

Growing Socioeconomic Sustainability through Community-Based Forest Management  
in British Columbia

by

Anne M. Rooban

A Thesis submitted to the Faculty of Graduate Studies of  
The University of Manitoba  
in partial fulfillment of the requirements of the degree of

MASTER OF NATURAL RESOURCES MANAGEMENT

Clayton H. Riddell Faculty of Environment, Earth, and Resources  
Natural Resources Institute  
University of Manitoba  
Winnipeg

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## **Abstract**

Despite widespread reports of the benefits of Community-Based Forest Management, there is little empirical evidence regarding socioeconomic outcomes for local communities. The purpose of my research was to consider the extent of innovation and sustainability in Community Forestry approaches in British Columbia, Canada. Data was collected through a qualitative case study focusing on the Lower North Thompson Community Forest Society and the Wells Gray Community Forest Corporation, and involved document review, participant observation and interviews with community members.

Key socioeconomic benefits identified were additional silviculture, local employment, local participation, grant distribution, and strategic partnerships. Although increased local control through grants increases quality of life, innovative practices and diversification opportunities are underdeveloped and require greater policy support to ensure continued success.

Findings point to community forests as holding potential to increase the socioeconomic sustainability of local communities, which could make them key players in support for rural areas beyond forestry.

**Dedication**

This thesis is dedicated to those who invest in their local communities and care for the future well-being of rural Canada.

## **Acknowledgement**

I would like to thank all the study participants who willingly and gladly shared their knowledge and insight regarding Community Forestry for this research. I am grateful for all who went the extra mile in taking me on forest and mill tours, helping me make connections at community events, and teaching me how to curl and cross country ski. I learned so much, not just about Community Forestry but the unique lifestyle afforded by your communities.

I would also like to thank my committee members, Dr. John Sinclair, Dr. Ryan Bullock, and Dr. Jonathan Peyton for their keen insights, constructive feedback, and valuable input into this thesis. I reserve special thanks for my advisor, Dr. John Sinclair for his complete support for me as his student and commitment to excellence in this research.

I say thank you to my husband and my parents for their full and ongoing encouragement and support throughout my research.

Thank you to the friendly administrative staff of the Natural Resources Institute, who work tirelessly to navigate us all through the countless details related to coursework and research.

Finally, I would like to thank the Social Sciences and Humanities Research Council of Canada and the Province of Manitoba for their financial support of this research.

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## **Glossary of Terms and Acronyms**

AAC: Annual Allowable Cut

BC: British Columbia

CBFM: Community Based Forest Management

CF: Community Forest/Forestry

CFA: Community Forest Agreement

CFAC: Community Forest Advisory Committee

DOC: District of Clearwater

FSF: Forest Stewardship Fund

GM: General Manager

LNTCFS: Lower North Thompson Community Forest Society

NFW: National Forestry Week

NTFP: Non-Timber Forest Product

OL: Organizational Learning

SE: Social Enterprise

SFM: Sustainable Forest Management

SFOL: Sustainability Focussed Organizational Learning

WGCF: Wells Gray Community Forest Corporation

WGCF: Wells Gray Community Forest 2010 Society

## **Definition of Terms**

**Community Based Forest Management:** The governance and management of forests by community members to increase local control and community benefit. CBFM is a broad term, which includes the stakeholder and institutional aspects of forest management.

**Community Forest Agreement:** A type of tenure created in 1998 within the existing forest tenure system in the Province of BC that allows communities to operate a forest license to harvest timber and manage Crown land for community benefit.

**Equity:** Equivalent distribution of the costs and benefits of CBFM development for rural, forest communities generally.

**Innovation:** A widely used term which refers to the introduction of a novel product, process, marketing method or organizational practice. Innovation may be developed within an organization or brought in, may create social and/or economic value, and may be applied to processes or outcomes. It is viewed by many as a promising approach to solve complex problems related to sustainability.

**Lower North Thompson Community Forest Society:** A non-profit society based in Barriere BC, that manages the operations of a CFA on an 8254 hectare tenure, and distributes profits as grants to local community groups within the five community partnership.

**Non-Timber Forest Products:** Resources within the forest, apart from timber, that CFs can harvest and sell for profit. Some examples include mushrooms, berries, and cedar branches. Although the CFA does allow for harvest and sale of NTFPs, it does not give CFs exclusive access to manage these resources.

**Organizational Learning:** An organization's change in knowledge from experience reflected in day-to-day practice. OL is a framework used to understand and assess individual and collective aspects of learning, which can lead to improved performance and long term success.

**Social Enterprise:** Refers to a socially-minded business which focuses on outcomes beyond profitability, often used to address societal problems.

**Silviculture:** A range of forest practices involved in managing and maintaining the health of forest land for various objectives. Silviculture involves a planned strategy that generally incorporates the entire operational cycle of harvest, re-planting, and ongoing maintenance of a forest.

**Social Equity:** Equivalent distribution of the costs and benefits of CBFM development across differing groups within a community specifically.

Sustainability: "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland & WCED, 1987:54). This original definition came from the World Commission on Environment and Development and has been incorporated into many frameworks, including Sustainable Forest Management.

Sustainability Focussed Organizational Learning: A framework based on OL that focuses on how organizations pursue sustainability through learning.

Sustainable Forest Management: A set of management goals created from the 1992 UN Conference on Environment and Development in response to the degradation of forests globally. SFM incorporates a variety of sustainable forest management practices that take into account ecological, social, economic, and cultural aspects. Canada's current SFM strategy has a framework of 6 criteria and 46 indicators.

Wells Gray Community Forest Corporation: A non-profit corporation based in Clearwater BC that manages the operations of a CFA on a 13,154 hectare tenure. WGCFC gives the profits to Wells Gray Community Forest 2010 Society, which holds the shares for the corporation, to distribute as grants to local community groups.

## **Chapter 1 : Introduction**

### **1.1 Background**

Sustained yield forest management and industrial tenures have led to forest degradation and loss of livelihoods across the globe (Teitelbaum, 2014). In response to these ecological and socioeconomic repercussions, the Statement of Forest Principles was created at the 1992 UN Conference on Environment and Development in Rio de Janeiro, Brazil, which outlined 17 key points for achieving Sustainable Forest Management (SFM) (Siry et al., 2005). SFM is meant to incorporate ecological, social, economic and cultural considerations in forestry management plans, often using a criteria and indicators framework for implementation and monitoring of success (CCFM, 2008). Canada has adopted its own set of 6 criteria and 46 indicators for SFM that informs Canada's National Forest Strategy (CCFM, 2008). One new approach to managing forests in Canada aimed at achieving SFM is Community Forestry (CF).

In general, CF constitutes forest management by communities under ownership or tenure agreements that give access and increased local control and benefits to communities (Bullock & Hanna, 2012; Molnar et al., 2011). Community Based Forest Management (CBFM) is a wider conception of CF that incorporates the stakeholder and institutional aspects of forest management (Bullock & Hanna, 2012). CBFM is said to constitute innovation, defined in this research as a novel organizational framework that embodies a holistic understanding of forest management with a set of practices that differ from industrial models of forestry, for the purpose of increasing equity and sustainability. Innovative CBFM is linked to equity, which in this research refers to equivalent distribution of the costs and benefits of resource development for communities. Social equity in this research pertains to the extent of

involvement of excluded groups in governance and distribution of socioeconomic benefits, which may lead to more sustainable outcomes (IUCN, 2000).

Some of the outcomes of CBFM that may address equity and sustainability objectives include participatory methods of decision-making, conflict resolution, learning, innovation in forest products and practices, economic stability and employment, local socioeconomic and cultural benefits and improved ecological outcomes (BCCFA, 2015; Bullock & Hanna, 2012; Eguny et al., 2016; FAO, 2011; Teitelbaum, 2014). Local control of forests through CBFM is said to lead to more sustainable outcomes for communities including in developing countries as well as the Global North (MacQueen, 2010). According to MacQueen (2010), in order to be successful CBFMs need clear commercial forest rights, strong social organization, and business skills.

Despite widespread reports of the benefits of CBFM and contributions of this approach to SFM, there is a lack of empirical evidence about the socioeconomic outcomes for local forest communities and in what ways these are different than those derived through industrial forms of management (Beckley, 1998; Benner et al., 2014; Bowler et al., 2012; Furness et al., 2015). In Canada, 76.6% of forests are Crown land owned by the provinces, and are leased out to companies for access and timber harvest (Natural Resources Canada, 2016). British Columbia, Quebec, Ontario and Nova Scotia all have provincial policies that include CF and increased local involvement (Benner et al., 2014). In 1997, the Community Forestry Agreement (CFA) was legislated in the Province of BC, and there are now 56 community forests in operation across the province (BCCFA, 2015). A number of these communities list how operations and revenues contribute to community wellbeing, including number of jobs provided, reinvestment into

value-added processing, research and education, development of recreation or tourism, and grants or donations to local community groups for infrastructure and services (BCCFA, 2015). However, there is a lack of study into how socioeconomic benefits are shared in practice and distributed among the community (Benner et al., 2014; Furness et al., 2015).

One approach to better understanding the benefits to communities afforded by activities like CF might come from the Social Enterprise (SE) and related literature. Community-based SEs use market strategies to fund social or ecological goals, and varying definitions incorporate non-profit, corporate, and hybrid organizational structures (Defourny & Nyssens, 2010; Kerlin, 2010; Ridley-Duff, 2008; Teasdale, 2012). These kinds of organizations often aim to create social, ecological and economic wealth (a triple bottom line), distribute wealth more equitably, empower local communities through increased participation and inclusion, promote community development and resilience, create social cohesion and shared values, build social capital and provide sustainable solutions to challenging societal problems (Haugh, 2005; Jamali, 2006; Ridley-Duff, 2008; Teasdale, 2012; Whitelaw & Hill, 2013). Although many promote SE as a solution to challenging problems associated with community economic development, a clear definition for the term has yet to emerge, and its numerous benefits remain contested (Dey & Steyaert, 2010; Nicholls, 2010; Teasdale, 2012). More research is needed to determine what constitutes innovative and sustainable practice for SEs (Madill et al., 2010).

There is no doubt though, that there are links between the CBFM and SE literatures. For the purposes of this research, three linkages are particularly interesting. The first linkage is financial self-sufficiency and creation of local socioeconomic benefits. CBFM and SEs often show clear socioeconomic benefits to communities, but sometimes struggle with being

economically viable while providing these benefits. The second linkage is wider participation in governance and socioeconomic benefits. CBFM and SEs are seen as ways to involve local people in decision making regarding resources, as well as redistribute any related wealth with the aim of keeping it in the community for greater socioeconomic well-being (Ridley-Duff, 2008). However, even in a local context, decisions regarding resources may cause wealth to be concentrated or to leave the community, making social equity a primary concern (Ridley-Duff, 2008). The third linkage is innovative organizational structures and practices leading to new strategies and outcomes. Although CBFM and SEs are often seen as innovative structures that support innovative practices and outcomes, the extent of innovation has been difficult to assess and identify (Madill et al., 2010; Teitelbaum, 2014).

Challenges faced in both CBFM and SE include identification of clear needs, along with clear objectives and goals in business plans, and ways to meaningfully measure performance and outcomes in relation to sustainability (Assuah, 2016; Haugh, 2005; Paton, 2003). Social outcomes are difficult to measure, and there are often trade-offs between competing goals (Ruebottom, 2011). This presents challenges in tracking progress in SEs and CBFMs in order to determine if sustainable outcomes are being achieved. Another challenge is the need for greater innovation in measuring progress in operations and revenue sharing, increased accountability, and clear information regarding who benefits in relation to equity (Assuah et al., 2016; Madill et al., 2010).

In relation to these management concepts, a learning orientation is now widely viewed in natural resource management, including forestry, as a means to empower individuals and groups to understand socio-ecological, cultural and economic systems and respond by adopting

more sustainable practices (Cundill & Rodela, 2012; Eguny et al., 2016; Keen & Mahanty, 2006; Reed et al., 2010; Sinclair et al., 2008). Organizational Learning (OL) in particular, defined by Argote (2011) as an organization's change in knowledge from experience reflected in practice, provides a promising framework for identifying sustainable practices in both CBFM and SE. The concept of Sustainability-Focused Organizational Learning (SFOL) developed by Molnar & Mulvihill (2003) may, for example, provide a framework for fostering innovative ways to measure progress by assessing how an organization is pursuing learning towards sustainability on an individual, team, and organizational level. Looking at an organization's existing mission statement, leadership, performance measurement and means for accountability through the lens of SFOL may help inform and develop innovative organizational structures and practices which contribute to long-term sustainability for CBFMs and SEs (Molnar & Mulvihill, 2003).

## **1.2 Purpose and Objectives**

The purpose of my research is to determine how community-based approaches to forest management create socioeconomic benefits through their operations and revenues, and whether these approaches demonstrate innovation that result in more equitable distribution of benefits and sustainable outcomes.

The study had the following objectives:

- a. To explore how CBFM benefits from operations and revenues are shared and distributed locally;
- b. To examine the outcomes of benefit sharing in CBFM in relation to markers of SE;
- c. To explore how CFs measure progress and how SFOL may contribute to more innovative measurement approaches; and,

d. To identify policy implications and provide direction for CFs and the Province of BC.

### **1.3 Research Design**

My research was community-based and took a qualitative, constructivist approach. A case study strategy of inquiry with an embedded design was used, with data collected through document review, semi-structured interviews, and participant observation (Creswell, 2014; Yin, 2003). I selected two cases through considering data collected on economic benefits from community forests in BC by Assuah et al., (2016). BC implemented the CFA tenure 18 years ago, providing a range of communities to choose from that had forestry operations for sufficient time to establish operational and revenue benefit streams and demonstrate tangible socioeconomic benefits. Criteria for selecting cases are presented in Chapter 3.

To fulfill my objectives, I worked with adults in the case study communities who were board members, foresters, forest users, grant recipients, and local government representatives to understand CBFM practices, benefit sharing, and innovation. As the primary researcher, I conducted semi-structured interviews and observed CF meetings. I organized data using Nvivo software to help categorize and summarize research findings. Chapter 3 outlines the methods in more detail.

### **1.4 Significance**

Many scholars agree that more context-specific study is needed to determine whether practices and outcomes of CBFM lead to SFM and in particular, local socioeconomic sustainability (Benner et al., 2014; Bowler et al., 2012; Furness et al., 2015). In the BC context, I hoped to see whether CFA tenures provide communities with a framework required for improved distribution of CBFM benefits, and whether this connects with federal and provincial

SFM goals and policy (Ambus & Hoberg, 2011; BCMFML, 2010; Furness et al., 2015). Some argue that CFA policy requirements are imposed on communities to such a degree that socioeconomic benefits are greatly reduced (McCarthy, 2006). They suggest that the provincial tenure system continues to support and benefit industrial tenure holders through policy and works against CFA tenure holders by forcing them to compete on a smaller scale within a system which limits innovation. This in turn reduces equity, and threatens the sustainability of CFs. Others argue that the CFA tenure provides a clear platform and opportunity for communities, under certain conditions, to generate socioeconomic benefits, which in turn allows for innovation in doing forestry differently, supporting increased equity and sustainability (Pinkerton et al., 2008).

Additionally, socioeconomic outcomes which are derived from CBFM can be challenging to identify and require in-depth study of context, as goals and measurement may differ widely between communities and self-reporting may differ from what happens in practice (Assuah et al., 2016; Benner et al., 2014). One of my goals was to understand whether CBFM does provide different and more sustainable socioeconomic outcomes to local communities than previous forms of management, and to determine whether operational and revenue benefit streams truly benefit local communities in equitable and sustainable ways.

My research also aims to reveal whether SE may have structures and tools to inform sustainable CBFM, and it makes some initial steps towards bridging these concepts and determining what constitutes sustainable organizational practice. Overall, this study also adds to the growing body of literature on CBFM, to determine what is happening with regards to benefit sharing in a specific BC community context, and helps make a case for CBFM nationally,

advocating for increased policy support, which may improve forestry practice and outcomes for communities in other jurisdictions.

It is also important to note that CBFM and SE are both politically contested terms. There is much literature debating to what degree CBFM and SE are framed as simple solutions to complex challenges and used by powerful actors such as governments and multi-national corporations to support existing institutions and neoliberal agendas, and therefore question whether these structures can truly provide the local socioeconomic benefits claimed (Dart 2004; Dey & Steyaert, 2010; Mason, 2012; McCarthy, 2006; Teasdale, 2012). It is beyond the scope of this thesis to explore this discussion in depth. There is evidence that even within a politically contested environment, that small communities can still derive socioeconomic benefits and have their agendas met (Pinkerton et al., 2008; Ruebottom, 2013). I consider the data collected in my thesis through this lens.

### **1.5 Organization of the Thesis**

The thesis is organized into seven chapters. Following the introduction, Chapter 2 provides a literature review of topics relevant to this study, including Community-Based Forest Management, innovation, Community Forest Agreement tenures in BC, Social Enterprise, performance measurement, and Sustainability Focussed Organizational Learning. Chapter 3 presents the research design and methods used in the study. Chapter 4 provides the general context of benefit sharing in BC community forests and describes each case community, including history, current CBFM structure and socioeconomic benefits reported to date. Chapter 5 presents results and findings from interviews and participant observation, including linkages to SE regarding operations, benefit sharing and innovation. Chapter 6 discusses

progress measurement, and ways that SFOL may inform more innovative ways to measure progress. Chapter 7 concludes this thesis with future research directions and recommendations.

## **Chapter 2 : Community-Based Forest Management and Sustainability**

### **2.1 Community-Based Forest Management (CBFM)**

CBFM has been cited as an important approach in achieving SFM globally (Antinori & Bray, 2005; CCFM, 2008; Donovan et al., 2006; MacQueen, 2010). According to Molnar et al., (2011: 1), CBFM is “the management, by communities or smallholders, of forests and agroforests they own, as well as the management of state-owned forests...by communities”. CBFM arose largely in response to ecological degradation of forests and social upheaval in communities worldwide due to industrial models of harvesting (Donovan et al., 2006; Molnar et al., 2011). Main goals of CBFM include increased participation and local control over decision-making, development and stabilization of local economies, increased community resilience and improved ecological outcomes (FAO, 2011; ITTO, 2007; Teitelbaum, 2014). Social benefits include increased networking and collaboration among stakeholders, conflict resolution, and development of diverse and integrated forms of management, including local and traditional knowledge and cultural values (Bullock & Hanna, 2012; Teitelbaum, 2014). CBFM also produces a greater variety of timber and forest products than industrial or individual enterprises, creating greater ecological and community sustainability (ITTO, 2007).

### **2.2 Innovation and Equity in CBFM**

Two key components for successful CBFM are innovation and equity. Innovation is defined by OECD (2005) as: “...the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations” (p. 46). Crossan & Apaydin (2010) defines innovation more broadly as the “production or adoption, assimilation, and

exploitation of a value-added novelty in economic and social spheres; renewal and enlargement of products, services, and markets; development of new methods of production; and establishment of new management systems. It is both a process and an outcome” (p. 1154). This definition enhances the one presented by OECD (2005) by recognizing that innovations may be created within an organization or brought in from an outside source, create economic and/or social benefits, and can be applied to processes or to outcomes. According to the World Business Council for Sustainable Development, innovation is a key condition for creating sustainable societies because it holds potential for addressing challenging societal and organizational issues by incorporating sustainability into the creative processes behind innovation in product development and organizational practices (Dormann & Holliday, 2002). Innovative methods developed by organizations using a bottom-up approach may lead to innovative outcomes through new products, niche development or new approaches for addressing societal issues (Madill et al., 2010; Ridley-Duff, 2008; Teitelbaum, 2014). Innovation is also widely seen as a way to move beyond traditional business, governance, or regulatory models that have been unable to address growing concerns related to sustainability (Seelos & Mair, 2012; Steelman, 2010).

Organizations place high expectations on innovation to fix problems, increase profits and efficiency, and address sustainability. The promises and benefits attributed to innovation have been subject to much academic study and literature directed towards the business, social, and environment and natural resource sectors, with research focused primarily on implementation and outcomes (Adams et al., 2006; Seelos & Mair, 2012; Steelman, 2010). However, innovation is challenging to define, as it is a term that can reflect small adjustments

as well as monumental shifts in technological outcomes or practices to achieve a new goal or progress towards one (Steelman, 2010). Additionally, since innovation may be defined at the individual or firm level, subjective understandings of innovation can make defining what constitutes innovation problematic, especially if such claims are unsubstantiated through clear practices or outcomes (Adams et al., 2006; Steelman, 2010). Therefore, some argue that innovation has become a buzzword for organizations as they try and promote their practices as cutting-edge, regardless of whether this is true in practice (Seelos & Mair, 2012). Innovation is also mistakenly viewed by some as a technical solution with concrete steps, or as a short-cut to desired outcomes when in reality developing innovation is complex and takes significant effort and resources (Seelos & Mair, 2012). Another challenge regarding innovation is the potential for it to become a condition imposed on organizations in a top-down way, especially for organizations that depend on government or other outside funding. The widespread understanding that innovation is more effective at solving complex challenges, alongside the challenge of identifying what constitutes innovation, may result in ineffective use of resources and continued problems.

Despite the challenges associated with identifying what innovation is, it may still be a useful indicator for sustainability in a given organization. One thing to note is that procedure or process may actually be a greater predictor of innovation than outcomes, as the ability for an organization to endure through and learn from failed attempts at innovation points to organizational capacity as a primary determinate for gauging success (Seelos & Mair, 2012). Efforts may be better focused on building a strong foundation for an organization to compete with existing institutions in developing innovations that will persist (Steelman, 2010).

Additionally, understanding dynamics within an organization as well as the wider institutions in which it operates is crucial to ensure a given innovation is favourable (Seelos & Mair, 2012; Steelman, 2010). Finally, innovation is not always the appropriate response to issues faced by organizations, and does not replace more conventional methods that may more effectively address a problem if implemented over time (Seelos & Mair, 2012).

Innovation is a term with many definitions, categorized into product, process, marketing, or organizational components, and mainly applied to identify innovative outcomes. Although innovation is said to solve complex societal challenges and increase sustainability, defining it loosely and viewing it as a technical solution or shortcut to constant effort often leads to failure. In order to ensure that innovation is stewarded effectively for sustainability, it is important to examine innovation as a process, which develops organizational capacity to compete with existing institutions to produce innovative outcomes.

