must be submitted to JFREB for approval before implementation.
3. Any deviations to the research or adverse events must be submitted to JFREB as soon as possible.
4. This approval is valid for one year only and a Renewal Request must be submitted and approved by the above expiry date.
5. A Study Closure form must be submitted to JFREB when the research is complete or terminated.
6. The University of Manitoba may request to review research documentation from this project to demonstrate compliance with this approved protocol and the University of Manitoba *Ethics of Research Involving Humans*.

Funded Protocols:

- **Please mail/e-mail a copy of this Approval, identifying the related UM Project Number, to the Research Grants Officer in ORS.**

Research Ethics and Compliance is a part of the Office of the Vice-President (Research and International)
umanitoba.ca/research

Appendix 5: Ethics Renewal Approvals



Human Ethics - Fort Garry
208-194 Dafoe Road
Winnipeg, MB R3T 2N2
T: 204 474 8872
humanethics@umanitoba.ca

RENEWAL APPROVAL

Date: March 11, 2020

New Expiry: March 14, 2021

TO: Aaron Janzen (Advisor: John Sinclair)
Principal Investigator

FROM: Julia Witt, Chair
Joint-Faculty Research Ethics Board (JFREB)

Re: Protocol J2018:091 (HS22400)
Social Learning and Governance in Community Forests in Canada

Joint-Faculty Research Ethics Board (JFREB) has reviewed and renewed the above research. JFREB is constituted and operates in accordance with the current *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*.

This approval is subject to the following conditions:

1. Any modification to the research must be submitted to JFREB for approval before implementation.
2. Any deviations to the research or adverse events must be submitted to JFREB as soon as possible.
3. This renewal is valid for one year only and a Renewal Request must be submitted and approved by the above expiry date.
4. A Study Closure form must be submitted to JFREB when the research is complete or terminated.



RENEWAL APPROVAL

Date: March 5, 2021 **New Expiry:** March 14, 2022

To: Aaron Janzen (Advisor: John Sinclair)
Principal Investigator

From: Andrea Sz wajcer, Chair
Research Ethics Board 2 (REB 2)

Re: Protocol # J2018:091 (HS22400)
Social Learning and Governance in Community Forests in Canada

Research Ethics Board 2 (REB 2) has reviewed and renewed the above research.

REB 2 is constituted and operates in accordance with the current [Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans – TCPS2 \(2018\)](#).

This approval is subject to the following conditions:

- i. Any changes to this research must be approved by the Human Ethics Office (HEO) before implementation.
- ii. Any deviations to the research or adverse events must be reported to the HEO immediately.
- iii. This renewal is valid for one year only. A Renewal Request Form must be submitted and approved prior to the above expiry date.
- iv. A Study Closure Form must be submitted to the HEO when the research is complete prior to the above expiry date, or if the research is terminated.