Scholars characterize CBFM as a collaborative approach to resource management that strives for innovation through the use of novel forest management and organizational practices that may lead to innovative outcomes. These outcomes may include development of novel forest products, value-added manufacturing, and greater equity in governance and socioeconomic benefits for local communities, all of which may contribute to sustainability. However, based on the discussion above, there is a risk that benefits ascribed to CBFM may be overstated as definitions of innovation developed within communities may not accurately reflect novel practices. Ensuring that innovation within CBFM is favourable among other institutions and not imposed in a top-down way by governments is another important component for success (Teitelbaum, 2014). Sufficient support and resources for communities to

conceptualize and put innovative structures and practices into place is critical to ensure longevity and sustainable outcomes (Madill et al., 2010; Mason, 2012).

In order for socioeconomic benefits and sustainable outcomes to be realized through innovative CBFM, issues pertaining to equity must be addressed. The term social equity, as applied to natural resource management, refers to equivalent distribution of the costs and benefits of conservation or resource development across different age, gender, socioeconomic and cultural groups (Dahal et al., 2012; IUCN, 2000). Social equity has been increasingly viewed as a condition that must be met in order to achieve sustainable development (Agyeman & Evans, 2002; Agyeman et al., 2009; IUCN, 2000; Schlosberg, 2007).

Social equity may be achieved when the specific needs and barriers for disadvantaged groups are recognized and addressed through policies and programs (IUCN, 2000). If social equity is not explicitly pursued by an organization, exclusion of marginalized groups is often a result, even if unintended, and may threaten sustainability outcomes (Schlosberg, 2007). In a broader sense, CBFM is intended to address the inequitable distribution of the ecological and socioeconomic impacts of industrial forestry development on rural communities. However, these communities are not socioeconomically or even culturally homogeneous (Teitelbaum, 2014). Therefore, looking at what a CBFM organization does to ensure that all groups in their community are recognized, benefit, and participate is important and may inform the long-term sustainability of the initiative. In this research, the term equity is used to describe CBFM governance and benefit sharing within the forest tenure system in relation to forest communities, and social equity refers to governance and benefit sharing in relation to excluded groups within a community.

Issues surrounding equity in CBFM include technical and financial support for entrepreneurs and organizations to build capacity, which help ensure benefits ascribed to these approaches to forest management. Local job creation is cited as a major benefit of CBFM, but can only be realized if local people are employed and have a means of obtaining skill requirements (Teitelbaum, 2014). Abrose-Oji et al (2014) lists high start-up costs, limited community capacity and skills, and managing bureaucracy as three major obstacles to successful CBFM. These challenges are exacerbated in developing countries, where funds, education and access to markets can be very limited (FAO, 2011). One form of support is Market Analysis and Development, which is a holistic approach used by FAO to train community members to operate small-scale forest enterprises sustainably using financial and business plans, connecting them within local networks, as well as to government and markets (FAO, 2011). Direct involvement of entrepreneurs and inclusion of the broader community significantly increases the overall success of an enterprise, building social capital and community resilience while maintaining or improving ecological outcomes (FAO, 2011).

Equitable and favourable policy and institutional structures are also necessary for CBFM success (FAO, 2011). This is especially true in developing countries where forest rights are not legally supported and enforced, or policy favours industry and penalizes communities, preventing full benefits from being realized (Donovan et al., 2006; MacQueen, 2010).

Governments may play a large role in CBFM success by ensuring secure rights to forest access for communities and enforcing regulations to prevent illegal logging (Donovan et al., 2006). Additionally, subsidies or low interest loans may be offered in early phases, in addition to special tax rates to ensure long term success (Humphries et al., 2011).

Taking into account current and past institutional structures and social organization is important to ensure that management approaches are equitable and compatible with context (Antinori & Bray, 2005). Favourable CBFM policy has also been cited as a requirement for the development of Non-Timber Forest Products (NTFPs), which include botanical forest products such as berries, mushrooms, bark, decorative branches and greenery, and traditional and medicinal plants (Ambus & Hoberg, 2011; BCCFA, 2015). Although NTFPs have potential to create economic and ecological diversification for community forests, most existing forest tenures require timber harvest and do not address access or harvest of these products (Ambus & Hoberg, 2011). Addressing these concerns allows for full incorporation of a wider range of values into CBFM to create more sustainable outcomes (Bullock & Hanna, 2012).

Issues related to social equity are important to grant programs established from operational revenue streams, which are also cited as a means to establish benefits through local distribution of wealth (Bullock & Hanna, 2012; Teitelbaum, 2014). Donations to community groups and non-profits are said to serve ecological, social, cultural and economic goals (BCCFA, 2015). A range of activities are supported through grants from CBFM revenues including recreation, tourism, infrastructure, research, education, scholarships, tree planting, forest stewardship, economic diversification initiatives and job creation (Assuah et al., 2016; BCCFA, 2015; BLCF, 2012; HPFP, 2015). However, the processes communities use to distribute grants influences social equity and whether these grant programs benefit all members. Additionally, long-term success is dependent on transparency, accountability, and ability of CBFM to manage costs and generate profits over time (Benner et al., 2014; Teitelbaum, 2014).

### **2.3 CBFM in BC: Tenure Reform, Context and History**

The BC government has its own set of indicators for SFM that align with national criteria outlined by CCFM (BCMFML, 2010). CBFM is an approach that the Province of BC chose as a means to alleviate the pressures of industry dominated tenures, declines in forestry, and increasing conflict. The addition of the Community Forest Agreement (CFA) to the provincial tenure system was a key step towards implementing CBFM as a means for achieving SFM (BC MFLNRO, 2011). In BC, 95% of forests are owned by the province and are leased out to companies through licencing arrangements that provide exclusive access and harvesting rights (Haley, 2002). Some of these licenses include Tree Farm Licenses (TFLs), Forest Licenses (FLs), Timber Sale Licenses (TSLs), Woodlot Licenses (WLs) and as of 1998, Community Forest Agreements (CFAs) (Haley, 2002). An Annual Allowable Cut (AAC) is set by the province and assigned with each license which allocates how much timber must be harvested, and a stumpage fee adjusted for market prices is charged in exchange for taking public timber (Luckert et al., 2011; Haley, 2002). The majority of BC's AAC tenures are TFLs and FLs are owned by large companies (Haley, 2002).

Although it was acknowledged as early as the 1940s that there was need for a more diverse forest tenure system and inclusion of community forestry, it was not until the forest crisis in the 1990s that policy reform occurred to support CBFM (Haley, 2002). Pine and spruce beetle outbreaks were killing large tracts of forest and creating declines in logging (Parfitt, 2005). Large company mergers, mill closures and increased environmental impacts threatened rural forest-dependent communities (Parfitt, 2005). Increased conflict between forest harvesters and environmental groups created global attention and boycotts of BC lumber exports (Stefanick, 2001). By the late 1990s, the Asian market crisis, trade disputes with

America and fluctuating markets were putting great stress on the provincial economy (UBCM, 1998).

In response to these challenges, the Community Forest Advisory Committee (CFAC) was created by the Minister of Forestry in 1997 to provide advice to the province on how to create a forest tenure system to include communities in forest management. The committee included a range of stakeholders from academia, industry, First Nations, the Union of BC Municipalities, forest workers, environmental groups and several communities (Government of BC, 1998). Their recommendations included flexibility in management planning, inclusion of recreation and NTFPs in management plans, and innovative revenue-sharing (Haley, 2002).

The CFA was brought into legislation in July 1998 under the Forests Statutes Amendment Act, Bill 34 (BCCFA, 2015). The Community Forest Pilot Project (CFPP) was started soon after and allowed communities to apply for a 5 year pilot forest licence, which the CFAC would grant and evaluate. Communities who applied were required to be a municipality, regional district, or First Nation community, and to designate their operation as a society, cooperative, corporation or partnership (Government of BC, 1998). Out of 27 proposals, the Minister granted pilot forest licences to 10 communities by 2000 (BCCFA, 2015; McIlveen & Bradshaw, 2006). Each community had the opportunity to replace the pilot agreement with a long-term agreement of 25-99 years (BCCFA, 2015).

CFA tenure holders must harvest according to their Annual Allowable Cut (AAC), which is the amount of timber that can be harvested sustainably from the given land base. AAC is determined using a Timber Supply Analysis conducted by MFLNRO. From this AAC, a stumpage

tax, which comes from the revenue from selling that timber, is paid to the province, in exchange for exclusive access to timber on the land base. CFs pay 15% of the stumpage that volume-based tenures, such as FLs and TSLs, pay to the province. In turn, CFs must manage for and provide local benefits, as outlined in the eight provincial objectives:

1. provide long-term opportunities for achieving a range of community objectives, values and priorities;
2. diversify the use of and benefits derived from the community forest agreement area
3. provide social and economic benefits to British Columbia;
4. undertake community forestry consistent with sound principles of environmental stewardship that reflect a broad spectrum of values;
5. promote community involvement and participation;
6. promote communication and strengthen relationships between Aboriginal and non-Aboriginal communities and persons;
7. foster innovation;
8. advocate forest worker safety. (MFLNRO, 2015a)

According to reviews the CFA tenure has had some success in achieving economic, social, cultural and environmental benefits for rural communities, effectively involving them in CBFM (BCCFA, 2015; Benner et al., 2014; Furness et al., 2015). At present, 56 communities hold CFAs, and make up 2% of the province's annual timber harvest (BCCFA, 2015). A report by the British Columbia Community Forest Association (2015) highlights the benefits of community forestry from a survey of sixteen community forestry managers, comparing these outcomes to those of industry. Economic benefits include local job creation 50% over the industry average, greater investment into local economic activity, and profit sharing through cash and in-kind donations to local projects (BCCFA, 2015). Social benefits include greater accountability, participation, engagement of a wider range of forest users, and use of forest for recreation and education (BCCFA, 2015). Cultural benefits include greater involvement of Aboriginal

communities in management, with over half of groups surveyed operating as a partnership between an Aboriginal and non-Aboriginal community (BCCFA, 2015). Environmental benefits include careful operation in sensitive areas and strong adherence to environmental standards and practice (BCCFA, 2015). From this report, there are clear local benefits from CBFM. However, more research and policy development is required regarding how benefits are distributed and shared in practice (Benner et al., 2014). A study by Furness et al. (2015) which surveyed 38 community forests in BC also identifies CFA policy as an effective measure that has increased public participation and stewardship of forests; however it has not contributed to economic diversification. Continued ongoing effort to sustain and increase participation was identified as an ongoing challenge for CFs (Furness et al., 2015).

#### **2.4 CBFM and Sustainability – Challenges**

As seen in the above example in BC, CBFM is promoted as a solution to economic, social and environmental problems, which result from industrial models of forestry, leading to more sustainable outcomes (Bullock & Hanna, 2012; Haley, 2002). However, McCarthy (2006) argues that the creation of political space for CFs by the BC government, combined with the lack of opposition by industry demonstrates that the CFA tenure was created through negotiations that did not threaten the status quo of the tenure system significantly. Some of these negotiations involved the creation of the Jobs and Timber Accord in 1997, which introduced cost-benefit analysis for environmental practices required by industry on their tenures, in exchange for the creation of a CFA, and the Forest Revitalization plan in 2003, which removed the requirement for companies to process harvested timber local to tenures, in exchange for land to create more CFs and WLs (McCarthy, 2006). These negotiations, in effect, supported

greater market and voluntary regulation, overall maintaining a system that supports and grows industrial models of forestry (McCarthy, 2006).

The CFA tenure was seen by people in rural communities as a unique opportunity to respond to the crisis created by industrial forestry over time, allowing for governance of local forests and generation of socioeconomic benefits (McCarthy, 2006). However, there is evidence that the tenure system also supports conditions that favour industrial forestry, which threatens viability as CFs try and compete. Additionally, CFs are expected to fulfill a wide variety of objectives beyond timber harvesting, negotiating trade-offs between profitability and socioeconomic benefits. Therefore, according to Pinkerton et al., (2008), it is important that communities create their own space to assert local values and agendas within their tenure agreements and operations.

Individual communities in BC face unique challenges when implementing and maintaining sustainable CBFM. One challenge is limited capacity in terms of capital, skills and technology (Benner et al., 2014; Bullock & Hanna, 2012; Charnley & Poe, 2007; Haley, 2002). Sustainable outcomes are largely dependent on individual communities' values, strategies, and adherence to business plans, therefore the outcomes of management are varied (Benner et al., 2014). CBFM is also often limited by regulatory frameworks and tenure models, as well as lack of political and policy support (Ambus & Hoberg, 2011; Bullock and Hanna, 2012). It has been found that innovation is limited as silvicultural practices used in CBFM may be similar to industrial practices, due to current policies and culture surrounding forestry and logging (Ambus & Hoberg, 2011). Often the reason that many communities resort to the commercial model of timber harvest is that it is the only viable way to gain revenue under existing policies

(McIlveen & Bradshaw, 2006). Another concern is that decision-making is not always democratic, and may be controlled by more powerful stakeholders within the community (Bullock & Hanna, 2012). Finally, policy implementation is challenging due to complex contexts and vague objectives, leading to conflict and misunderstanding (Bullock & Hanna, 2012). Some of these challenges may be addressed through findings from the Social Enterprise (SE) literature.

## **2.5 Social Enterprise (SE)**

SE is a concept that encompasses a variety of organizational structures, claiming to fulfill economic, social and ecological problems (Lepoutre et al., 2013; Teasdale, 2012). SE is viewed as a range of business practices that build economic and social capital across stakeholder groups (Ridley-Duff, 2008). It is generally defined as any organization that uses market strategies to achieve social or environmental goals and outcomes (Kerlin, 2010; Social Enterprise Alliance, 2014). Another definition by Social Enterprise UK is “A business driven by social and/or environmental purpose...their main income streams are revenues for goods and services provided, not grants or donations. Successful social enterprises generate surpluses or profits, which are reinvested towards achieving their social mission. Their assets are often locked for community purpose” (SEUK, 2015:para. 24).

Definitions of SE incorporate a range of organizational structures. One category includes traditional non-profit organizations which make profits in order to re-invest into a primary social mission or objective, thereby redistributing wealth to benefit excluded groups in society (Ridley-Duff, 2008; Teasdale 2012). In another category are traditional corporations, which pay dividends to investors but also choose to invest in social or ecological objectives, creating a

double or triple-bottom line (Jamali, 2006; Ridley-Duff, 2008; Teasdale, 2012). In addition to these are hybrid organizations which fall somewhere in between traditional non-profits and corporations, such as non-profits that offer public services, democratic organizations or co-operatives that blend economic and social goals, and community enterprises that address social problems (Teasdale, 2012).

The structures and practices of SEs differ between countries and regions and are influenced by historical factors, politics, culture, and economic and social circumstances (Kerlin, 2010; Teasdale, 2012). These factors create unique potential market opportunities for SE that may be overlooked by mainstream business (Haugh, 2005). Therefore, SE performs activities that address societal problems where state, civil society or market forces have failed (Lepoutre et al., 2013; Teasdale, 2012). In fact, Teasdale (2012) compares the historical development of the co-operative with the current development of SE as a similar response to state failure, with SE now addressing challenges of globalization and overpowering market forces alongside reduced state funding for social services.

## **2.6 Canadian Context for SEs**

SEs have been growing in popularity and impact in Canada, although non-profits and charitable organizations have been generating funds through fees and small businesses for many years (ENP, 2010; Madill et al., 2010). They are defined by ENP (2010) as business ventures used by non-profits, charitable organizations and co-operatives to support their social or environmental aims. Some examples of SE activities in Canada include addressing environmental issues, economic revitalization, reducing poverty, accessible healthcare, integrating immigrants, providing services to underserved communities and developing social

and cultural capital (ENP, 2010). Although it is challenging to determine exactly how many SEs operate in Canada, a 2003 estimate by Statistics Canada (2006) posits approximately 161,000. A study by Madill et al., (2010) found that about half of Canadian SEs are financially self-sufficient, and about 25% rely on grants and donations.

A growing consensus in the literature regarding Canadian SEs is that legal reform is needed to support this new sector and expand its reach (Liao, 2013). According to Liao (2013), Canada should reform mainstream corporate governance laws, as well as create hybrid laws for SE governance. These hybrid laws would bridge the gap between for-profit and non-profit sectors in Canada by allowing for payment of dividends while being able to ensure social and ecological outcomes from investment (Government of BC, 2015; Liao, 2013). This lack of institutional support may be one reason that Madill et al., (2010) found that Canadian SEs had low levels of innovation, defined in their research as "...utilizing new processes or behaviors to accomplish the enterprise mission." (p. 142).

Some legal reform is happening in provinces across Canada. British Columbia created a new legal form for SEs, called Community Contribution Companies (3Cs) on July 29<sup>th</sup>, 2013 (Government of BC, 2015). This new legal form allows for private wealth investment into community projects, includes an asset lock to prevent assets from being sold below market value, and a dividend cap to ensure profits are used for community benefit (Government of BC, 2015). C3s are taxed like regular corporations, and must create an annual report regarding benefits to stakeholders and community (Government of BC, 2015). There are currently 28 registered C3s in BC (BC Registry Service, personal communication, 2015). Nova Scotia is also beginning to reform provincial laws regarding SEs.

A study by Elson & Hall (2012) looked at SEs in Alberta and BC to determine the level of social, cultural, economic and environmental activity in the SE sector. They found that SEs were embedded in local context, with half of SEs in BC focused on employment and 38% being involved in environmental activities such as market gardens, car and bike share programs, recycling, and ecotourism (Elson & Hall, 2012; ENP, 2010). Nearly all were registered as non-profits in both provinces, relied on government as their primary source of funding, and had social mandates related to population demographics of low income, disability, underemployed, women and youth (Elson & Hall, 2012). This demonstrates that SE in Canada aims to address social exclusion and balance stakeholder interest and business judgement, reforming corporate law to include stakeholder interests in decision-making (Liao, 2013).

In short, what can be gleaned from the above is that SEs are seen as organizations that create enhanced local social benefits, especially when a government or business top-down approach is not working. In this role they have been found to play a particularly important part in revitalizing rural communities (Whitelaw & Hill, 2013). A potential linkage between SE and CBFM is innovation in creating new types of organizations and governance structures that are holistic in their approach, applicable to local contexts and able to experiment and adapt to change (Armitage et al., 2009; Diduck et al., 2015; Madill et al., 2010). Additionally, local participation and control of resources are highlighted as a key objective and measure of success for SEs as well as for CBFM (Defourny & Nyssens, 2010; Teitelbaum, 2014). SE and CBFM also focus on securing financial self-sufficiency, alongside high levels of reinvestment into economic activity and social capital (Madill et al., 2010; Ridley-Duff, 2008). Understanding that pursuing both economic and social goals and benefits is desirable and not mutually exclusive is central to

informing diverse and innovative organizational structures and benefit sharing streams which go beyond traditional business or non-profit structures (Madill et al., 2010; Ridley-Duff, 2008).

## **2.7 SE and Sustainability**

Although SE shows much potential in creating sustainable solutions to challenging societal problems, collective interests risk overruling or marginalizing individual concerns or points of view (Ridley-Duff, 2008). Additionally, bottom-up, innovative approaches may be overruled by powerful actors and related narratives, skewing positive outcomes (Mason, 2012; Nicholls 2010; Ruebottom, 2013). Because SE is still in its formative stages, those with political and economic power are able to influence and legitimize how the concept is perceived and acted upon in wider society (Nicholls, 2010; Ruebottom, 2013). Therefore, SE may be easily steered towards legitimacy as an instrument to achieve specific goals in a political agenda, constraining innovation and true bottom-up processes at the community level (Defourny & Nyssens, 2010; Elson & Hall, 2012; McCarthy 2006). Control and performance measurement by government often does not allow SEs to operate according to their initiatives and values, which in the long term may decrease sustainability (Paton, 2003).

Another threat to sustainability is legitimization of SE as an approach that simply reflects a wider societal understanding and preference of applying business methods to solving social problems, rather than a truly innovative approach (Dart 2004). For example, some view the rise of SE as a response to the perception that non-profits are inefficient with resources and that social entrepreneurs are better able to address societal problems (Dey & Steyaert, 2010). These social entrepreneurs are backed by foundations, which are funded by wealthy entrepreneurs who define and legitimize certain kinds of people and SEs by choosing who receives awards and

funding (Dey & Steyaert, 2010). Since many of these foundations are associated with schools of business, SE may come to be defined primarily as applying traditional market approaches to solving societal problems, taking precedence over other definitions and practices of SE which may be better suited for different contexts.

Other questions surround the operation and sustainability of SEs, such as how profits may be used and distributed as benefits. Existing legal structures often limit economic distribution, and new hybrid legal forms are still in early phases of implementation, meaning that benefits may be limited until these forms are more widely realized and perfected (Liao, 2013). Lack of accountability is cited as one issue that SEs face (Ridley-Duff, 2008). There are also issues with long term investment, as potential investors may be uncertain given the early stages of the concept, associated legal forms and potential risks (Ridley-Duff, 2008). Because of uncertainty surrounding what constitutes SEs, and the fact that it is defined according to the interests of the organization or group using it, the term may become meaningless to investors and practitioners and render sustainability elusive (Ridley-Duff, 2008).

Despite these concerns, there is evidence that SE holds potential to address social and ecological concerns related to sustainability in two main ways: through non-profits gaining access to sustainable funding and through businesses taking a more holistic approach to create sustainable outcomes and a double or triple bottom line (Kerlin, 2010; Lepoutre et al., 2013; Ridley-Duff, 2008). SE develops economic and social capital, promotes public engagement and debate in public forums, creates shared values and solidarity, and develops relationships across boundaries, all of which may lead to sustainable development (Ridley-Duff, 2008). Haugh (2005) also mentions innovation as a fundamental aspect of SE, in terms of opportunity

recognition, creating new markets, and ongoing success with internal operations. A bottom-up, collective approach to development is a key strength of SE, which can take into account local contexts in implementation and management (Borch et al., 2008; Grimes, 2010).

## **2.8 Performance Measurement of SEs**

One measure proposed to increase sustainability outcomes of SEs is performance measurement. However, performance measurement is an ongoing challenge for SEs, as social outcomes are difficult to measure and identify. Intangible outcomes include social capital, citizenship, community cohesion, relational assets, social well-being, quality of life, and social and economic regeneration of communities (Haugh, 2005). However, many authors note that performance measurement is of critical importance for the ongoing success of SEs, as it enables regular assessment and evaluation of current practices, creating opportunities to re-focus vision and efforts or address issues, including those related to sustainability (Haugh, 2005; Ruebottom, 2011). Performance measurement also helps SEs in a sense-making process regarding organizational identity, shared meanings and values, and accountability (Grimes, 2010). Performance measurement is important for securing start-up capital and funding, as well as identification of causes for failure and related consequences (Haugh, 2005). Paton (2003) acknowledges that performance is a social construct that is ambiguous and contested that cannot be known independently of people involved in a SE. Adding to the challenge is the fact that the definition of SE is contested in and of itself, therefore requiring a balancing of multiple, often competing, goals when measuring performance (Ruebottom, 2011).

Many indices and criteria have been used to measure success in SEs, which are outlined in Ruebottom (2011). They include a single financial measure using dollar value on social

outcomes developed by Roberts Enterprise Development Fund (REDF) (Emerson et al., 2001); mission, mobilization and staff effectiveness (Sawhill & Williamson, 2001); length of operation, growth in revenue and employees, and greater social impact (Harman, 2008); improvement in income/welfare, standard of living, and developmental benefits (Nicholls, 2005); and declared goals, continuity/sustainability, and resources available for growth/development (Sharir & Lerner, 2006). Social capital is another factor or indicator that may be measured through participation levels in governance, development of relationships, and trading activities (Ridley-Duff, 2008). Economic capital may be measured in terms of distribution and diversity of members benefitting, not just economic bottom line (Ridley-Duff, 2008).

Madill et al (2010) presents three criteria which measure and identify sustainable social enterprises. These are social transformation, economic self-sufficiency and social innovation (Madill et al., 2010). Social transformation is defined as "impact of the social change desired or achieved by an SE" (p. 137), with effective social enterprises demonstrating high economic and social returns on their investment (Madill et al., 2010). Economic self-sufficiency is defined as the "ability of social enterprise to gain financial autonomy through generating profits from income-generating activities" (p. 138) and includes cost recovery and reliance on earned income (Madill et al., 2010). Finally, social innovation is defined as "innovative structures to solve social problems" (p. 138) and involves combining resources in new ways and doing things differently to create local social value (Madill et al., 2010).

Overall, it is understood that performance measurements are an important aspect in helping SEs become sustainable in their operations and outcomes. However, one must be aware that choice of performance measurements and indicators determine and shape how

organizations function and what outcomes have value, especially if reporting requirements are prescribed in a top-down way by government (Ruebottom, 2011). This highlights the importance of a bottom-up approach to SE development and measurement, so that organizations are able to define and shape practices and outcomes to reflect local community needs and contexts.

## **2.9 SE and CBFM**

SE development is one way in which communities may achieve SFM, and these enterprises take on many legal forms and structures depending on community goals and ownership (Ambrose-Oji et al., 2015). Based on my review of the literature, CF in BC tends to operate closer to a business model than a non-profit one. However, with their focus on economic, ecological, social and cultural goals as outlined above, CFs could easily be hybrid SEs. It seems that to date this link has not been made in policy or practice, despite BC having a social innovation council that promotes the development of SEs (BC Social Innovation Council, 2012). This department tends to focus more on non-profits with social objectives generating revenue. Perhaps this is a result of the Social Innovation Council and C3 governance structure being very recent developments in the province. A large majority of community forests in BC are registered as corporations, and a requirement in the early development of the CFA tenure arrangement was that the community must register under a limited range of legal business structures (Furness et al., 2015; Government of BC, 1998). A focus on benefit sharing in my research may help create an understanding as to why SE and CBFM remain separate in the Province of BC. This is one reason I decided to attempt to establish which characteristics of community forestry in BC may reflect SE practice.

A strong linkage between CBFM and SE is the pursuit of equity and sustainability through innovation (Madill et al., 2010; Ridley-Duff, 2008; Teitelbaum, 2014). In CBFMs and SEs, innovations may include multiple forest use and niche market development, which are seen as measures of sustainability (Madill et al., 2010; Teitelbaum, 2014). Additionally, creating community resilience through a bottom-up, participatory approach that takes local context and values into consideration and gives communities more control as a whole is considered an innovative and more equitable approach to resource development (Ridley-Duff, 2008). However, achieving sustainable outcomes is dependent on clear objectives, adherence to business plans and measurement of both economic and social outcomes (Paton, 2003; Sharir & Lerner, 2006).

There is some discussion in the literature around CFs in BC regarding how innovative the CFA is, and what it allows the communities to do with forestry (Ambus & Hoberg, 2011; Furness et al., 2015). Innovation appears to be lacking at the operational level, however as the CFA tenure is a part of the wider forest tenure system in BC, and communities must harvest timber according to provincial regulations. These regulations are designed to create a standard to make all tenure holders accountable to sustainable forestry practice. However, the costs of maintaining this standard of forestry on a CFA tenure in comparison to industry are significantly higher because of their smaller scale. This is mitigated by the 15% stumpage that CFs pay, but the question still holds as to whether it is possible to sustainably harvest profitably while managing for multiple values.

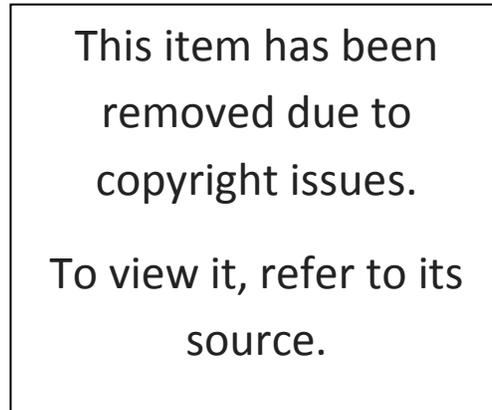
Innovation can be identified both by members within an organization as the extent of actual changes in procedures or practices, as well as by people external to an organization who

look more broadly at practices and compare these to practices which are widely accepted as the standard or norm (OECD, 2005). An outside perspective on the extent of innovation occurring within an organization may help confirm its effectiveness. Therefore, this research aims to look at what members from CFs identify as innovative practices, as well as critically assess to what extent these practices constitute innovation in comparison to industrial methods of forestry.

Another useful tool which will be used to identify extent of innovation in both CFs is a comprehensive multi-dimensional framework of innovation created by Crossan & Apaydin (2010). Their research identified ten dimensions of innovation from the literature, and categorized them as process (how innovation is produced) or outcome (what kind of innovation is produced), stating that process always precedes outcome. The components under innovation as a process include level (individual, group or firm), driver (what motivates the process), direction (whether the process is developed from a top-down or bottom-up approach), source (whether the process is developed within a firm or brought in from outside), and locus (within a firm or shared within a network). Innovation as an outcome includes form (product, process or business model innovation), magnitude (extent of innovation to a given referent), referent (novelty of innovation at any given level, such as firm, market or industry level), and type (technical or administrative). The tenth dimension, nature (tacit or explicit), applies to both process and outcome. Figure 2.1 shows these dimensions, as well as the sequential nature of innovation processes towards innovation outcomes.

**Figure 2.1 Multi-dimensional framework of organizational innovation**

From (Crossan & Apaydin 2010, p. 1167) doi:10.1111/j.1467-6486.2009.00880.x



These dimensions of innovation will be used to identify the types and scope of innovation processes and outcomes present in both CFs. From this, the extent of innovative processes currently in place were assessed, as well as the degree of innovative outcomes to date.

One key focus of my research was to determine whether CBFM under the CFA tenure agreement in BC leads to innovations that increase equity for rural forest communities. Historically, communities have suffered disproportionately to declines in the forest industry as a result of industry-dominated tenures (Haley, 2002). Looking at both operations and revenue distribution from CBFM in a specific local context is one way to determine whether wealth distribution is equitable and sustainable in practice, to ensure that rural communities do not continue to suffer exclusion from the benefits of resource development. In depth study may reveal how a community incorporates values and identity in the creation of their organization, including which legal structure is chosen for their operations. Business plans, reporting requirements, annual meetings, and application processes for grants, or lack thereof may also

reveal level of accountability and whether CBFM practices are equitable and sustainable. Looking into how communities negotiate trade-offs between social and economic benefits through reinvestment and revenue sharing reveals whether values written in plans reflect practice.

In addition to examining socioeconomic benefits, identifying learning outcomes also played an important role in my research by allowing for comparison of past and present experience and practice of forestry under industrial and community management, and in turn revealed whether innovation has occurred. Structures which enhance learning and knowledge-sharing within organizations can be characterized as determinants for organizational innovation, including information data bases and opportunities for education and training (Crossan & Apaydin, 2010; OECD, 2005). Community-based approaches to resource management are said to enhance learning outcomes, however there is evidence that learning opportunities and outcomes in CF can decrease over time due to increased regulations and shifting arrangements or circumstances (Egunyu et al., 2016; Sinclair et al., 2008).

Understanding the level of learning through what kinds of things community members have learned in relation to operating a CFA and distributing or receiving benefit streams may have implications for sustainability.

## **2.10 Sustainability Focused Organizational Learning (SFOL), and Performance Measurement**

Learning has been identified as an important factor in sustainable resource management, including forest governance (Cundill & Rodela, 2012; Egunyu et al., 2016; Keen & Mahanty, 2006; Reed et al., 2010; Sinclair et al., 2008). Learning provides a means for addressing the complexities of sustainability by creating more adaptable individuals, systems

and organizations (Armitage et al., 2009; Egunyru et al., 2016; Jamali, 2006). Social learning is a widely used framework in natural resource management literature, and is defined by Reed et al. (2010:1) as “a change in understanding that goes beyond the individual to become situated within wider social units or communities of practice through social interactions between actors within social networks.” Papers that use social learning as their main framework often focus on collaboration and participation as markers of sustainability (Cheng et al., 2011; Fernandez-Gimenez et al., 2008; Koontz, 2014; Webler et al., 1995). Organizational Learning (OL) on the other hand puts emphasis on businesses that take on sustainable practices, taking into account both individual and social aspects of learning in their frameworks, and addressing performance measurement by providing clear criteria regarding what constitutes a learning organization (Kofman & Senge, 1993; Molnar & Mulvihill, 2003; Senge et al., 1999). Since CBFM in BC constitutes a multi-party community organization defined and regulated by the province under the CFA tenure agreement operating as a small business or corporation, OL is an appropriate framework to help determine whether organizational practices provide local economic benefits and sustainable outcomes in practice, including how progress or benefits are measured.

OL is broadly defined as a change in an organization's knowledge from experience, demonstrated through changes in behaviour and practice (Argote, 2011). It encompasses learning at the individual and collective levels and examining these processes within the structure and function of an organization. Three sub-processes in OL include creating, retaining and transferring knowledge, which are embedded in tools, social networks, and routines of day-to-day practice (Argote, 2011). A learning organization is an organization which is able to thrive in uncertain conditions, characterized by commitment, systems thinking, community, self-

reflection, group leadership, practice and process (Kofman & Senge, 1993). Much literature on OL is based on Senge's et al. (1999) five disciplines for learning organizations:

1. building shared vision;
  2. using a team approach to learning;
  3. refining mental models (our structures for understanding the world);
  4. supporting personal mastery;
  5. employing the techniques of systems thinking.
- (Senge et al., 1999, p. 32)

Personal mastery addresses an individual's capacity and ability to create a personal vision for growth (Senge et al., 1999). Mental models allow people to reflect on their interactions with others to develop skills of inquiry (Senge et al., 1999). Shared vision rallies a group around a common purpose, and team learning fosters a collective learning environment, which mobilizes a group towards that common purpose (Senge et al., 1999). Finally, systems thinking teaches people to view and understand systems holistically, and how different components interact and influence one another, in order to more effectively enact change (Senge et al., 1999). Rather than using a top-down approach, Senge et al. (1999) advocates for generation of internal capacity through learning at the individual and collective levels.

One framework related specifically to sustainability and OL, based on Senge's five disciplines, is Sustainability Focused Organizational Learning (SFOL) by Molnar and Mulvihill (2003). Their criteria for such an organization are:

- the business has a well-articulated sustainability vision and mission, or at least a strongly implicit one;
- it is investing in sustainability education for its employees;
- it is employing at least some of the organizational learning elements proposed by Senge and others (shared vision, personal mastery, team building, mental models and systems thinking);
- there is leadership within the company in the pursuit of sustainability and the triple bottom line, from the top, middle and bottom levels (and ideally at all levels);

- the company is measuring its progress towards sustainability in a rigorous and systematic way that creates a sense of accountability with its stakeholders (Molnar & Mulvihill, 2003, p. 170).

Using Senge's et al. (1999) and Molnar and Mulvihill's (2003) criteria, one is able to identify the ways in which organizations are approaching sustainability in the organization and the extent to which they recognize that learning plays a key role in implementation and ongoing success. SFOL addresses the way individuals, teams, and organizations conceptualize sustainability, supporting the bottom-up approach to progress measurement that is promoted in the SE literature (Senge et al., 1999). This research, rather than prescribing ways to measure progress for CFs, is suggesting an SFOL approach that may empower these organizations to conceptualize and introduce innovative practices and ways to measure progress within their local context. By identifying and assessing the ways that each CF currently measures progress, and the extent of practices that align with SFOL already, this research will provide recommendations for further growth and development.

## **2.11 Chapter Summary**

CBFM is one strategy that is being used for achieving SFM in BC through the CFA tenure agreement. Although CBFM is widely thought to increase wealth locally through operations and revenues, it has yet to be determined how and to what extent in practice. SE and OL has the potential to inform sustainable CBFM outcomes by providing criteria for what constitutes best practice, including clear objectives, adherence to business plans, reporting and performance measurement. Innovation is a key concept linking SE and CBFM, in which business practices and revenue sharing are shaped more directly by local values and interests, generating both economic and social capital. Equitable redistribution of wealth is another key concept linking

CBFM and SE. Although institutional linkages between SE and CBFM are not clear in BC, this research hoped to identify whether innovation, equitable distribution, or perhaps other linking concepts do exist and happen in practice. Additionally, an SFOL framework can be used to determine the extent of what people have learned over time in regards to innovation in benefit sharing, in addition to whether CBFM constitutes innovative practice compared to past management by industry, informing sustainability.

## **Chapter 3 : Research Approaches and Methods**

### **3.1 Introduction**

I took a qualitative approach to this research and used a case study strategy of inquiry to better understand benefits in relation to equity and sustainability in BC communities operating a CFA. I used document analysis, participant observation and semi-structured interviews to meet my objectives. Data was organized and coded using Nvivo, a qualitative software program, which organizes and helps in reporting research findings. In this chapter I describe my research approach and methods in detail.

### **3.2 Constructivist Paradigm**

Constructivism is the philosophical worldview that informed how I approached my research. Growing up in a rural community on Prince Edward Island, I noticed that the farming and fishing industries in my area always seemed to be in crisis or decline. I had questions regarding why this was the case, and tried to make sense of it as I learned about local history and watched the news. I realized that decisions made by government had very real impacts on family, neighbours and the province as a whole. When I studied biology and sociology in my undergraduate years, I realized that science and social science were complementary and could be used to gain a holistic understanding of real life issues. Working for a local watershed group for one summer helped me to realize the value of community-based management, and how this approach could potentially lead to better long-term outcomes for the environment and communities.

According to Creswell (2014), a constructivist worldview in research involves understanding how individuals make meaning in specific social, historical, and cultural contexts.

From this, a researcher inductively develops a theory or ways to explain these meanings, understanding that different people can make sense of the same reality in a variety of ways (Crotty, 1998). Constructivism also allows a researcher to use their understanding of different paradigms to piece concepts and ideas together in a different way to create a new whole (Crotty, 1998). An aim in my research was to understand peoples' experiences of managing a CF and how historical and social factors have influenced the decisions they have made regarding CF operations and revenue distribution. Another aim was to bridge the concepts of CBFM, SE, and SFOL and determine how viewing these concepts together may contribute to sustainability. I realized that my personal background and own process of making meaning would influence how I interpreted my research, namely my favour towards more community control in resource development. I acknowledged this factor throughout my research process.

My research in BC was intended to understand whether CBFM is truly leading to improved outcomes, taking into account past local history, current socioeconomic realities, and how these are informing current practices and socioeconomic benefits. A constructivist approach allowed me to address context and how practices have evolved from participants' understandings of local realities and provincial policy. Through investigating participant's experiences of CBFM, I gained a sense of multiple realities within the communities, who was benefitting, and perceptions regarding how benefits were distributed. I also aimed to understand what people had learned throughout the process of starting and operating a community forest.

### **3.3 Qualitative Research Approach**

A qualitative research approach was the most appropriate for my research, which aligns with a constructivist world view by allowing a researcher to investigate meaning and people's understanding, interpretation, and everyday practices related to a given issue (Creswell, 2014; Flick, 2007). An emphasis on context and experience is a key component of qualitative research, meaning that on-site research is required (Guest et al., 2012). In addition to understanding subjective viewpoints, qualitative research can also give insight into how wider societal institutions and people interact, shaping and creating realities (Flick, 2007).

A qualitative research approach made sense because I wanted to go beyond identifying the benefits of CBFM towards developing a greater understanding of how these benefits operate in practice in a specific context. Many studies on CBFM have used the survey method to collect data, as established in Chapter 2, identifying generalized benefits created across communities. However, this approach can ignore the uniqueness of each community and details of how they understand and implement benefit sharing practices, if at all. This approach also does not investigate how wider institutions, such as the CFA tenure and market forces may influence understanding of and practices related to benefit sharing. Understanding how communities interact with institutions to make meaning, alongside the approaches they use in operating and distributing benefits from CBFM provided new data and insights regarding challenges and opportunities in this sector.

### **3.4 Case Study Strategy of Inquiry**

A case study is defined by Gerring (2007: 20) as "the intensive study of a single case where the purpose of that study is – at least in part – to shed light on a larger class of cases (a

population).” Creswell (2014) more broadly defines a case study as a bounded system in which an issue is explored. A case study looks at contemporary phenomenon and preserves the context and individual nature of the issue being studied, which is considered a major strength of this strategy (Gerring, 2007; Yin, 2003). A case study can also be used to better understand unclear relationships between a given phenomenon and its context (Yin, 2003). There is a lack of context-specific research on benefit streams from CBFM in BC under the CFA tenure, which is one reason a case study strategy was appropriate for my research. Context is a key consideration in investigating how benefits are understood and being shared in practice when outcomes may not be obvious.

Case studies are also useful in exploring new phenomena and for approaching issues from new perspectives, using multiple variables and sources of evidence (Gerring, 2007; Yin, 2003). Since the CFA tenure is a fairly recent policy structure in BC, and my project examines CBFM from a new point of view, namely SE, along with SFOL, these provide additional reasons that a case study was a suitable approach. A multiple case study involving two communities in BC strengthened findings by providing more robust data and insight into how policy is influencing local practice, including how benefits are being distributed (Yin, 2003).

Yin (2003) describes a case study as a strategy for addressing ‘how’ or ‘why’ questions in research as well as evaluation of current systems or practices. Examining the application of a CFA in depth in two specific situations allowed me to explore and evaluate outcomes that were not clear from a cross-case survey. A case study approach also allows for questions to emerge as research is taking place (Gerring, 2007; Gillham, 2000). Choosing an approach that allowed for emergent themes and questions was important in my research, because I tried to identify

current practices of CBFM and how benefits are shared. Information on this is available but limited because it often comes exclusively from self-reporting or from survey-based studies. Additionally, practices of CBFM and SE differ between communities. Therefore, the flexibility of a case study strategy of inquiry allowed me to adapt my research questions as I discovered new linkages and meaningfully analyzed data.

According to Yin (2003), an embedded case study is one that involves more than one unit of analysis, and allows for a detailed level of inquiry stemming from a rich theoretical framework. An embedded case study approach was used to address the complexities related to understanding CBFM benefit sharing practices and how these relate to sustainability. Some of my subunits of analysis included CBFM, SE, innovation, equity, and SFOL. Linking CBFM meaningfully with these subunits of analysis was challenging; therefore using two cases with embedded units of analysis strengthened validity and allowed for a thorough exploration of my topic. Hearing from multiple perspectives was important in gaining a wider and more detailed understanding of CBFM practice and context, especially in relation to equity and sustainability.

### **3.5 Selecting Cases**

My research took place in the Province of BC, in two different communities operating a CFA. I chose communities that had operated a CFA tenure for at least 4 years to ensure enough time for some benefits to be realized through profits and grants. I also chose communities that operated an AAC over 10,000 m<sup>3</sup>. Clear objectives of building local social and economic capital were looked for and revealed through policies, business plans and examples on websites that indicated active pursuit of local community benefits. Transparent reporting on operational

expenditures and revenues indicated accountability and profitability. A clear process for distribution of revenues for community benefit was also a key criterion in my selection.

Potential case study sites were identified from data, as shown in Appendix I. The detailed list of criteria used to select a case included:

- Operation for 4 years or longer
- AAC of 10,000 m<sup>3</sup> or greater
- Clearly defined community grant process
- Local job creation
- Educational opportunities and scholarships
- Investment in recreation
- Existence of a legacy fund
- Availability of meeting minutes, newsletters, and annual reports
- Other benefits from operational or revenue benefit streams
- Willingness to participate

These criteria stem from operational and revenue benefits streams, and are potentially embedded in policy. Operational benefits included local jobs, job training, reinvestment into enterprise, profitability, value-added processing, and development of non-timber forest products (NTFPs). Revenue benefits included grants to community projects or non-profits, donations, and investment into recreation, tourism, research and education. These benefits are not exhaustive, and more benefits were discovered through my research.

The two case communities I selected were the Lower North Thompson Community Forest Society (LNTCFS) and the Wells Gray Community Forest Corporation (WGFC). These communities have been in operation for significant lengths of time, and provide numerous benefits in addition to the ones from my list of criteria (Appendix I).

### **3.6 Data Collection Procedures**

To meet the objectives of this study, three data selection procedures were used: document analysis, participant observation and semi-structured interviews.

#### **3.6.1 Document Analysis**

Document analysis is defined by Bowen (2009: 27) as “a systematic procedure for reviewing or evaluating documents.” This method allows a researcher to create a conceptual framework and theories for their research using content and thematic analysis from various documented sources (Bowen, 2009). Documentary material serves a variety of functions, including assisting in understanding of context for a given issue, relevant questions to include, potential situations for observation, and complementary research data (Bowen, 2009).

Document analysis was the first step in my research before going to the field. I reviewed and analyzed documentary data that had been collected in BC which characterized types of local benefits provided through CFs. This gave me a general, but clear and current sense of what was happening in relation to benefit sharing. In relation to the case study communities, I reviewed historical documents and news reports to gain context such as local and regional articles from newspapers and online articles related to CF. I also reviewed each community’s application for a CFA, minutes from board meetings, and annual reports to understand how the CFs had developed over time, and whether their business plans had translated into expected outcomes in alignment with community values. Document analysis also helped inform opportunities for participant observation, such as when community events or board meetings were happening, and generated initial contacts and potential questions for interviews. From this I developed a case study protocol to guide site visits and ensure consistency in data collection.

### **3.6.2 Participant Observation**

Participant observation is a method used by researchers to observe human behaviour while interacting in the context in which they are researching (Guest et al., 2013). Participant observation allows a researcher to ask how and why things are occurring and to notice details or behaviours that may not be recognized by participants or expressed verbally (Guest et al., 2013). Such observations may uncover important information and linkages that validate theories or data, and also provide unique insights not possible from other research methods (Guest et al., 2013). Participant observation may also reduce reactivity in comparison to other methods.

Using participant observation in my research helped demonstrate how CBFM worked in practice, and whether benefit outcomes differed from what was reported. Participant observation also allowed for the observation of interactions and interpersonal dynamics, addressing the complexities of managing for multiple values and outcomes as discussed at Board meetings and other venues. I was able to observe benefit-related activities at board meetings, take tours of a CF, and visit grant recipient organizations to speak to the people involved. Finally, participant observation helped identify people to interview later, and established more relevant questions to ask. I recorded observations in a field notebook throughout my time in the communities, during formal events or meetings as well as through general day-to-day activities. Since a main focus of my research was to determine whether the reported benefits of CBFM actually occur in practice, participant observation was a key method that set my research apart from survey studies, and contributed to a greater understanding of context-dependent CBFM practice.

### **3.6.3 Semi-structured Interviews**

Interviewing as a research method is a spoken exchange of questions and answers between a researcher and participant for the purpose of gaining information and understanding of a given issue or phenomenon related to research (Wengraf, 2001). Interviews are used to gain insight about events, practices, thoughts, opinions, attitudes, world views, and experiences of participants (Dunn, 2005). A semi-structured interview uses a mixture of theoretical concepts and key indicators in the preparation of an interview guide, allowing for topics to emerge while ensuring the fulfillment of research objectives (Wengraf, 2001).

I used semi-structured interviews to gain information regarding perception of benefits and innovations from CBFM, including learning related to being a part of managing a forest. Semi-structured interviews were important for understanding the whole system of CBFM in a community and extent of innovation, taking into account viewpoints from a wide range of community members. I spoke to forest managers and operators, board members, forest users, local government, contractors, and grant recipients that benefitted in some way from each CF. Appendix II captures the interview schedule I developed through my review of the literature and document analysis and in the context of the objectives I set for the research. As I learned more about the chosen community and benefit sharing practices, I sharpened some of my initial questions, especially those in relation to specific benefit activities. A total of thirty-nine interviews were conducted, twenty-five related to LNTCFS, eleven related to WGCF, and three from participants external to both CFs. Due to ethical reasons regarding the small size of each community, details regarding community role or position will not be identified within these numbers. Interviews were conducted in a mutually suitable location, and lasted on average between forty-five minutes and one hour. The interviews were recorded if permission was

granted, otherwise notes were kept, which was the case for two interviews. Ethics approval from the Joint Research Ethics Board was obtained.

### **3.7 Data Analysis**

My data analysis followed Creswell's (2014) guidelines. Data collection and analysis proceeded simultaneously, in alignment with a qualitative approach to research (Creswell, 2014; Flick, 2007). Coding of documents, field notes and interview transcripts using Nvivo software helped identify and organize a detailed description and emergent themes. Nvivo allows for the sorting and structuring of large amounts of raw data from qualitative research, helping the researcher to recognize themes and analyze data.

Outcomes of benefit sharing were identified from coded themes developed initially from the literature on CBFM and SE using parent themes taken from Madill et al., (2010) regarding SE, in combination with themes taken from Teitelbaum (2014) regarding CBFM, outlined at the beginning of chapter five. These themes broadly include economic self-sufficiency and provision of socioeconomic benefits, wider participation in governance and socioeconomic benefits, and innovation (Madill et al., 2010; Teitelbaum, 2014). Economic self-sufficiency includes measures of profitability, identification of socioeconomic benefits provided through grants, and partnerships created as a result of grants. Wider participation includes descriptive measures regarding inclusivity of CF boards and meetings, and decision making processes regarding contracting and grants. Innovation includes identification of new outcomes from the CFA tenure, as well as innovative practices that CFs have adopted to fulfill their mandates. Mission statements, changes over time, and strategies for measuring progress were described and analyzed in a separate chapter for each CF, and compared to indicators of SFOL

from Molnar and Mulvihill (2003) to determine existence of learning and pursuit of innovative measurements and practices over time.

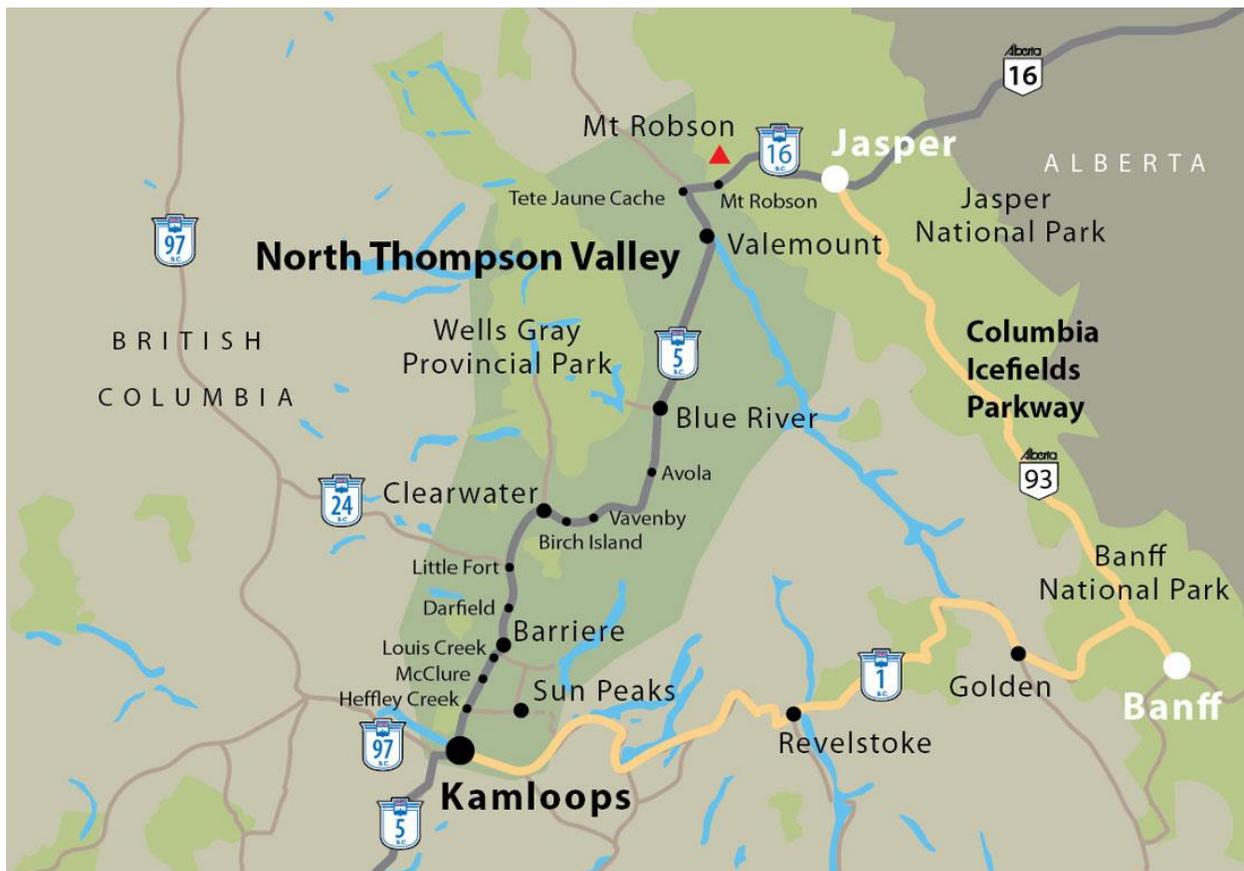
To ensure the accuracy of my data I employed triangulation. This term is defined by Bowen (2009) as “the combination of methodologies in the study of the same phenomenon.” (p. 28). Triangulation is one means used by qualitative researchers to reduce the chances of bias in a study by using methods that work together to present a more holistic viewpoint (Gillham, 2000). I triangulated CF policy documents, management plans, newsletters and financial documents with statements from interviews, alongside observations and notes made at CF meetings to ensure accuracy. I also used member-checking, allowing my participants to view their transcript to ensure that what I recorded was in alignment with what was being communicated (Creswell, 2014). I also collected data and documents that allowed for ‘thick’ or detailed description of the setting of the community to enhance the accuracy of my results (Creswell, 2014). Some data presented in this research comes directly from documents, but most data has been collected through interviews with participants. Interview data is supplemented by quotes from individual participants which represent the voice of others that could not all be presented due to space. Level of support for perspectives from interview data use two different descriptors – many indicating support from four or more participants, and some indicating two or three participants. Finally, I incorporated all perspectives, including contrary ones into the discussion of my findings to ensure unbiased selection of data and to incorporate diversity. I provided a report of my findings to the communities and have shared my research with the UofM community.

## Chapter 4 : Case Study Community Forests

The CFs chosen as my case study sites were the Lower North Thompson Community Forest Society, located in Barriere, British Columbia, and the Wells Gray Community Forest Corporation, located in Clearwater, British Columbia, as shown in Figure 4.1. Both communities are located within the North Thompson Valley. The structure of each CF, including their operations, distribution of revenues, and socioeconomic benefits are described in this chapter.

**Figure 4.1 Map of the North Thompson Valley**

**Barriere and Clearwater are both located along Yellowhead Highway 5.**



Used with permission from "Plan," by Lower North Thompson Tourism Society, 2016 (<http://visitbarriere.com/plan/>).

#### **4.1 History and Demographics of the North Thompson Valley**

The District of Barriere was incorporated in 2007, and has a population of 1773 as of 2011 (District of Barriere, 2013; StatsCan, 2011a). It is located 45 minutes north of Kamloops, and is a part of the Thompson Nicola Regional District Electoral Area O. Barriere and area has an aging demographic, with almost half of the population over the age of 55 (District of Barriere, 2013). The main industry in the area is forestry, but this is also supported by agriculture and tourism (District of Barriere, 2009). The four other communities included in the LNTCFS partnership, Little Fort, Chu Chua, Louis Creek, and McLure are located within the same electoral district, and have a combined population of 1335 (StatsCan, 2011d). Chu Chua is the main village for Simpcw First Nation. Historically, the Simpcw First Nation territory extended from current-day McLure, north towards the Fraser River in McBride, east towards Jasper, and south towards the Athabasca River (Simpchw First Nation, 2017). As of January 2016, Simpcw First Nation had 710 members on and off reserve (Simpchw First Nation, 2017).

The District of Clearwater was incorporated in 2007, and has a population of 2331, as of 2011 (StatsCan, 2011b). Clearwater is located 125 km north of Kamloops, and within the Thompson-Nicola Regional District Electoral Area A, which covers Wells Gray Country, and includes the communities of Blackpool and Vavenby, in addition to Wells Gray Provincial Park (TNRD, 2016). The TNRD Electoral Area A, apart from Clearwater, has a population of 1536, as of 2011 (StatsCan, 2011c). Forestry continues to be the main industry and source of income in Wells Gray Country, followed by agriculture and tourism (DOC, 2016, Participant 28, 29). Uranium mining was proposed as another potential industry, but has not been approved to date (Participant 27).

Forestry has historically been a key component of the local economy of the North Thompson Valley, with sawmills acting as major employers. The Forest Revitalization Act set forth by the BC government in 2003 was designed to increase the profitability and sustainability of the forest industry by reducing industrial Crown land tenures by 20% and redistributing them as CF and other small tenures (Furness et al., 2015). However, this act also removed requirements for large forestry companies to operate mills within certain distances to tenures, leading to mill closures and loss of local jobs and revenue. This crisis and opportunity was the impetus for many communities to begin CFs at this time (Participant 8).

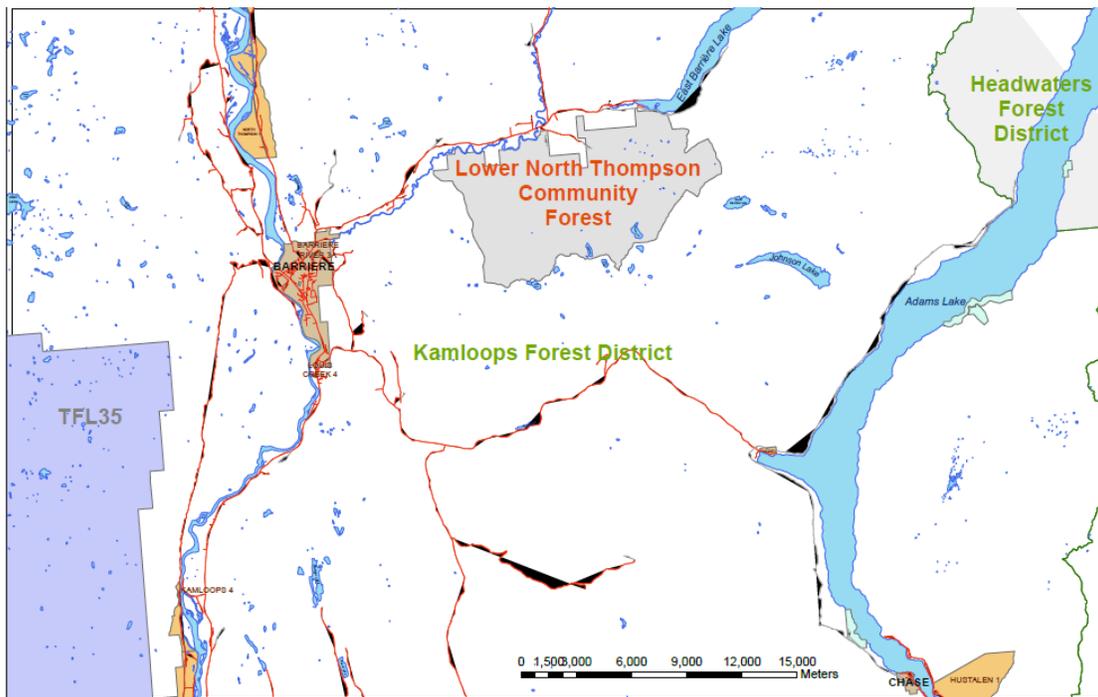
#### **4.2 Lower North Thompson Community Forest Society**

The Lower North Thompson Community Forest Society (LNTCFS) was formed in 2004, largely in response to a devastating forest fire in July of 2003 (LNTCFS, 2016g). In this fire, the Tolko sawmill in Louis Creek burned to the ground. Community members rallied together to start a CF largely as a way to re-gain some of these jobs. The CF began as a five community partnership between Barriere, Little Fort, Louis Creek, McLure, and with Simpcw First Nations band from Chu Chua, who had an offer from the Provincial government to manage a temporary Non-Replaceable Forest License (NRFL) to harvest beetle-killed trees (Participant 1). A large portion of this license was passed on by Simpcw First Nation to the CF to manage on their behalf, in order to fund the start-up operations costs for the community forest license. The CF also received a loan from Tolko to this end (Participant 1). While harvesting was done on the NRFL, a proposal for a CFA was developed and submitted to the Provincial Government, proposing a society legal structure for the organization. The proposal was approved for a probationary license in 2006, with a land base of 8254 hectares and an AAC of 20,000 cubic

metres. The CF is located east of the town of Barriere, as shown in Figure 4.2 (LNTCFS, 2006). In 2010, the LNTCFS was approved to move directly into a 25 year long-term license (LNTCFS, 2010). When the NRFL license expired in 2011, the CF continued harvesting on their tenure. The LNTCFS is now into its second cut control period (LNTCFS, 2015c).

**Figure 4.2 Map of LNTCFS CFA tenure**

From (Ecora Resource Group Ltd., 2015, p. 6)



#### 4.2.1 Mission and Vision

The mission statement of the LNTCFS is:

“To establish local control of dedicated forest resources for the long-term sustainability of the five participating communities. To secure for these communities an opportunity to be more self-determined. To engender economic stability in these communities. To practice and model exemplary stewardship of the local forest environment” (LNTCFS, 2016g).

Their objectives include:

“Create a long-term sustainable plan for local forest resources that benefits the people of the Lower North Thompson Valley, preserve ownership of local natural resources, promoting self-determination for our communities, create sustainable employment, new business opportunities and investment, and provide long-term opportunities for achieving a range of community objectives, including: skills training, forest related education, and social environmental, and economic benefits” (LNTCFS, 2016g).

#### **4.2.2 Board and Management Structure**

The LNTCFS is made up of twelve volunteer board members, who meet monthly to discuss and approve decisions related to operational plans and grant applications (LNTCFS, 2016g). These directors, ideally, represent the five communities included in the partnership, although current board members are predominately from Barriere. The board hires employees to help with the day-to-day operations of the CF, which include a General Manager (GM), Administrative Assistant, and Job Creation Project Supervisor (LNTCFS, 2016g). The board also makes decisions regarding hiring local contractors for major operations such as harvesting, road building, site preparation and silviculture. The GM has an office in Barriere, and is responsible for hiring contractors and receiving and signing cheques, bills and invoices to forward to the administrative assistant. The GM also ensures that the CF operates according to the forest stewardship and management plans and that all tasks and reporting requirements are fulfilled (LNTCFS, 2014c). The GM creates an operations budget for approval by the board, and reports back to the board every month as well as at their annual general meeting (LNTCFS, 2014c).

Board members are responsible for reviewing and approving budgets and financial statements on a monthly basis to ensure that they are transparent, honest, and align with policy (LNTCFS, 2014c). The treasurer acts as a signing officer, maintaining the bank accounts and investments, as well as keeping track of the financial records and distributing these to the board (LNTCFS, 2014c). The treasurer also participates in reviews of the annual plan and

budget, and monthly reviews of financial statements (LNTCFS, 2014c). A certified accountant is hired each year to prepare financial statements to file with Revenue Canada.

The LNTCFS has a number of financial policies and controls to maintain accountability (LNTCFS, 2014c). The LNTCFS has a contingency fund to cover unforeseen circumstances and an investment committee that manages investments to contribute to profits and ensure operational stability (LNTCFS, 2014c). Complete annual financial statements for the LNTCFS are posted on their website.

#### **4.2.3 Local Contracting**

The LNTCFS has a section in their policy manual regarding hiring of local contractors for forestry operations, according to their objective of providing local employment. According to policy 2014-12, a contractor is considered local when they live within the area of Chase, to Kamloops, to McBride (LNTCFS, 2014c). The LNTCFS holds a local contractor registry, with contractors listed based on experience, performance, equipment available, success to date, financial stability, and safe certified status (LNTCFS, 2014c). Contractors from this registry are given priority in the hiring process, which is done by the GM, with the aim of providing at least 85% of all contracted work to local contractors (LNTCFS, 2014c). Contractors are hired either through direct bids, which is when a number of contractors are contacted with information packages on a contract and submit bids for the same contract, or indirect bids, where one contractor is selected by the GM based on their knowledge of competitive rates (LNTCFS, 2014c). Successful contractors who are chosen are contacted by phone or email, and are given seven days to sign a contract. Unsuccessful bidders are also contacted and told who has

received the contract. Local contractors are named in bi-annual newsletters regarding ongoing operations work completed on cut blocks within the CF tenure.

#### 4.2.4 Log and Fiber sales

The LNTCFS, as a log sales organization, sells logs and fibre to local mills and manufacturers. Barriere has two local wood companies, Gilbert-Smith, a cedar sawmill, and Woodco, a log yard and small sawmill that makes specialty products. Information regarding how much is sold to each company is tracked and made available to the public. Table 4.1 lists percentage of logs and fibre sold in 2015.

**Table 4.1 Sale of logs and fibre by the LNTCFS to companies in 2015**

Adapted from (LNTCFS, 2015a)

Company	Location	Percentage	Locally owned? (Y/N)
Tolko Industries	Heffley/Nicola	59%	N
Gilbert-Smith	Barriere	14%	Y
Interfor	Adams Lake	10%	N
Canfor	Vavenby	9%	N
Woodco	Barriere	4%	Y
Various	Firewood, house logs, rails, pulp	4%	Y

Wood sold largely remained in the Lower North Thompson Valley, however the majority of wood is still sold to large, non-locally owned companies as shown in Table 4.1. The challenges that this creates for LNTCFS will be described in chapter five.

#### 4.2.5 Non-Timber Forest Products

Although one hope for CFs is to be able to manage and sell NTFPs, there are none being developed within the tenure at this time despite having the right to manage, harvest and charge fees for NTFPs (LNTCFS, 2015c). In the past, some work has been done making cedar oil

from branches, and some harvesting of Morell mushrooms after the 2003 fire. As policy changes over time though, the LNTCFS has expressed interest in keeping these rights and moving forward in managing NTFPs (Participant 2).

#### **4.2.6 Silviculture and Mapping**

The LNTCFS meets and exceeds provincial requirements for silviculture and mapping on their CFA tenure. Communities operating a CF tenure are required to manage their land base for a variety of government objectives, including soil, conservation, water, biodiversity, recreation, wildlife, visual quality, and cultural heritage resources, which are described in their Forest Stewardship Plans (LNTCFS, 2013b). In relation to some of these objectives, inventories conducted on the LNTCFS land base include a Vegetation Resource Inventory (VRI), Terrestrial Ecosystem Mapping (TEM), landscape inventory, recreation inventory, biogeoclimatic inventory, ungulate winter range inventory, water user inventory and stream classification inventory (LNTCFS, 2015c).

The LNTCFS also improves their land base through the Land Based Investment Program. This is a program that is run by the Ministry of Forests, Lands, and Natural Resource Operations (MFLNRO), in partnership with the Resource Practices Branch, which provides funding through grants available to all types of forest tenure holders, for the purpose of enhancing the land base to increase productivity and forest health (MFLNRO, 2015b; Participant 1; Participant 2). The MFLNRO lists goals and kinds of projects eligible for funding, and tenure holders submit projects for approval (MFLNRO, 2015b). Some of the ways the LNTCFS has applied this funding is for replanting, juvenile spacing, brushing, and fertilization for low producing sites (Participant 1). Currently, the LNTCFS is conducting a study to determine which parts of the tenure could

benefit from aerial fertilization in order to determine where best to invest future funding (Participant 1, Participant 2).

The LNTCFS also invests in the land base through the Forest Stewardship Fund (FSF). The FSF is an initiative in which LNTCFS puts its own money back into improving the land base. This fund is additional to and separate from the Land Based Investment Program, and generally receives \$30,000 per year from operational revenue. The LNTCFS chooses to harvest timber on areas in the tenure with low volume and productivity with the purpose of restoring and enhancing them to a higher growth rate (Participant 1). These low growth sites often lose money, as the cost to harvest and re-plant exceeds the revenue that is generated from the timber. Rather than recording harvest of low growth sites as a deficit in the operational budget, money is transferred from the FSF to make up the loss. The FSF creates environmental benefit in addition to helping the CF maintain its AAC over the long term (Participant 3).

#### **4.2.7 Grants**

The LNTCFS distributes funds generated from the operations through grants, educational bursaries or re-payable loans. The LNTCFS started giving out grants in 2011 (LNTCFS, 2016e). Community organizations are encouraged to apply for grants each year through word of mouth, newspaper ads, and the LNTCFS website. An application form, which is available on the LNTCFS website, is filled out and submitted by December 31<sup>st</sup> (LNTCFS, 2016e). Information required includes a description of the organization applying, reason for donation request, and what benefits this donation or anticipated project will provide (LNTCFS, 2016c). The communities that will benefit from the grant must also be identified. In January and February, grant applications are reviewed by the directors at their monthly board meetings.

Grants are approved based on which communities are represented by the grants, as well as the number of people who will benefit from the grants (LNTCFS, 2016c).

Grants from previous years have gone to recreation societies, 4H clubs, community halls, the North Thompson Fall Fair and Rodeo Association, Barriere Search and Rescue, first-responders and firefighters, the District of Barriere, the Thompson-Nicola Regional District, and local schools. A full chart with grant recipients and amounts is included in Appendix V. More on these grants is forthcoming in chapter five.

#### 4.2.8 Education

The LNTCFS supports education through grants towards bursaries and scholarships for the Barriere Secondary School. To date, 21 bursaries worth \$1000 and 20 scholarships worth \$2000 have been given to graduating students planning to pursue post-secondary education. Bursaries and scholarships are awarded upon registration to a post-secondary school and program of the student’s choice, and may be deferred up until one school year later (LNTCFS, 2016c). Table 4.2 shows the amounts given from 2011-2015.

**Table 4.2 Scholarships and bursaries for Barriere Secondary School from 2011-2015**

Adapted from (LNTCFS, 2016c)

Year	Amount	Scholarships (\$2000)	Bursaries (\$1000)
2015	\$15,000	5	5
2014	\$16,000	5	6
2013	\$15,000	5	5
2012	\$10,000	5	0
2011	\$5000	0	5

The LNTCFS has also hosted University of British Columbia (UBC) student interns in 2014 and 2015, and a Job Creation Program (JCP) in partnership with the Federal and Provincial governments since 2011. Both of these initiatives will be described in more detail in chapter five.

#### **4.2.9 Getting the Word Out**

The LNTCFS gets information out regarding their operations and grants in a variety of ways. Requests for contractor bids and grant applications are posted in the local newspaper, as well as on their website. Successful grant recipients are also included in the local Barriere Star Journal and Clearwater Times newspapers, and are listed on their website. Every fall, a two page spread is published in the Barriere Star Journal, with the annual finances of the organization, map of cut blocks, and an invitation to attend their Annual General Meeting. Articles and pictures about grant projects are regularly posted in both local newspapers. The local radio station is also used on occasion to get word out about the LNTCFS events or meetings. Word of mouth was also identified a number of times as a way people hear about the LNTCFS.

The LNTCFS website provides a number of documents related to their operations and grants, including their management plan, forest stewardship plan, financial statements from 2009 to present, past newsletters, all successful grant recipients, job creation project updates, and hiring information regarding summer students and JCP opportunities. The website also includes the LNTCFS' mission and vision, management structure including board member names and staff, pictures, and short videos showing machinery doing various stages of harvesting (LNTCFS, 2016g).

Recently, the LNTCFS has started doing strategic planning meetings with the five communities included in their partnership. These meetings, initiated in 2014, were created to fulfill the objective of creating new business opportunities and investment. A consultant was hired and at least one meeting, open to the public, was held in each community, where a meal was served and feedback invited regarding current operations of the LNTCFS, and ways that the organization could help their community into the future. People's comments were recorded, and a strategic plan was created and organized into themes from this feedback (LNTCFS, 2014a). Follow up meetings were held in spring of 2016 to evaluate how well the LNTCFS has done in meeting these goals and in following the strategic plan (LNTCFS, 2016a). Although these meetings focused on future initiatives, in many cases they promoted awareness of the LNTCFS and availability of grants, as well as an opportunity for LNTCFS to partner with communities in advocacy.

#### **4.2.10 Stakeholder and First Nations Consultation**

The LNTCFS works with a trapper, ranchers, and Simpcw First Nation within their tenure, as well as people holding domestic water licenses (LNTCFS, 2015c). Consulting with stakeholders and First Nations is a Provincial requirement described in their Forest Stewardship Plan and Management Plan when operations, such as harvesting or road building, occur within overlapping areas (LNTCFS, 2006; LNTCFS, 2015c). Many times, consulting occurs through conversations with affected groups, with comments and concerns taken into account. AGMs and newsletters are other ways that the LNTCFS keeps groups informed, and invites written or verbal comment (LNTCFS, 2015c).

The Simpcw First Nation has also done archaeological work on the CF forest tenure, as it covers a portion of their traditional territory (LNTCFS, 2015c). An Archaeological Overview Assessment (AOA) was completed in 2009 (LNTCFS, 2015c). The LNTCFS is also required to report to Simpcw First Nations with all cut block and road building plans and maps for comment on whether cultural heritage resources will be affected (LNTCFS, 2013b). Some of these resources may involve archeological sites, trails, and traditional uses and rights (LNTCFS, 2015c).

#### **4.3 Wells Gray Community Forest**

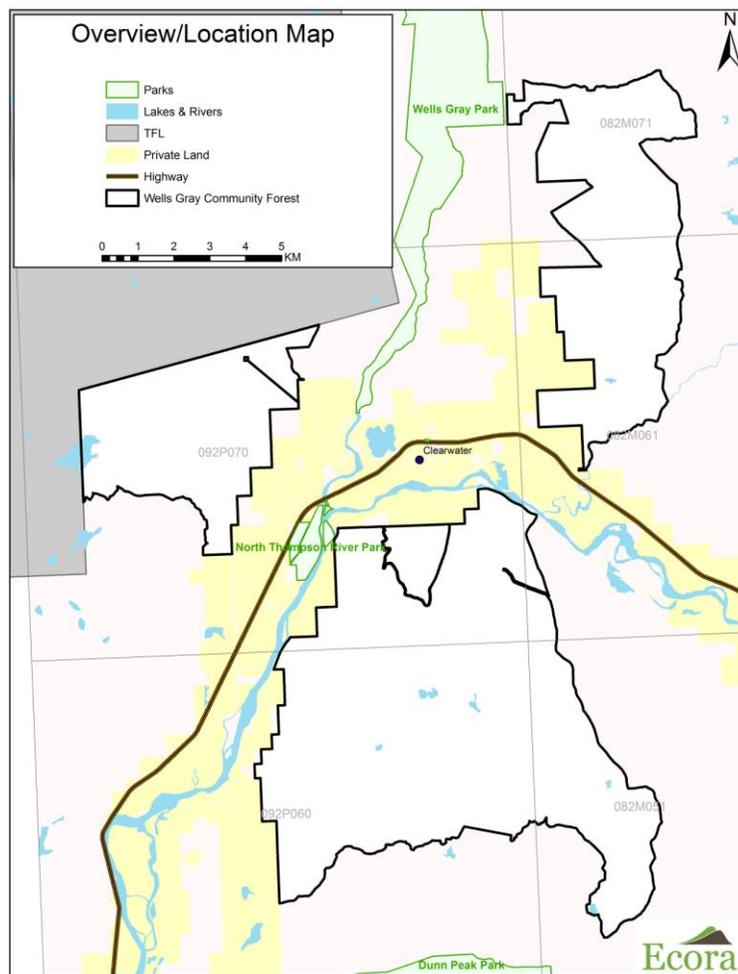
The Wells Gray Community Forest (WGCF) is located in Clearwater, BC and includes the wider Wells Gray Country within its local contracting, grants and benefits. The WGCF was formed in 2004, in response to the loss of a major licensee from the area in 2003. Community meetings led to the creation of an action committee with sub-committees to explore the possibility of getting a CF to benefit Wells Gray Country (Participant 7). A non-profit corporation structure was chosen as its legal structure.

In 2004, the Provincial government extended an invitation to Clearwater to apply for a CFA (Participant 7). A proposal was submitted by the community in December 2005, and a Probationary CFA was issued to the community in July 2006 with a 33,500 cubic meter cut on a land base of 13,154 hectares on three separate areas surrounding the community, shown in Figure 4.3 (Participant 7, BCCFA, 2015; WGCF, 2006). In 2008, the Community Forest Advisory Committee (CFAC) was created to increase opportunities for public input into CF operations (WGCF, 2016c). In 2010, the Wells Gray Community Forest 2010 Society (WGCF, 2016c) was created to hold the shares for the corporation and distribute money into the community (WGCF,

2016e; Participant 7). In 2011, the WGCF signed on to a 25 year long-term license at 20,000 cubic meters on the same land base, as the uplift previous to this was due to the harvest of beetle killed trees (BCCFA, 2015). Currently, the WGCF is entering into its second cut control period (WGCF, 2012c).

**Figure 4.3 Map of the WGCF tenure area**

From (Ecora Resource Group Ltd., 2011, p. 11)



#### **4.3.1 Mission and Vision**

The mission statement for the WGCFC is:

“To operate and manage a Community Forest Agreement License on a long term sustainable, environmental, and social plan that will maximize economic opportunities and benefits for the residents of Wells Gray Country.” (WGCFC, 2016d).

This mission is fulfilled by the corporation through the WGCFS and the CFAC, demonstrated in the purposes listed for each organization. The purposes listed for the WGCFS are:

“To promote the economic and social welfare of the residents of the Wells Gray Country (including the District of Clearwater), including the provision of support for benevolent and charitable enterprises, federations, agencies and societies engaged in furthering these purposes;

To hold the shares, and receive all the benefit of the shareholdings, of the Wells Gray Community Forest Corporation, which [company] manages a Community Forest License (the “Community Forest”) in the Wells Gray Country (Thompson-Nicola Regional District Electoral Area ‘A’).” (WGCFC, 2016e).

The purposes listed for the CFAC are:

“To be a volunteer advisory body to the Wells Gray Community Forest Corp. (WGCFC) Board of Directors; To raise the public’s awareness of the Community Forest (CF) and how it can benefit them; To encourage and foster the public participation in the CF by holding public meetings, open houses, joint field trips, and information session[s]; To assist with the development of a communication plan that holds the CFAC and WGCFC accountable to the public’s concerns and input” (WGCFC, 2016c).

#### **4.3.2 Board and Management Structure**

The WGCFC is made up of eight volunteer board members who are responsible for overseeing the operations of the CF (WGCFC, 2016a). One of the positions is reserved for a Simpcw First Nations representative; however this role is currently not being filled. The WGCFC board employs a GM, who has an office in Clearwater and is responsible for the day-to-day operations, ensuring that all CFA requirements are fulfilled according to management plans.

The GM also hires contractors and environmental specialists, and reports back to the board on a regular basis, as well as at their annual general meeting (WGCFC, 2016a).

The WGCFC has policies regarding finances, stating that the board directors are responsible for creating and ensuring their budget is meeting all operational and strategic plan requirements, as well as reviewing the budget quarterly and annually (WGCFC, 2012a). Board members must also make sure that financial statements are created with integrity, through creating and implementing internal controls to prevent theft or fraud, and ensuring the corporation does not go into debt (WGCFC, 2012a). The WGCFC has a treasurer that is responsible for managing the details related to revenues and expenditures on a monthly basis in their accounting system in addition to helping prepare the budget and annual plan. The GM manages contracts and silvicultural accruals, as well as signs and approves invoices, bills and cheques. The WGCFC appoints a book keeper to receive all invoices and bank statements from the GM (WGCFC, 2012a). An accountant is hired every year to review financial and accounting systems, to do an audit and file the government reports for the WGCFC. The WGCFC has a number of financial controls listed and described in detail in their financial policy to maintain accountability (WGCFC, 2012a). The WGCFC also has investments that contribute to profits, and a contingency fund to cover unforeseen circumstances related to emergencies, the economy or postponement of harvesting (WGCFC, 2012a). The contingency fund also ensures that the WGCFS continues to receive a steady flow of income (WGCFC, 2012a). Selected pages of annual financial statements for the WGCFC are posted on their website.

The WGCFC deals with all the finances for the CF, disbursing profits to the WGCFS to distribute to community groups. The WGCFS is made up of seven trustees, which include two

directors from the CFAC, two directors from the WGCFC, one director from the District of Clearwater (DOC), and two directors from Wells Gray Country, who are Community Members at Large (WGCFC, 2016e). The WGCFS holds the shares for the WGCFC and receives a dividend of all the profits of the WGCFC twice a year, in the spring and fall (Participant 7).

The CFAC is made up of eight community members, with the requirement of one also being a member from the WGCFC (WGCFC, 2016c). The CFAC was created as a requirement of the Ministry of Forests, Lands and Natural Resource Operations for greater public input into the CFA (Participant 7). The CFAC meets at least four times a year, in addition to an AGM, and welcomes public involvement in meetings and events (WGCFC, 2016c). For the past two years, the CFAC has organized National Forest Week (NFW) speakers and events in the community to promote forest awareness and education (CFAC, 2016; Participant 8). They also provide feedback to the WGCFC, and make them aware of any problems that community members bring, so they can consult or adjust operations as required (WGCFC, 2016c; Participant 7).

#### **4.3.3 Local Contracting**

The WGCFC has a section in their policy manual regarding hiring local contractors for forestry operations, with processes and criteria very similar to LNTCFS. The only notable differences are that the WGCFC defines local contractors as those whose primary residence is located within TNRD Electoral Area A, and that the board may cancel a contract and remove a contractor from their registry for up to one year if they fail to deliver on a contract. (WGCFC, 2012a).

#### **4.3.4 Log and Fiber Sales**

Similar to the LNTCFS, the WGCFC also sells logs to local contractors, who then sell logs to other companies in the area. The majority of logs from the WGCFC are sold to Canfor in Vavenby and Interfor in Adams Lake. Other buyers include Tolko and Gilbert Smith, as well as value added specialty mills, including Wadlegger Specialty Forest Products and Colborne Lumber Ltd. (WGCFC, 2015).

#### **4.3.5 Non-Timber Forest Products**

The harvest of NTFPs has been considered to some extent within the WGCFC, but similar to the LNTCFS has had limited implementation. Some people do harvest cedar boughs within the CF to make cedar oil, but do not have exclusive access (Participant 15). There are also people who pick berries within the CF tenure. In 2010, a symposium, put on by a Masters student from SFU and focussed on NTFPs, was hosted in the community, with guest speakers leading sessions on different aspects of NTFPs (WGCFC, 2010). Despite the interest generated by the symposium, NTFP development did not increase.

#### **4.3.6 Visual Quality**

One aspect that the WGCFC manages within their tenure is visual quality, which is also a provincial objective for forest tenures on crown land (WGCFC, 2007). Since much of the WGCFC tenure is located in a visually sensitive area surrounding Clearwater and leading to Wells Gray Park, many cut blocks and roads have the potential to make drastic changes to the landscape and cause distress to business owners and community members, including tourism operators.

#### **4.3.7 Fire Protection**

Since the forest comes right into the community, homes and businesses are at significant risk from forest fires. Therefore, the WGCFC manages fire protection within their

tenure and around the town of Clearwater through fuel management, in partnership with the District of Clearwater (DOC) (Andrew, 2012; WGCFC, 2012c; Participant 15). The DOC has a Wildfire Protection Plan, developed in 2012, which provides a risk assessment, fuel hazard inventory, and plan of action to reduce the risk of catastrophic wildfire emergencies (WGCFC, 2012c, Andrew, 2012).

#### **4.3.8 Silviculture and Mapping**

The WGCFC does extensive land planning and mapping within their CF tenure to ensure optimal investments in silviculture, with the goals of maintaining a healthy forest and increasing land base productivity for future returns and community benefit. One way that the WGCFC does this is through their silviculture and tactical plan, which is a detailed plan being developed that will identify optimal areas to invest in practices such as fertilization and pruning (Participant 15).

This attention to the land base is also revealed as the WGCFC looks into its AAC and cut control and conducts an independent Timber Supply Analysis. After the pine beetle uplift, the provincial government raised the AAC to 33,000 cubic meters from 20,000 cubic meters because it was believed that the ICH productivity value was estimated too low previously (Participant 15). The WGCFC has expressed some concern with this increase in AAC, and is doing the Independent Timber Supply analysis to confirm this number.

Other land base planning tools that exist for the WGCFC land base include 5m contour mapping, Standing Timber Inventories (STI), Vegetation Resource Inventory (VRI), Roaded and Developed Inventory (RDI), aerial photographs and field maps, stream and riparian studies,

including alluvial fan and floodplain mapping, a Data Management System (DMS) and a 15-year timber forecast plan (WGCF, 2007).

#### **4.3.9 Grants**

As mentioned earlier, grants are disbursed by the WGCF from the profits of the WGCF. The WGCF started giving out grants in 2011 (WGCF, 2016e). There are three kinds of grants given by the Society: 25% of funds go towards social grants, 50% to capital infrastructure improvements with matching funds, and 25% towards larger, accumulating projects for Wells Gray Country benefit (WGCF, 2016a). Every spring and fall, community groups are encouraged to apply for grants, using an application provided on the WGCF website (Participant 7). Information required includes a description of the organization applying, reason for donation request, and what benefits this donation or anticipated project will provide (WGCF, 2016a). After the application deadline, each board member receives a copy of the application on a jump drive, and is given two weeks to review all applications (Participant 7). The grants are ranked according to criteria set out in the policy of the WGCF, including scope of benefits and demographic of who will benefit (Participant 7, Participant 8). The Society then meets and discusses the applications and decides which groups will be approved for grants. If more information is needed, the WGCF will contact the group, and may invite them to come for an interview with a few trustees (Participant 7). Groups are notified by letter as to whether they have received a grant, how much they have received, and if not chosen, reasons why and whether they may apply in the next granting period (Participant 7).

Grants from previous years have gone to various groups and organizations, including recreation groups, social and community service organizations, fire department, arts and

theatre groups, the District of Clearwater, schools, seniors housing, and healthcare groups. A detailed list of grant recipients and amounts is included in Appendix V, and discussion regarding the grant distribution process in chapter five.

#### **4.3.10 Education**

The WGCFC has also focussed on education, through hosting two students in the same UBC cooperative student program as the LNTCFS in summer of 2014, as well as through grants to Thompson Rivers University (TRU) for programming, tree planting with Girl Guides, and the NTFP symposium. The CFAC also promotes forest education, most recently through hosting speakers and events for NFW in fall of 2015 (CFAC, 2016). Many also viewed the grants to Clearwater Secondary School and Raft River Elementary School as a way that the WGCFC fulfills its mandate of providing education. However, some participants expressed a desire to see more done to promote forest education and training, within the community and also within the school system.

#### **4.3.11 Getting the Word Out**

The WGCFC gets the word out about grant and local contracting opportunities and their AGM through the local newspaper, the Clearwater Times, through Facebook updates, and through their website, which is run and updated by the GM. Successful grant applicants are listed on the website after each granting period. An annual report is also available on the website, summarizing all operations and grants given, which is released at their AGM each spring. Other reports available on their website include their Forest Stewardship plan, Management Plan, Watershed report, policy documents and strategic plan, as well as detailed maps of their cut blocks (WGCFC, 2016a). An annual newsletter is also available online and

distributed in the community, and focuses on stories about the CF and how the grant recipient organizations are using funds from the WGCFC grants to benefit the wider community. Grant recipients are also encouraged by the WGCFC to help get word out about their organization and contribution to the community, through publishing an article in the newspaper about their completed project or program, through signage, or verbally reporting at various community meetings.

**Photo 4.1 New front doors of Evergreen Acres Senior Housing**

Photo by Anne Rooban (2016)



As mentioned earlier, the CFAC plays an important role in getting word out in the community about the WGCFC and forestry in general, through their regular meetings and NFW (WGCFC, 2016c).

The WGCFC created a strategic plan in 2014 to guide operations and the direction of their organization. Input from community members was gathered from two open houses,

documented conversations, written statements, and questionnaires, and was sorted into themes to create the strategic plan (WGCF, 2014b; WGCF, 2014c). The WGCF also hosts annual CF tours, with 2015 and 2016 being held during NFW in partnership with the CFAC. The WGCF also hosted the annual BCCFA conference in June 2015 in Clearwater (WGCF, 2016b).

#### **4.3.12 Stakeholder and First Nations Consultation**

The WGCF works with trappers, ranchers, the District of Clearwater, tourism-related business owners, guides and outfitters, recreation tenure holders, mineral claims holders and Simpcw First Nation within their tenure (WGCF, 2006). Again, consulting with stakeholders and First Nations is a provincial requirement described in their Forest Stewardship Plan and Management Plan when operations, such as harvest or road building, occur within overlapping areas (WGCF, 2006; WGCF 2007). Referral letters, meetings and advertisements are some ways in which WGCF communicates with affected groups, taking into account comments and concerns. AGMs, annual reports and newsletters are other ways that the WGCF keeps groups informed, and invites written or verbal comment directly or through the CFAC (WGCF, 2006). The position reserved for a member of Simpcw First Nations on the WGCF board is intended as one way to increase participation and better understand First Nation values and concerns within the tenure (WGCF, 2006).

There are three recreation-related tenures associated with the CF tenure, including the Wells Gray Outdoor Club who operates the Candle Creek Cross Country Ski trails on the tenure under a recreation site/trail agreement with MLFNRO, the Clearwater Ski Club who operates the Clearwater Ski Hill, and the Clearwater Snowdrifters who travel through the CF tenure to access their tenure (WGCF, 2012c).

#### **4.4 Discussion**

This chapter describes each case community, and identifies basic structures and procedures for operations and distribution of revenues. Initial observations demonstrate that the structures of LNTCFS and WGCF support CBFM goals and objectives to varying degrees.

In terms of equity, both CFs do contribute to development and stabilization of local economies primarily through hiring local contractors as mandated and defined in their policy manuals, and support local distribution of wealth through grants. The structures of both CFs support participation and local control through having local volunteer board members responsible for decision-making, and through hosting of community meetings and AGMs for the wider community. Both CFs also manage local values and preferences, such as visuals, watershed management, fire protection, and consideration of climate change when re-planting forest stands, supporting local control through choice of management strategies (Teitelbaum, 2014). Although issues raised regarding limited community capacity and high up-front costs had the potential to threaten equity in initial start-up phases, these challenges were surpassed by both CFs. Issues pertaining to social equity will be explored in chapter five.

In terms of innovation, development of diverse and integrated forms of management, as described by Teitelbaum, (2014) and Bullock & Hanna, (2012), appears to be somewhat lacking for both CFs. The fact that many participants from both CFs reported that meeting provincial requirements and increasing the level of inventories and mapping conducted on their tenure demonstrates high levels of forest sustainability, reveals a very technical understanding of forest management, also present in industrial forestry. Innovative perspectives on forest management may be limited in these communities as they have both historically been forestry-

based economies surrounded by and employed through companies operating industrial forest tenures, creating widespread acceptance of timber harvest for profit. This preference is also supported by the fact that both CFs do not produce or sell a greater variety of timber and forest products, such as NTFPs. However, since these communities are familiar with the effects of industrial forestry on the land base and socioeconomically within their communities, the desire for innovative processes and outcomes that differed from the past was evident, and perhaps best seen through their start-up phases, increasing investments in silviculture, and support of local socioeconomic benefits through grants.

Now that the structures of each CF have been identified in connection with goals of CBFM (framed using equity and innovation), the next chapter will delve into some of the outcomes of benefit sharing which link closely with SE including profitability and local socioeconomic benefits, social equity in governance and benefits, and innovative practices.

## **Chapter 5 : Outcomes of Benefit Sharing and Social Enterprise Linkages**

There were a number of positive outcomes of benefit-sharing in both CFs. Many of these outcomes demonstrate current evidence of, and future potential for, even greater financial stability and more equitable distribution of wealth and greater social capacity, leading to greater sustainability in each community. There was also evidence of innovation as members of both CFs learned how to operate a successful business and how to create the greatest local benefit over time, looking ahead to future generations. My discussion of the outcomes of benefit sharing in this chapter will use SE as a guide.

There were three major linkages between SE and CBFM in my research framework. These are:

- **Financial self-sufficiency and creation of local socioeconomic benefits.**
- **Wider participation in governance and socioeconomic benefits**
- **Innovative organizational structures and practices leading to new strategies and outcomes**

Both CFs demonstrated all three of these characteristics in some capacity. The next section will reveal how these SE principles align with practices that the case CFs used to ensure that the revenues required for the provision of socioeconomic benefits continue to be generated over time. Each of these linkages are presented as main subheadings in this chapter, describing the results that stem from each.

### **5.1 Financial Self-Sufficiency and Creation of Local Socioeconomic Benefits**

#### **5.1.1 Financial Self-Sufficiency**

According to Madill et al. (2010), financial self-sufficiency is defined as the “ability of a social enterprise to gain financial autonomy through generating profits from income-generating activities” (p. 138). In this next section I consider the profitability of CFs, the challenges they

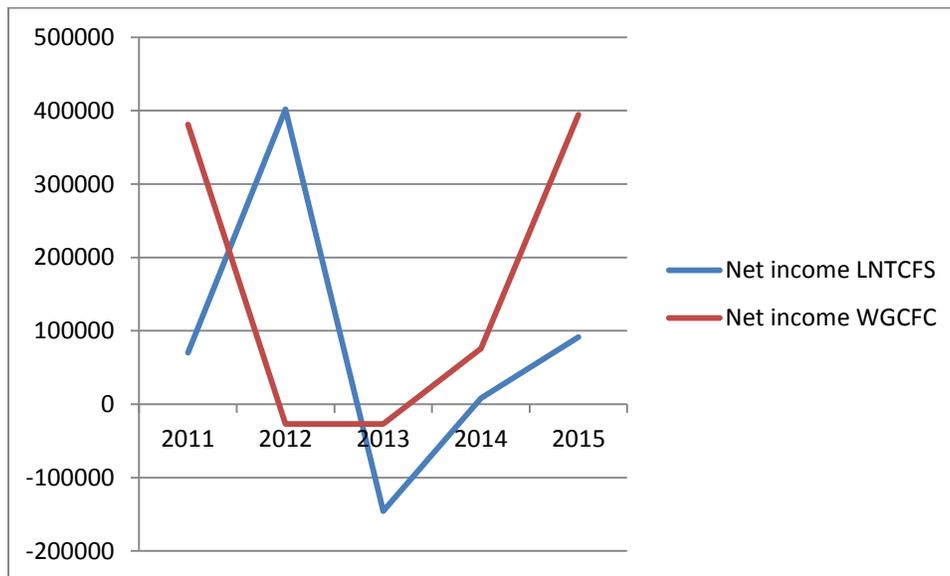
face, as well as the strategies they employ to ensure they remain financially self-sufficient so that grants and other socioeconomic benefits continue to be generated.

### 5.1.2 Income Analysis

In order for each CF to be economically sustainable over time, they must demonstrate financial stability and profitability. One way to determine this is to look at changes in net income over time. Figure 5.1 shows net income for the LNTCFS and the WGCF from 2011-2015, which was chosen because this is the period of time that each CF has been distributing grants.

**Figure 5.1 Net income for LNTCFS and WGCF from 2011-2015**

Adapted from (LNTCFS, 2011; 2012; 2013a; 2014b; 2015b; WGCF, 2011; 2012b; 2013b; 2014a; 2015; 2016b)



Both CFs show fluctuations in their net income over the six year period, especially the WGCF. One reason for these fluctuations mentioned by participants was the market price for logs, which dropped in 2012 and began to increase again in 2013 (LNTCFS 2013a; WGCF,

2013b). For the LNTCFS, a negative net income in 2013 was stated in a newsletter update as a result of low revenues from only harvesting ten percent of expected timber in fall of 2012, due to a shortage of contractors and other unidentified circumstances (LNTCFS, 2013a). The negative net revenue seen for the WGCFC in 2012-2013 was a result of low revenues from postponing fall 2013 logging until spring 2014, in order to sell to a major company that would be able to buy logs by then, bringing in a higher profit (WGCFC, 2013b). Other potential contributing factors for a negative net revenue in 2013 for the WGCFC could be the transition into a new five year cut control period, and the completion of the harvest of beetle killed trees in 2012 (WGCFC, 2013b).

#### ***5.1.2.1 Liquidity***

Another measure of financial health for each CF is liquidity, which is how quickly business is able to sell off assets to meet short-term obligations (Kimmel, 2013). Current ratio calculates liquidity by dividing current assets by current liabilities, producing a figure that identifies how many times over current liabilities are covered in relation to current assets (Kimmel, 2013). For example, the current ratio for the LNTCFS is stable, falling between 3.5 and 4 from 2011-2015. This indicates that the LNTCFS has their liabilities covered over 3-4 times by their assets, meaning that the organization is relatively stable if short-term costs arise. The current ratio for the WGCFC is higher than the LNTCFS, but fluctuates more over the period of 2011-2015, decreasing dramatically in 2014 before rising again in 2015. One reason for the decrease in liquidity for the WGCFC in 2014 is that a significant portion of their money went towards accounts payable and a silviculture security deposit related to their NRFL, increasing their current liabilities by a factor of five in comparison to 2013 (WGCFC, 2014a). On average,

their current ratio is 13.3, meaning they have their liabilities covered over 13.3 times by their assets. Table 5.1 shows current ratio from 2011-2015 for each CF.

**Table 5.1 Current ratio, indicating liquidity for the LNTCFS and the WGCFC  
from 2011-2015**

Adapted from (LNTCFS, 2011; 2012; 2013a; 2014b; 2015b; WGCFC, 2011; 2012b; 2013b; 2014a; 2015; 2016b)

<b>Current Ratio</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
<b>LNTCFS</b>	4.218906	3.774823	3.268383	3.56422	3.900144	3.745295
<b>WGCFC</b>	30.81218	16.94	7.146608	2.45078	9.341409	13.3382

Therefore, it can be said that both CFs are financially stable regarding meeting short-term expenses, with the WGCFC showing higher stability with higher coverage of their liabilities.

### **5.1.2.2 Solvency**

Solvency is a measure of how well a business can pay off their long-term debts, by determining amount of assets financed by debt (Kimmel, 2013). Total debt ratio is one figure that can determine solvency, by subtracting total equity from total assets, and dividing this figure by total assets, which gives amount obligated for liabilities per dollar of assets (Kimmel, 2013). For example, total debt ratio for the LNTCFS is stable, averaging around .57 cents obligated for liabilities per dollar of assets. Total debt ratio for the WGCFC starts out very low in 2011, increasing to .86 cents in 2013 and 2014 before dropping again to .63 cents per dollar in

2015. This increase in total debt ratio is a result of increased long term liabilities in the form of reserve funds set aside for silviculture, road building and bridges, and general operations in 2013 and 2014 (WGCF, 2014a). This means that for both CFs, just over fifty percent of their assets are obligated for liabilities, which is a moderate amount of solvency demonstrating relative stability in paying off long-term debts. Table 5.2 shows total debt ratio between 2011-2015 for each CF.

**Table 5.2 Total debt ratio, indicating solvency for the LNTCFS and the WGCF from 2011-2015**

Adapted from (LNTCFS, 2011; 2012; 2013a; 2014b; 2015b; WGCF, 2011; 2012b; 2013b; 2014a; 2015; 2016b)

<b>Total Debt Ratio</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
<b>LNTCFS</b>	0.596714	0.551119	0.569317	0.571146	0.598484	0.577356
<b>WGCF</b>	0.032467	0.836417	0.867446	0.867886	0.637461	0.648336

### **5.1.2.3 Profitability**

Profitability is a measure of a business’s operational success, taking into account expenses and revenues (Kimmel, 2013). Profit margin ratio is a measure of profitability, demonstrating the percentage of return or profit on each dollar of revenue after expenses (Kimmel, 2013). For example, profit margin for the LNTCFS is high in 2011, with a profit of .47 cents per dollar, but shrinks to -0.37 cents per dollar in 2013, increasing to .05 cents per dollar by 2015 (LNTCFS, 2011; LNTCFS; 2013a; LNTCFS, 2015b). The WGCF demonstrates a similar trend to the LNTCFS, with negative profit margin ratios in 2012 and 2013, before increasing to 0.27 cents per dollar in 2015 (WGCF, 2013b; WGCF, 2015). These shifts in profit margin ratio reflect decreases in levels of revenues from harvesting, reflecting low log prices in 2012, as well

as reduced operations in relation to demand and contractor availability, as discussed earlier (LNTCFS, 2013a; WGCFC, 2013b). However, for the LNTCFS in 2012 specifically, the decrease in profit margin ratio was a result of increased costs of forest development and silviculture, not a decrease in log sales (LNTCFS, 2012). Table 5.3 and Figure 5.2 shows profit margin ratio for 2011-2015 for each CF.

**Table 5.3 Profit margin ratio measuring profitability for the LNTCFS and the WGCFC from 2011-2015**

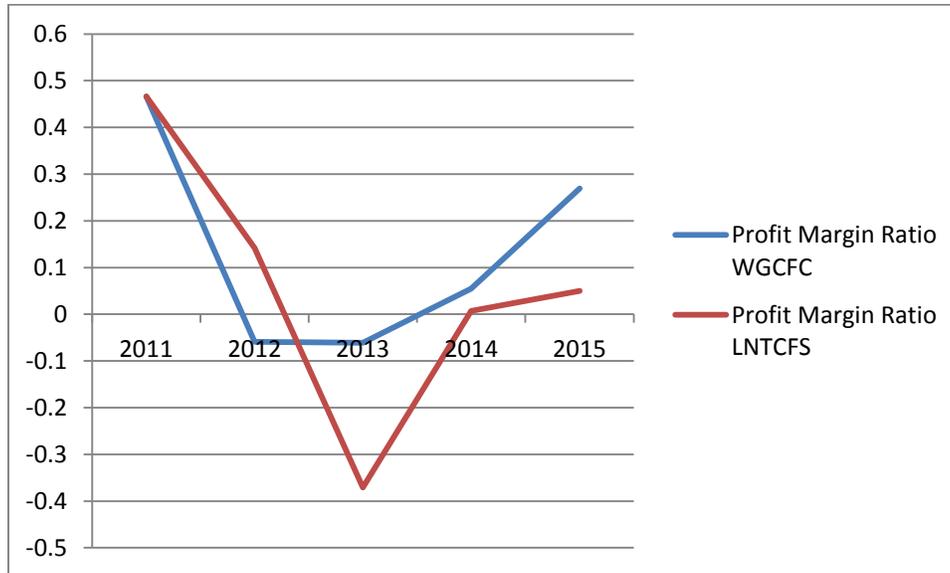
Adapted from (LNTCFS, 2011; 2012; 2013a; 2014b; 2015b; WGCFC, 2011; 2012b; 2013b; 2014a; 2015; 2016b)

<b>Profit Margin Ratio</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
<b>LNTCFS</b>	0.466512	0.142153	-0.37088	0.007039	0.050157	0.058996
<b>WGCFC</b>	0.466512	-0.05925	-0.06092	0.055034	0.269401	0.134155

On average, the WGCFC has a higher profit ratio than the LNTCFS, demonstrating greater profitability. However, both CFs have low profit margins, which does not support financial sustainability and makes them susceptible to fluctuating market prices for logs and fiber.

**Figure 5.2 Profit margin ratio measuring profitability for the LNTCFS and the WGCFC  
from 2011-2015**

Adapted from (LNTCFS, 2011; 2012; 2013a; 2014b; 2015b; WGCFC, 2011; 2012b; 2013b; 2014a; 2015; 2016b)



#### **5.1.2.4 Percentage of Silviculture Cost From Operations**

Percentage of funds spent on silviculture was calculated by dividing silviculture expenses over total expenses. On average, the WGCFC spends slightly more in silviculture than the LNTCFS, at 29.3% versus 22.7% respectively. These numbers are much higher than what industry spends, which was calculated at between 1.1-1.2 %, excluding depreciation, for two major public forestry companies operating in BC. However, other factors, including efficiency and cost-savings based on scale, can make that figure much lower for industry. The LNTCFS does invest in silviculture through the FSF and Land based Investment funds from the province, adding \$60,000 through FSF from own revenues, and \$91,701.45 through the provincial Land Based Investment program for silviculture to date (LNTCFS, 2015b). However, these

investments are incorporated already into the accounting and therefore, are included in the percentages that are calculated. These funds largely offset the costs of silviculture for the LNTCFS, allowing them to provide greater benefit to the community through grants. Table 5.4 shows percentage of operational costs used for silviculture from 2011-2015 for both CFs.

**Table 5.4 Percentage of operational costs used in silviculture for the LNTCFS and the WGCFC from 2011-2015**

Adapted from (LNTCFS, 2011; 2012; 2013a; 2014b; 2015b; WGCFC, 2011; 2012b; 2013b; 2014a; 2015; 2016b)

<b>Percentage of silviculture</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
<b>LNTCFS</b>	16.8%	22.2%	27.9%	20.1%	26.6%	22.7%
<b>WGCFC</b>	9.2%	35.8%	28.8%	28.8%	44.1%	29.3%

From these calculations, it can be seen that silviculture takes up a significant portion of operating expenses for LNTCFS and WGCFC, of between one quarter and one third. These high costs, in addition to demonstrating a high level of investment into the land base, may also reflect a larger percentage of costs due to the small scale nature of operations on a small tenure.

#### **5.1.2.5 Percentage of Revenue for Grants**

Percentage of funds spent on grants was calculated by dividing annual grant amounts over revenue for each CF. On average, the WGCFCS spends a much higher percentage of their revenue on community grants than the LNTCFS, twenty-three percent for WGCFCS versus four percent for LNTCFS. One reason for this difference is that WGCFC has a larger land base, with

13,146 hectares and an AAC of 33,000 m<sup>3</sup>, while LNTCFS has a land base of 8254 hectares and an AAC of 20,000 m<sup>3</sup> (WGCF, 2012c; LNTCFS, 2015c). However, even factoring in this difference in cut, WGCF is still distributing a greater percentage of their revenues, and providing more than twice the amount of funds for grants. Table 5.5 shows the percentage of revenue given as grants between 2011-2015 for each CF.

**Table 5.5 Percentage of revenue given as grants for the WGCF and the LNTCFS from 2011-2015**

Adapted from (LNTCFS 2011; 2012; 2013a; 2014b; 2015b; WGCF, 2011; 2012b; 2013b; 2014a; 2015; 2016b)

<b>Proportion of grants</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Average</b>
<b>LNTCFS</b>	0.47%	0.7%	8.47%	6.82%	5.44%	4.38%
<b>WGCF</b>	12.23%	37.65%	31.24%	17.36%	18.79%	23.45%

One possible reason for this difference is that the WGCF is able to keep their costs for contracting and consulting lower than the LNTCFS, by about \$500,000 in 2013, 2014 and 2015 (WGCF, 2013b; WGCF, 2014a; WGCF, 2015). This means the WGCF is effectively harvesting more timber at half the cost of the LNTCFS, and able to designate more revenue for grants. These higher expenses for contracting may be reflected in the trend of low profit margin over the past three years for the LNTCFS in comparison to the WGCF.

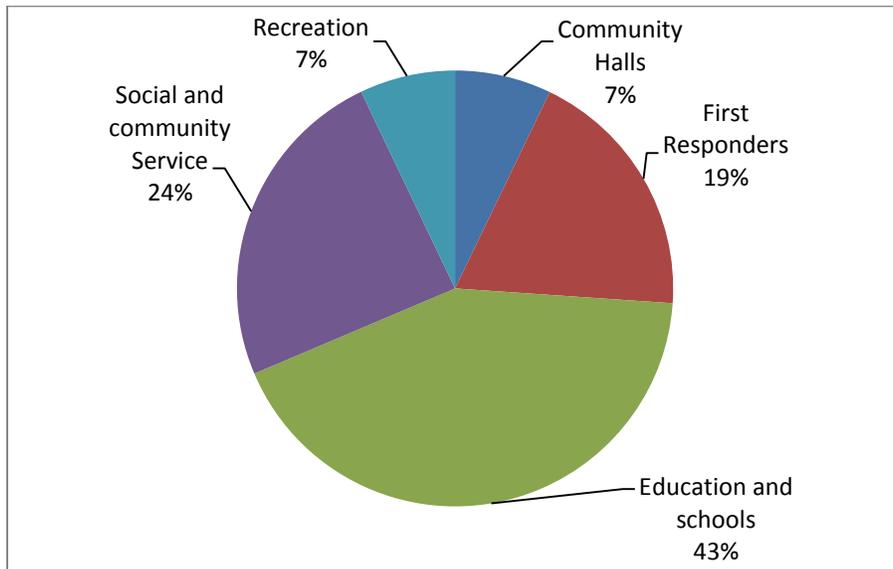
#### **5.1.2.6 Community Sectors for Grant Distribution**

The sectors that receive grants in each community reflect community values and priorities. Five general categories emerged from data collected on grant distribution from both

CFs. The categories are community halls, first responders and fire-fighting, education and schools, social and community services, and recreation. Figures 5.3 and 5.4 show the percentage of funds given to each community sector between 2011-2015.

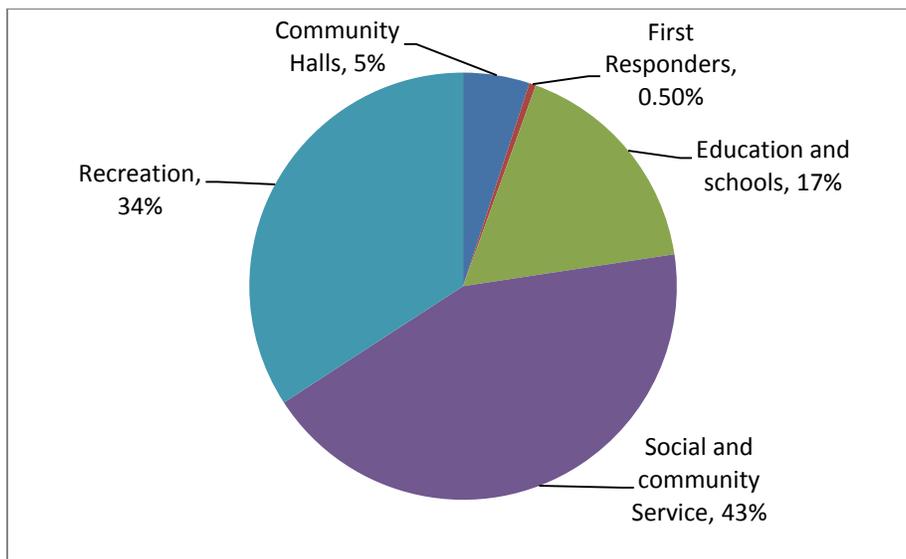
**Figure 5.3 The LNTCFS percentage of grants to community sectors**

Adapted from (LNTCFS, 2016e)



**Figure 5.4 The WGCFS percentage of grants to community sectors**

Adapted from (WGCFC, 2015; 2016b; 2016e)



These charts demonstrate that the LNTCFS is granting the greatest percentage of funds towards education and schools, with over forty percent of grants going towards this sector, mostly through bursaries and scholarships to students heading to post-secondary education. The LNTCFS also supports social and community services and first responders and fire fighters relatively evenly, demonstrating a commitment to community well-being, health and safety. The percentage to first responders includes a large grant to build a search and rescue building, which was listed separately as a special grant. With the huge fire in 2003 in recent memory, fire safety and preparedness is held as an important community value.

The WGCFS invests primarily in social services, followed by recreation, with a proportion to education and schools, and very little in first responders and fire fighters. Partnerships with the DOC contribute to the community center, which houses the CF office and DOC along with many other community organizations and services, meaning that grants to the DOC result in wide community benefit. The WGCFS also shows clear investment in community health, with numerous grants to the Yellowhead Community Services Society and other charitable groups. Recreation is important to the residents of Clearwater, especially being located next to a Provincial Park, so many grants in this category have supported ski, snowmobile, and walking trails.

### **5.1.3 Community Group Grant Recipients: Roles and Community Benefits**

As mentioned in chapter four, many community groups have received grants from both CFs. Rather than attempt to describe each grant recipient individually, this section relies on the broader categories established above, discussing the roles that some of these organizations

play in their communities, as well as the benefits these grants have provided for local community members and the community itself.

#### **5.1.3.1 Community Halls**

Community halls play a very important role in the life and well-being of small communities, especially unincorporated communities located outside of regional centers. The halls in the study communities are run entirely by volunteers, and function as important centers in areas where there is little infrastructure, hosting a wide variety of events and activities including weddings, funerals, sport and leisure activities, children and youth events, craft fairs, community meetings, and dinners. Some participants describe the critical role their community halls play in building and maintaining community cohesion and ownership:

*“I think we’re kind of the glue [laughs] We just try to keep a community together, and try to keep bringing all the neighbours and stuff together at the hall, for our kids mostly, because we’re so far out of Barriere, it’s nice for our kids to be able to have a Halloween party. Just nice for everybody to still know each other in the community and just keep the sense of community.” (Participant 20b)*

*“Oh the benefits are a sense of community, like my initial involvement was when I moved here, my daughter was three, I didn’t have my son yet, we needed to make friends, we needed to, become involved in the community... and for me, the underlying intention was, for young people to have a sense of belonging in the community, and a sense of ownership of the community hall.” (Participant 19)*

### Photo 5.1 Little Fort community hall

Photo by Anne Rooban (2015)



Grants towards community halls were used for key upgrades to the facilities, which included a furnace for Squam Bay Community Hall, kitchen upgrades for Little Fort Community Hall, tables and chairs for Upper Clearwater Community Hall, and renovations for Blackpool Hall, Elks hall, and the Legion in Clearwater. These upgrades were important because without them, the halls would not be able to function and provide opportunities for social interaction and community cohesion. Often the upgrades required for these halls are beyond what can be generated from such a small area. Additionally, it was noted that being able to upgrade halls puts less stress on the volunteers, who can spend more time planning events rather than trying to fundraise to pay for building crises:

*“Well now, before we had it done, we had an oil furnace, so it was... can anybody help us fill this up? Like we need fuel, and now, it’s just on us, we get an electric bill every couple of months, so now we’re not having to go to the community and asking them for donations for the fuel... I think for the community, it took the stress off of asking the*

*community for the donation for the fuel, and it's easier to just flip the switch and get the furnace going for whoever's using the hall.” (Participant 20a)*

Finally, community halls also have significant historical value, which makes maintaining them an important aspect for ongoing community identity:

*“Yeah, and the history of this school, it is the history of this valley, and that's the valley is the community, so that, they seem to all jive, and that's why this building is so important I think. Because this whole thing is the community. And so, you keep this building going and, the community keeps going. That's sort of how I see it.” (Participant 20b)*

### **5.1.3.2 First Responders and Fire Fighters**

CF grants have supported first responders and fire fighters through funds for training and equipment. These organizations are often volunteer run, so having funds for safety training and proper equipment is really important for fire protection in these communities, which are largely forested, as well as the safety of the fire fighters, as described by some participants:

*“It equips our firefighters with the training and equipment that they need to be safe, like at the time that we got the grant, what was happening was... we had a bunch of firefighting gear that didn't fit them and was mismatched. So [the grant] really allowed us to get regular folks equipped with equipment that is gonna fit them or does fit them, and keeps them safer...” (Participant 24)*

Some of the fire fighters supported by the CFs include McLure Volunteer Firefighters and Recreation Society, Barriere First Responders, Chu Chua First Responders, Little Fort Volunteer Fire Department, and Clearwater Volunteer Fire Department.

The LNTCFS also supported Barriere Search and Rescue through a large grant for the construction of a building to hold their rescue vehicle and equipment, as well as a space to hold meetings and training sessions (LNTCFS, 2016e). Barriere Search and Rescue is a non-profit society that assists the RCMP, BC Ambulance Service, TNRD and District of Barriere in highway rescue along the Yellowhead highway, search and rescue for missing people, and civil

emergency operations (Volunteer Rescue, 2010). Participants noted this was an important role because there are many steep slopes along roadways and wilderness where people can get into trouble. Additionally, the equipment required for these rescues is costly to purchase, especially for such a small population and tax base, so the building to protect equipment was crucial for continuing this service, as described by some participants:

*“We have an extremely well equipped rescue truck as good as any major city fire department... After 35 years we’ve decided that we need to get our own building and so that we can have a place to store our equipment safely, and officially a place where we can have our meetings and do training and stuff... without this money we wouldn’t be building it.” (Participant 18)*

**Photo 5.2 Construction of Barriere Search and Rescue building**

Photo by Anne Rooban (2015)



**5.1.3.3 Education and Schools**

Both CFs support education through grants towards schools and educational programs. The WGCFS has strong support for Clearwater Secondary school, as well as Raft River Elementary for school supplies and equipment for classes and extracurricular activities, creating more opportunities than would otherwise be possible on a limited school budget. Participants

felt that these sorts of grants increase the quality of education that students receive in these rural schools, giving them similar or even greater opportunities than students in schools in major centers:

*“...it’s interesting because since we’ve been able to fund some of the high school equipment, we actually have better education capability for some things (e.g., shop equipment) in the rural area than they do in Kamloops.” (Participant 7)*

**Photo 5.3 Clearwater Secondary School**

Photo by Anne Rooban (2016)



The LNTCFS supports education through scholarships and bursaries. Although there are no set criteria for certain institutions or programs in which students must study, one reason for the awards is the hope for some youth to become educated and work in the forestry industry, or supporting industries, and to come back and use that education locally. Education is really viewed as an important foundation for the community, and many participants expressed that they were glad that it is something the CF was supporting:

*“...hopefully we do leverage some [students] into maybe coming back one day as a high school principal, or as a fisheries officer, or a conservation officer.” (Participant 3)*

*“..you can see that they want our communities to feel strong, and I believe they support the community idea, so where they allocate their money, it’s not just in buildings, it’s in scholarships, it’s in education, and it’s in sort of the foundation of community, I don’t think they’re just looking at putting things in buildings for people...” (Participant 19)*

The LNTCFS also gave a grant to Simpcw First Nation for a student summer program. A participant described how the program gave teenage students hands-on skills and training in areas such as fisheries, archaeology, and maintenance, to prepare them for future employment:

*“[The purpose of the student program is] to kind of give them employment skills, so maybe on the job experience, for the younger ones..so what to expect in a job, and they did resumes, I believe they all got their food safe, so a lot of them got certificates, so their First Aid and things like that. So, preparing them for, for their future, is basically what it is, with some training and job experience.” (Participant 21)*

#### **5.1.3.4 Social and Community Service Organizations**

Both CFs support a range of socially-oriented and community service organizations through grants. One participant describes how these groups contribute to community health by supporting volunteerism and caring for vulnerable groups:

*“Not-for-profits really do play an essential role in the health of a community, and so, however we can help community members to be involved, to be enabled to feel like they’re contributing and being a part of a community, well that’s what it’s all about, isn’t it?” (Participant 23)*

Community service groups, such as food banks, healthcare and hospice groups, and non-profit senior’s homes serve vulnerable people in both communities, and grants from both CFs have supported their mandates. For example, Evergreen Acres Senior Citizen’s Home Society has received a number of grants for upgrades to their facilities, in order to provide safe and affordable housing for seniors, in a context where very little seniors-focussed housing is

available. This benefits seniors, according to some participants, by enabling them to stay in the local community closer to their support networks of family and friends:

*“So we’re keeping our seniors at home longer. They still maintain their independence, and they can have family come and visit and that, not a problem, but they’re still home.”*  
(Participant 25)

**Photo 5.4 Evergreen Acres Seniors Housing gazebo**

Photo by Anne Rooban (2016)



Another example is Yellowhead Community Services (YCS), which is a non-profit society that provides a wide range of programs and services in the North Thompson Valley, including preschool and parent groups, youth group, literacy programs, employment services, community kitchen, and transportation. These services exist to benefit vulnerable people in the area, providing resources to help overcome challenges of daily life. YCS has received numerous grants from WGCFS for programming and infrastructure. One participant describes how these grants enable the organization to provide additional resources for people, leading to increased capacity for employment and improved health:

*“One thing that’s important to understand is that by benefitting our organization, it benefits the community. For example, our community kitchen will function as a soup kitchen, from donations, for anyone in need. These grants provide better services and programming that we couldn’t do without these funds. It helps us do a little bit extra to meet the needs of our clients.” (Participant 29)*

It was evident that grants that support community groups also build community capacity. For example, the North Thompson Communities Foundation, which was started with the help of funding from a sawmill that closed down in the area in addition to some funding from the Vancouver Foundation, exists to support and strengthen non-profits in the Lower North Thompson Valley. One participant describes how the grants from the LNTCFS funded workshops to support and equip people working with non-profits to develop leadership capacity:

*“With Community Foundations, there is also a component that is focused on leadership in the community, and so there is that aspect... if there are ways that we see that are opportunities to provide and strengthen leadership within the community, or participate to help good things happen, that is part of our role.” (Participant 23)*

Another participant describes how supporting groups such as 4H and Girl Guides through grants makes these clubs more accessible to families who cannot afford the fees, and teaches the next generation about the importance of volunteerism and community involvement:

*“The 4H club, I like that it teaches the kids that there is a community, that there is something bigger than themselves. That it teaches them to speak publically, and to be open, and to lend a hand when somebody needs a hand. Sometimes it’s for the 4H club, but sometimes it’s for other events where they’re asking for help, and that you don’t always have to get paid to help people [laughs] Sometimes you help people because it’s the right thing to do. Yeah, it’s been good for my kids.” (Participant 38)*

Having CF grant money on top of fundraising for social groups makes it possible to complete larger projects that may otherwise take years to complete, or may never be

completed at all. One participant describes how investments into infrastructure can increase accessibility and make services more available for vulnerable groups of people:

*“Yes, the Clearwater Elks, they have a public hall, and they do bingos and everything there. And they also have the Challengers that do soup kitchens. So they received a grant, they applied for one, and what they got was a ramp to get in and out of the hall, because it’s like, three, and then three stairs to get in and out of their hall, right? So the handi-dart would go there, drop seniors off, but then, how do we get them in? ..so now the seniors, they have access, they’ve got the double doors there, they got a ramp there, and now they can wheel in, because it is, it seems to be that the hall there is more senior oriented.”*  
(Participant 25)

#### **5.1.3.5 Recreation Groups**

Recreation is supported by both CFs, through grants towards recreation groups and societies. Some participants describe the importance of recreation in supporting active living and increased quality of life for local residents:

*“Oh, it’s wonderful to have people going out and enjoying the outdoors, I mean we [Wells Gray Outdoor Club] have 120 members, and it’s right in town, it’s close to town, so it’s ten minutes to get there, and people go out, they can go there just about any time of the day, for as long as they want... and just about anybody you look around, they’re up there at the ski hill, they’re skiing. And they’re getting exercise, and the outdoors, and we have winter so you might as well enjoy the winter and get out and do something.”* (Participant 28)

Many people mentioned that grants for recreation groups increase accessibility to recreation for community members by keeping costs lower. Participants described how CF grants towards sports programs and minor leagues for tournaments, equipment and uniforms kept costs lower for families, allowing kids to become involved in sports:

*“We have bought a new set of uniforms for just about every sports team now, we’ve gone through a couple of cycles, which does things like make the athletic fees much more affordable, because a set of jerseys is somewhere around, depending on how big that particular team is for that sport, you know, it’s somewhere in the \$3000 range, and home and away colors, junior or senior teams..”* (Participant 27)

*“...mainly what we ask for is for the youth program, because we have between 35 and 40 youth come out, and they’re age 7 to grade 7. And so we have expenses because we try to keep the costs as minimal as we can, so we only charge \$20 for the full year of curling there. Six sessions before Christmas and 6 after Christmas, and so we feed the kids a snack and supply all the equipment for them, and then that way families can afford for the kids to, you know, there’s no reason for them to not participate.” (Participant 13)*

Additionally, recreation groups that require trails, such as ski, horseback, and snowmobile clubs that receive grants from the CFs often require large amounts of capital for trail building and equipment such as groomers to maintain trails, which may not exist without CF dollars.

The WGCFS shows strong support for recreation directly through grants to numerous organizations including Clearwater Ski hill, Wells Gray Outdoor Club, Clearwater SnoDrifter’s Snowmobile Club, school sports, and minor leagues. Support for recreation groups from the LNTCFS is more indirect, with much being done through JCP partnership for trail clearing and dock building, although grants also go towards community halls, which support recreation, as well as towards Barriere Secondary School athletics and Barriere Recreation Society. It was noted that good recreational opportunities also support tourism and draw people to live in the community. Therefore, supporting recreational groups was viewed by some participants as a way to invest in community well-being and economic diversification:

*“There’s now in excess of 200 kilometers of equestrian and multi-use non-motorized trails that are available there. A huge amount of that work, not exclusively as some of it’s been volunteer, but a huge amount of that work has been done through the Job Creation Project. And we now have people travelling from all parts of BC and as far as Alberta that actually come to use those facilities. It’s a bit of a crown jewel, if you enjoy accessing trails and back-country in the area. And so, there’s a benefit not only for local users, but in terms of drawing people in, they buy groceries and things as well.” (Participant 5)*

## Photo 5.5 Hospital Rim community trail in Clearwater

Photo by Anne Rooban (2016)



### 5.1.4 Strategic Partnerships and Leveraging Funds

In both CFs, evidence of strategic partnerships was clearly demonstrated. One advantage of strategic partnerships with other organizations is that it is possible to leverage additional resources and funds to create larger projects than otherwise possible. Many kinds of strategic partnerships involving the CFs were developed in each community. Some examples are described in depth in these next sections.

#### 5.1.4.1 District of Barriere and TNRD Partnership

The LNTCFS has a number of partnerships with local government, including the District of Barriere (DOB) and the Thompson Nicola Regional District (TNRD). These partnerships started up as a result of grant applications from these organizations for projects within the area, with

the DOB applying for a grant for a Splash Pad, and the TNRD applying for a grant to build a dock and outhouses on Adams Lake. At first, the LNTCFS was unsure about whether it was in their mandate to provide grants to these organizations, but over time, it became apparent that partnering with these organizations could leverage additional funds for community projects that the LNTCFS did not have access to. For example, the DOB has access to Gas Tax Funding and the Small Community Grant for yearly operations (Participant 33). Some participants described how these additional sources of grants and funding can be applied to projects alongside the LNTCFS grants to create larger projects with more widespread benefits than would be possible otherwise:

*"..We're eligible, whereas some organizations aren't eligible to apply for certain funding, such as infrastructure funding, and funding for certain recreation projects or gas tax funding that would fund things that non-profit organizations wouldn't be able to apply for. So that's one of the reasons for partnering." (Participant 33)*

*"Every spring they have meetings in the communities, and because they cover communities within the area that I represent, I go to the meetings...[and] we see where can we partner. If we can take their \$2500 or \$5000 and turn it into \$10,000 or \$15,000 for a community. That's where the benefit comes from. It gives the communities seed money, to go after other...government funding. Because government funding now is about 50/50, so that gives us a way to come up with 50%, and access that 50% funding from the government." (Participant 32)*

These larger projects have the potential to become larger economic drivers, in terms of tourism or attracting people to the community.

#### **5.1.4.2 Fall Fair and Rodeo Association**

Another organization that the LNTCFS has partnered with is the Fall Fair and Rodeo Association, which puts on an annual Fall Fair and Rodeo during the Labour Day weekend in September. The Fall Fair and Rodeo Association was started in 1949, and is a non-profit that owns its own facilities, with revenues used to sustain the Fair's operating costs (Participant 22).

Its purpose is to celebrate and promote heritage, rural living, as well as the farming and ranching lifestyle. This organization contributes to tourism in the area, and hosts many other events throughout the year at its facilities. One participant describes how they have partnered with the CF for infrastructure upgrades, and really sees alignment in the vision of both organizations in supporting the local community through creating economic opportunities:

*“So it’s so neat that we’ve become a destination, which we never were before, it was drive-through, go to Wells-Gray Park or go to Kamloops, or go to the Okanogan, but we’re becoming a destination, so we’re kind of re-inventing the community as more of a tourism stop, a place where people can really understand what a healthy rural lifestyle is. I think that socially it’s really good for people, and it gives our people an opportunity to tap into other resources that maybe they never had the opportunity to before.” (Participant 22)*

#### **5.1.4.3 UBC Students**

The LNTCFS partnered with UBC students in 2013 for a group project regarding a management and business plan for the CF, focussed on sustainable harvest levels and carbon sequestration (LNTCFS, 2016g). The LNTCFS has also had a partnership with the UBC in 2014 and 2015, as did the WGCFC in 2014, to bring two students up to work for the summer as a part of a cooperative program. Wages were funded from a scholarship at the UBC, and they worked with the GMs on various aspects of operating the CFs, including site preparation, planting, studies, and education. Some participants described how the students involved have gained work experience with a wider range of activities not possible from larger forestry companies, while the CF organizations benefitted from having extra help during the summer season:

*“It’s also been a training ground of experience for those students when they’re here, so their opportunity is to have a large variety of work through the summer versus doing just one thing for a whole summer. So they get to see a lot more different things, and participate in a lot more things, and to get a lot more hands on field training than perhaps what you might get through a forest company for forest consultant perhaps.” (Participant 1)*

*“Well in a way, we were free labour for the Community Forest! We helped him with a lot of stuff, and freed up the forester’s time to do other things.” (Participant 39)*

The LNTCFS has plans to hire its own students in summer 2016.

#### **5.1.4.4 Job Creation Partnership**

The Job Creation Partnership (JCP) is a project funded through the Community and Employer Partnerships program under the Employment Program of BC by the Province of British Columbia and the Canadian Government (BC Gov News, 2015). The goal of the program is to help people gain skills and experience required to enter the workforce and build community capacity and the economy, and is implemented in partnership with local business or non-profit organizations. In the past, the project was sponsored by the Barriere Chamber of Commerce through the Employment Center but, due to a conflict of interest regarding sponsorship of their building, it was transferred to the LNTCFS in 2010, fulfilling its objectives of providing skills training and local employment, as well as recreation (Participant 30).

The JCP has been sponsored by the LNTCFS five times so far, with a sixth year underway. The LNTCFS applies for funding to the Ministry of Social Development for projects, and looks after book-keeping, reporting and safety. Participants apply through the Employment Center for a year-long term for a given project, and receive maximum funding through EI. Participants may join part way through a term, or may leave early if they find employment (Participant 30). Safety and skills training is provided to participants by the LNTCFS, and they gain experience through completion of various projects, which have included trail clearing in the area, setting up a geocache system, building a fishing dock, and brushing, spacing and tree-planting within the Community Forest. Table 5.6 shows the funding provided and partnered for these projects each year.

**Table 5.6 Annual provincial funds stewarded by LNTCFS through the JCP program**

Adapted from (LNTCFS, 2016f)

<b>Year</b>	<b>Funds (\$)</b>
2010	233,220
2011	112,099
2012	156,901
2013	208,828
2014	237,214
2015	279,732

To date, the JCP/LNTCFS partnership has had approximately four or five people participating per year, with many people finding employment as a result of their experience and training. Some participants described how the JCP has multiple benefits for program participants which also flow into the community:

*“So the Job Creation Program is another one that actually has benefits in multiple spheres, so not only is it teaching program participants necessary skills and things that actually help make them employable, it’s also giving them some short-term employment. So there are benefits regarding training, employment (ie some cash flow) as well as having them contribute, and then the final part of that is the actual benefits that accrue to the community as a result of the work that’s done.” (Participant 5)*

#### **5.1.4.5 District of Clearwater Partnership**

The WGCFS has a strong partnership with the District of Clearwater (DOC) with grants. Some participants noted this was largely because the DOC provides a means to distribute benefits widely among the community, and to promote economic development for the area. The DOC started in 2007, and is a municipal government that provides infrastructure, transit, recreation, and community services for Clearwater (Participant 36). The WGCFS has one position on its board reserved for a trustee from the DOC. The DOC has received over ten grants from the WGCFS for various projects, found in Appendix V. Some of these grants make programming more affordable and accessible for community members by providing equipment

or offering facility rentals at a reduced rate. Additionally, for things like the Healthy Living Program, the WGCFS grant provided seed money to leverage more funds. Community trails create more recreation opportunities within Clearwater and increase tourism. One participant describes how the biofuel plant, which currently receives free wood chips from Canfor, greatly reduces operating costs for the DOC, which in turn allows tax payers' money to go towards other initiatives:

*“The bio-energy system is a good example [of economic development]. We’re using this as a pilot, and if this works out, we intend to apply to do one at our sports arena, because it’s costing us around \$48-\$50,000 for propane for that facility, here it was \$40,000 last year. And we’ve seen a substantial benefit. From an economic perspective, right now we get the chips for free from Canfor. I can see at some point where we would be looking for buying them from another source. And you know, hopefully that could be the community forest sometime.”* (Participant 36)

The WGCFS also partners with the DOC on watershed planning and fire prevention to reduce the risk of wildfire. Since Clearwater gets its drinking water from the same watershed in which the WGCFC operates, they work together to ensure forest operations do not impact water quality.

#### **5.1.4.6 Clearwater Secondary School Partnership**

The WGCFS has partnered a number of times with Clearwater Secondary School on grant proposals. Clearwater Secondary School has received close to \$60,000 in grants for things such as new sets of uniforms, a rugby sled for training, gym renovations, guitars, shop equipment, and stage and lighting equipment (Participant 27). Some participants suggested that Clearwater Secondary school has a limited budget, and these grants from the WGCFS give students in Clearwater greater accessibility to opportunities that would not exist otherwise. Having a well-equipped school with good programs provides an opportunity to draw and retain

skilled professionals such as doctors, who may come with their families and stay. I was told that benefits are not just limited to students, as community members also have access to the gym and some of the equipment bought through the WGCFS grants. Interestingly, Clearwater Secondary School also partners with the DOC to provide space for recreation programming. One participant describes how this partnership functions to provide public access for wider benefit:

*"..not only do our kids get access to [the upper gym], but the community does, because, in conjunction with the District of Clearwater, the DOC, we run recreation programming, because really our building, and their building, which is smaller than ours, is the only place in town where you can run that stuff. So we have a dual-use agreement with the DOC and it allows the public to access it, but it's also good for our kids...it's created opportunity for the community and for my kids in the school...there's a lot of intertwined benefits and spinoffs that you wouldn't probably point to at first glance."* (Participant 27).

The WGCFS partnerships with the DOC and Clearwater Secondary School are key in leveraging more opportunities and wider benefits than would otherwise be possible.

### **5.1.5 Local Control**

Local control was a core theme and outcome that emerged over the course of interviews in discussions surrounding local socioeconomic benefits of CF with participants. It seemed clear for participants from both the LNTCFS and the WGCFC that a driving factor in applying for their CFA tenures was to have more control over how local forest resources were managed, and to see more jobs and profits stay within the community:

*"The primary driving force was many people thought we must do something to try and create something in the community for those people who were suddenly unemployed, and hoped to create something for themselves, and to stay local."* (Participant 1)

*"Can't communities control what's around them? There's wood out there, but most of that wood, when big companies came, it was theirs. They didn't care, well I shouldn't say they didn't care, because of course the workers are still in town, and it was good for the*

*community, but basically all that money went down the road to Washington State, or wherever, to whoever owned the various companies...They feed lots of wages into the community, but the actual overall profits move on. So the idea is that the Community Forest is controlled more by local [people] and it'll increase the health of the community in a lot of different ways, mental health too."* (Participant 10)

*"The dollars generated by the community forest stays within our community, providing more autonomy on what happens, how the funds are spent and distributed."* (Participant 36)

Many participants discussed the benefits of having the CF run by board members who are from the area that care about the interests of the community, in contrast with forest companies who come in, cut timber and leave:

*"They're people that, within the community, that belong to the association, and have no personal gain, most of them. It's to represent, and so it's people that care about the area that they're in. It's not a corporation that's taking everything away, the head office is in Barriere, right here downtown, and in our area, so I think it's, that's the main thing, there are people that care about the area they represent."* (Participant 32)

*"I think Community Forestry is important for a reason I think a lot of people don't understand is that the Community Forest gives back to the community, it's not just going out and harvesting trees, that money that becomes a profit from that comes back to the community through grants and bursaries, and helps to sustain and improve the lifestyle that the community has..."* (Participant 22).

Self-determination was a term coined by many LNTCFS board and community members to describe how operating a CF allows local people to have a say in decision-making regarding their forest resources, including a greater ability to voice concerns and communicate needs. Self-determination was also linked to the health of the community by some participants, with the reason that people steward a local resource better when given some control. Many participants described how operating a CF allows the community to make responsible decisions that look after the forest resources in ways that provide local benefit and secure future sustainability:

*“..it’s formed by our local community representatives, has a better buy-in in protecting our forest and making sure that they are replenished and sustainable for the future, and they look after them properly. You know, it’s not someone in Ottawa looking after them, it’s the guy who lives down the road, or it’s my neighbour who looks after it, and we understand the impact that the decisions that are made with our forests, are done that benefits us, ‘cause what benefits us with the decisions may not be what would benefit Kelowna if they got the same decision, and I think that’s a really important part about the Community Forest.” (Participant 22).*

*“I think when we can have some level of self-determination within a community, it’s a win-win-win, and when your community has that stewardship role within your own forest, they have a vested interest to be good stewards.” (Participant 23)*

*“So what I envision for any small community in an area where there is a forest opportunity, is that they have some form of local control, because what I’ve seen in the past in other locations is a lack of control, and as a result, a lack of forming their own destiny, and a lack of responsibility for the health of the forest. If they don’t have that authority, they’re not going to take on the responsibility for the health of the forest.” (Participant 3)*

Another major aspect of local control is realized through grants awarded to community groups from the profits generated from the CFs. As outlined above and detailed in Appendix V, many community groups benefit from grants awarded by the CFs. Many participants expressed a sense of pride of being able to fund community initiatives and projects in partnership with the CF, rather than having to rely on sources of funding from outside of the community:

*“I mean you can’t always rely on federal and provincial funding for everything, and obviously we’re trying to get that to match what the Community Forest and what local people have raised through pie sales and other [things].” (Participant 33)*

Many participants mentioned that it is becoming increasingly difficult to access funds for projects and programs, so they viewed having the CF as an additional revenue source as invaluable, especially in such a small area. Many groups or projects that were sponsored by CF dollars did not meet the criteria for many other funding sources. Therefore, certain community

projects happened as a result of CF dollars that would not have happened otherwise, as described by some participants:

*“The next positive thing about the Community Forest is that the community gets the funds that are donated to the community, so it gives them the ability to develop and promote different aspects of the community. And that’s very important because what’s happened within a provincial context is that the funds that they used to get through bingos and lotteries has dried up, and our lottery corporation won’t let them build a building, you can’t have capital funding in lottery programs, you can only have expensed funding like wages and stuff like that, so it makes it a lot harder for somebody like the Search and Rescue to build a building to protect vehicles and that sort of thing.”*  
(Participant 1)

## **5.2 Wider Participation in Governance and Socioeconomic Benefits**

Another link that can be made between the CBFM and SE literatures is the pursuit of wider participation in governance and socioeconomic benefits than conventional top-down management strategies. In theory, greater local participation empowers communities and provides more equitable outcomes as discussed in the literature review above. This section explores how both CFs are locally managed, use strategies to garner wider participation and buy-in from the public, and pursue social equity in the socioeconomic benefits they provide to their communities specifically.

### **5.2.1 Board Decision-Making**

In each of the case CFs, the board of directors plays an important role in the forestry operations and business, as well as the distribution of benefits to the community through grants. Therefore, board structures, and how these members are chosen, significantly influences social equity. As described in chapter four, the LNTCFS has one board which makes all operational and grant decisions, while the WGCF has two boards, the WGCFB and the WGCFM for each function, in addition to the CFAC for public input.

Six criteria and indicators listed by Teitelbaum (2014) regarding local and participatory governance in CF provide a useful framework for assessing how equitable CF boards are in their selection of members and governance specifically, as well as how equitable the overall CFA tenure is in regards to its devolution of authority for decision-making to each CF generally. The criteria are local character of decision-making process, representation, inclusivity, transparency, authority of decision-making process, and quality of public participation. Table 5.7 shows this list of criteria alongside the indicators from Teitelbaum's (2014) research.

**Table 5.7 Local and participatory governance criteria and indicators**

From (Teitelbaum, 2014, p. 261)

<http://dx.doi.org.uhl.idm.oclc.org/10.1016/j.jenvman.2013.11.013>

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For both CFs, the decision-making process regarding the application for a CFA licence to the provincial government was initiated locally, with all boards exclusively made up of community members. Each CF also got to choose their legal structure for operations, along with their own policies, accounting, and granting criteria within the guidelines set out in the CFA tenure. However, the CFA structure itself was developed provincially, and much of the forestry operations are determined by provincial regulations and laws (Ambus and Hoberg, 2011). Some

local decision-making is possible within these rules regarding how silviculture proceeds, if it goes above Provincial requirements.

In terms of representation, all board members are from the communities or region covered by the CF, although with the LNTCFS some communities in the partnership were not represented on the board, and the WGCFC did not have a First Nations representative, even though this was a requirement outlined in their policies (LNTCFS, 2014c; WGCFC, 2012a). Board members of all boards for both CFs are volunteers, and are decided on internally by the CF boards based on nominations and applications received, as well as a set of criteria outlined in their policy manuals (LNTCFS, 2014c). The LNTCFS allows any community member living within the five-community partnership to purchase a life-time membership, which allows them to nominate board members and vote at AGMs (LNTCFS, 2014c). The LNTCFS has a limit of twelve board members, the WGCFC has a limit of 7 board members, including a First Nations representative, and the WGCFS also has a limit of 7 board members, which have representatives from each WGCFC board, DOC, and community at large (WGCFC, 2012a; WGCFC, 2016e). Not all stakeholders for each CF are involved as board members, but are consulted when required, according to CF policies.

In terms of inclusivity, each CF differs in terms of how new people become involved in decision-making processes. The WGCFC has a two year limit for board members, which allows new members to apply and join to become a part of decision-making processes (WGCFC, 2012a). A vacant position is advertised in a local publication, along with the required qualifications, and members of the community may apply. The WGCFC then conducts

interviews, and uses a scoring system to approve applicants, which include criteria such as education level, work history, community involvement, qualifications and skills, and general knowledge (WGCF, 2012a). The LNTCF has one and two year terms that are renewable, therefore new directors can be nominated by members when a position becomes available, let their name stand, and be voted in (LNTCF, 2014c).

For transparency, the LNTCF allows community members to attend monthly board meetings, but not to participate in decision-making (LNTCF, 2014c). The WGCF and the WGCF meetings are for board members only, and community members are included through the CFAC, which welcomes attendance, involvement and feedback at all meetings (WGCF, 2012a). The LNTCF provides all financial statements, newsletters and management plans on their website, while the WGCF provides selections of their financial statements, along with annual reports, newsletters, and management plan.

In terms of authority of decision-making process, the CFA tenure allows both communities to have authority over operations and some management of the forest, but strategic planning is largely determined by the province in the form of AAC and management objectives. However, some strategic planning has emerged in the LNTCF regarding the use of revenue to leverage and generate greater economic opportunities for socioeconomic development in the area.

For quality of public participation, both CFs have some public engagement, but not always on a regular basis. The CFAC started hosting NFW every year in 2014 with special events and speakers to promote education and public involvement in forestry and the CF organization

(CFAC, 2016). In 2015 a survey was given out at a farmer's market to gain input for NFW. The WGCF hosted two open houses in 2014 to invite community feedback on strategic planning, and makes information accessible through the newspaper, annual report, annual newsletter, and on their website (WGCF, 2014c). The LNTCFS hosted strategic planning meetings and suppers in each community in 2014, with follow-up accountability meetings in 2016 (LNTCFS, 2014a; LNTCFS 2016a). Information is readily accessible to the public through the newspaper, bi-annual newsletters, annual report, website, and radio. Both CFs expressed a desire to become more involved in the local schools for forest education.

### **5.2.2 Social Equity and Participation: Examples**

Although some measures are taken to ensure there are equal opportunities for participation, such as meetings and committees open to the public, one clear example that demonstrates pursuit of social equity were the meetings hosted by the LNTCFS in each of the five communities in their partnership. The LNTCFS, which is based in the community of Barriere, realized that the outlying communities in the partnership were not taking advantage of grant opportunities, and perhaps were unaware of the grants as a result of their distance from the main center. With this in mind, the LNTCFS phoned key contacts in each community, and hosted a dinner and meeting in each local community center. These community meetings gave opportunity for inclusion of all community members included in the LNTCFS partnership to attend and learn about what the CF does and how it may benefit them. Some participants from these communities expressed appreciation of the efforts that the board members from the LNTCFS made to come and meet specifically with them:

*“The folks from the Community Forest group came and did a really neat kind of presentation/consultation at our firehall as well...when they came out to our community, we were all kind of like, what is this? Why do they want to come meet with us? I rallied everyone, and said well let’s go and check them out, because they just gave us a nice grant, and let’s go learn a bit more about them, you know, they’ve helped us, let’s go see what they have to offer, and sort of them help out if they want us to come and have a conversation with them.” (Participant 24)*

*“One thing that I would like to mention is when they were working on their long-term plan, the strategic plan that they had last year, had the community suppers in the different parts of their region, and I’ve felt that that was a really very, very worthwhile thing to bring the locals, different areas together, to sit down and have a discussion about what they feel is important, burning issues, etcetera. I thought that was a really very, very worthwhile thing to do, and having conversations within communities, is, we need to have more of them. So I was very proud of the initiative that was taken.” (Participant 23)*

**Photo 5.6 Community meeting in Barriere 2014**



Used with permission from “Newsletters,” by Lower North Thompson Community Forest Society, 2016 (<https://lntcfs.org/gallery/newsletters/>).

Another outcome from these meetings was the opportunity for the LNTCFS to act as an advocate and representative for the outlying, unincorporated communities in the partnership. Although the Thompson Nicola Regional District (TNRD) acts as a regional government, beyond

that there are few opportunities for community members to voice concerns. Some participants described how the LNTCFS was able to act as another avenue for community needs to be met:

*“We’ve found, another one of our roles when we went and visited the communities, and found out what people were concerned about, was that...they wanted us to act as their representative. To government. And this was something we had not anticipated at all. We ended up working very closely with the TNRD, and our representative here to go to bat for various problems in these little outlying areas...and bring these things to the fore, and try and get them on somebody’s agenda...some meeting’s agenda to fix that problem. So we definitely will advocate for anybody in our area if they have an issue. And we’ll definitely, if it involves money, and if we think that’s appropriate, put the money there. So that was a big eye-opener, that they wanted us to be advocates for them.”* (Participant 3)

*“I think it’s just nice knowing that if you do have, like an issue with our range or something like that, I think we can go to [LNTCFS] and say, oh, well what do we do about this? And they can point us in the right direction. So it’s just peace of mind knowing that you have somebody to go to about things like that. That we do have somebody to go to.”* (Participant 20a)

The JCP program may be considered another way in which the LNTCFS pursues social equity. Some participants described how this program plays an important role in building community capacity and skills development, especially for people who are currently excluded from the workforce due to lack of training or work experience:

*“The people that have worked on the Job Creation Program, the first thing they do is get quite a bit of training, which is a good thing because that leads to them working, and originally they’re on UIC or unemployment and they go to find a job and go to work somewhere and you’ve got to find more people, but that’s what it’s all about, so I think it’s a very valuable program for the community.”* (Participant 2)

*“And most of the ones that are [in the JCP] are people who have had a difficulty finding jobs. And there’s some good stories of people that have come out of the JCP and gone on, and get some of that kick-start that they needed. It’s good for them.”* (Participant 32)

It was also mentioned that many people who go into the program have additional financial challenges or life circumstances that may prevent them from being able to hold a job,

such as lack of access to a vehicle. One participant described how the JCP helps to remove some of these barriers, for instance travel, by providing transportation to and from work sites:

*“The other benefits, sometimes there’s clients that are, in limbo or they’re..going through a rough period in their life, and the Job Creation Project gives them some stability, they may have lost their driver’s license, and so they’re picked up right at the Community Forest office every morning, and so they can build enough money up to maybe pay off a debt that they have so they can get a vehicle back on the road, or pay for their insurance, if they don’t have insurance. So it’s a leg up as well.”* (Participant 30)

Many of the participants in the JCP are from Chu Chua, the local First Nations community involved in the LNTCFS partnership, and go on to work for another business that is owned and operated by that community. The ongoing participation and success of First Nations people in this program demonstrates a tangible effort that is incorporating a group often marginalized in resource development.

For the WGCFC, the CFAC seems to hold the greatest potential to promote social equity. One participant describes how the CFAC was created out of a requirement from the province for an avenue for public input, as well as their mandate of involving the wider community in the benefit-sharing and decision-making processes of the CF:

*“The Community Forest Advisory Committee is sort of the third pillar of the community forest organization. And the advisory committee was set up because when we applied for our license, we just about didn’t get it because there was a concern on the Ministry’s part that we weren’t having enough public input, or a vehicle for the public to have input. So we didn’t set the advisory committee up immediately just because, well I have some experience in public involvement, and I knew it would take quite a bit of time and effort, so we didn’t set it up originally until we got our bank account looking a bit better, and got underway on things. But anyhow, so the public advisory committee has, in my view, been a really important vehicle to provide public input, and the constructive criticism too, which we didn’t always like.”* (Participant 7).

NFW demonstrates a potential avenue for increasing public participation and social

equity. For example, for NFW in 2015, their debrief document states that events were held for all demographics in their community, including Girl Guides, workers, professionals and seniors, demonstrating an intentional attempt to engage all groups, including those who may be marginalized (CFAC, 2016). There is also evidence that the CFAC is working hard to improve their outreach to the public over time through reflective exercises together as a committee about what went well, what could be improved, and ideas for next time (CFAC, 2016).

### **5.2.3 Local Contractors**

Hiring local contractors for work was a high priority for both CFs with procedures and criteria outlined in the policy manuals for the LNTCFS and the WGCFC (LNTCFS, 2014c; WGCFC, 2012a). However one challenge highlighted by the LNTCFS regarding local contracting was that sometimes contractors from outside the locally-defined area had to be brought in for certain jobs where local expertise was not available, mainly for silviculture. Despite this gap in available expertise, local people were often hired on a short-term basis to work for non-local companies. Another challenge associated with hiring local contractors was that the number of local contractors has been decreasing, reflecting a general trend happening in industry of smaller contractors either closing down or scaling up to become larger companies and corporations over time to meet demand. Some participants described how the LNTCFS had to change their definition of 'local' in order to find contractors able and willing to do work for them:

*"...we found that the contractors were going away. Even with the Community Forest, 20,000 metres a year, it wasn't enough to keep the local contractors. And there's been a devolution in the number of people working in the woods over the long term. Companies have gotten bigger, and fewer." (Participant 3)*

*"We worked hard at trying to determine what was local and what wasn't local, so when you use the word 'local', originally local was the community of Barriere and maybe, a thirty mile radius. But now local is more like, a larger area from Kamloops to Valemount,*

*probably about a three hundred mile radius, so when you use the word 'local', we're using local people within a three hundred mile radius, who maybe we don't know personally, but we're still using those people within that area. And the way I look at it, is because of the economics of logging and because of the economics of how the majors are changing the logging dynamics, local is no longer just small individual contractors, now it's major corporations, and they won't even bid on our jobs, so it becomes a problem of finding the right contractor to be able to do the work."* (Participant 2)

**Photo 5.7 Local contractor for the LNTCFS**

Photo by Anne Rooban (2015)



Additionally, the challenge of defining local benefit was mentioned by some participants. For example, if a local contractor submits a bid on a project, and a non-local contractor submits a more competitive bid, there is the question of how the benefit of saving on operational costs is weighed against the benefit of hiring a local person or company to do the job, especially in the context of maintaining a successful business and giving grants to local community groups. Some participants discussed how this tension was considered in decision-making by the GM and board members:

*"The contracting and things has been challenging sometimes, with the trying to balance hiring local contractors with generating revenue for the Society...they both benefit the Society I guess, or communities, it's just one benefit is through jobs and the other benefit's through eventually the grants end of things, right? And trying to decide when to draw the*

*line and when it's worth [it]. How much is it worth to have a local contractor do work for us versus somebody else?" (Participant 14)*

The WGCFE also faces the challenge of finding local contractors who are available and able to fulfill contracts within the CF. Sometimes contractors from outside the locally-defined area had to be brought in for certain jobs where local expertise was not available. Additionally, some local contractors are excluded because they only have expertise and equipment for one part of a contract, such as harvesting, and therefore cannot make a profit if they need to hire sub-contractors for other aspects such as road building (Participant 10). The challenge of defining local benefit was also discussed by some participants with the WGCFE, in weighing out the benefit of providing a local job versus getting a competitive rate:

*"Only on extreme circumstances do we take outsiders, we pretty much try to stay solely with local contractors and local...and there have been occasions where there wasn't the local contractor ability, in the silviculture side because we don't have any local larger silviculture companies, at one time we did, but we don't, so we've had to go outside to hire the silviculture company, but our demands to them was they had to hire local people." (Participant 9)*

*"If a local says, well I'm the only local so I'm going to push it up to 55 cents a tree, then the guy who comes in from outside and says, I can do it for 40 cents, that's a lot of profit that's gone down the drain, so basically that's been a bit of a contention, you don't hire a local guy to do the tree-planting, but the guy comes in who is the tree planter company, and he hires local planters." (Participant 10)*

The WGCFE tends to focus more on competitive rates in hiring contractors, but does often require companies from outside of Wells Gray Country to hire local people or sub-contractors. However, the WGCFE learned early on that this kind of arrangement can lead to additional challenges. When the WGCFE started out in their operations, they faced issues with hiring a non-local company who hired local sub-contractors that were not able to do work

according to the CFs standards, largely due to low log prices at that time (Participant 7). Now, the WGCFC hires local contractors directly whenever possible.

Another challenge identified was ensuring that all local contractors have a chance at getting contracts from the WGCFC. One participant mentioned that certain contractors were able to consistently provide good work and learn how the WGCFC operates, therefore gaining an advantage over other contractors who could also do good work but were unable to get in. The CFAC plays an important role of bringing public concerns, such as those regarding the process of awarding contracts, to WGCFC, emphasizing the point that addressing perceptions regarding social equity is as important as ensuring hiring processes are equitable:

*“...there’s a sense that some of the contractor contracts aren’t awarded as transparently as they could be. So that’s one of the advantages of having an advisory committee because the public advisory committee is aware of this. So we will probably do a little bit more work within the Society, and the Society’s got oversight responsibilities, the Society will then talk to the corporation and say, what is the mechanism? And it may be perfect, you know, this may be just a rumour that’s circulates in the community, but if it isn’t, then there’s an opportunity to improve that.” (Participant 7)*

Some participants described how the WGCFC has not created any new local forestry companies per se, but has contributed to maintaining jobs and supporting contractors within the community. With that being said, it was also mentioned that more could be done by the WGCFC to build greater capacity and skills in the local community, and in doing this, possibly develop or fill some of the local gaps that currently exist for being competitive on contracts such as silviculture:

*“...They do go local with the harvesting, but not with the silviculture, and yeah, to me, my vision would be more to build capacity in the community. There’s a variety of ways that they could do that, but they’re not really looking at those, they’ve been suggested to them, but yeah, they’re just kind of running a business, they’re acting kind of like a Canfor*

*or a Weyerhaeuser or you know, a bigger corporation. When there is opportunity in my mind, and a lot of people's minds that they could do a lot more local employment."*  
(Participant 8)

Some participants expressed that a major reason for this lack of business development in both communities is that the size of each CF is not large enough to sustain a local contractor for some kinds of jobs, such as silviculture, but has been effective in maintaining business for local contractors during times of low log prices:

*"I would say no companies have been established, I mean, a number of companies benefit from it, without a doubt, because of the work provided to them, especially when we get into slower seasons. During that deep depression of the early days of the Community Forest we were a godsend to a number of the local contractors in the work that we were able to provide to them when there was nothing else available. It gave them, companies and their employees, work that they wouldn't have had otherwise. So it kept local employment."* (Participant 9)

The LNTCFS does have the JCP program, which builds local capacity and skills through hands on experience and safety training in forestry. However this program itself has not led to the creation of any new forestry businesses or contractors. It was mentioned that the CF may have had some influence in the start-up of one or two new contractors in the community, but perhaps not directly because of the small size of the tenure. Again, the general trend in industry of contractors becoming larger over time influences how viable smaller, local contractor businesses can be.

As mentioned in chapter four, the majority of the logs from both CFs are sold to larger, non-locally owned companies. This was identified as a challenge by the LNTCFS, and demonstrates that there are still limits, mostly as a result of local demand and scale (Participant 14). Larger companies, because of their scale, tend to control how wood is distributed as they can make arrangements to buy larger amounts of wood, which affects price, as well as enter

into log-trade agreements with other wood companies to their own benefit (Participant 1, Participant 3, Participant 14). This means that smaller, local mills often choose to specialize and find ways to use logs that the larger mills do not want. For example, Gilbert-Smith is the only cedar sawmill in the region, and therefore is able to get much of the cedar cut in the area (Participant 1). The LNTCFS does consider these more local, specialized companies in selling wood, but still requires a competitive price. Finding the balance between maximizing profit and selling locally was identified as an ongoing challenge by some participants:

*"I know there are challenges when a small user may be looking for a particular wood species or particular size that may be in competition with other users, and so it's a supply and demand situation, and it's also a compromise. Yes, you may want to help the local small guy continue on with his operation, but also be fully aware that you're running a business and you're trying to create profits across the whole board. You can't be having favoritism to one small user just because they may employ 3 or 4 or 5 people in this community, when you could make more money off of that product selling it to another source." (Participant 12)*

Some concern was expressed by one participant that the only consideration the WGCF made in selling logs locally was price, and more could be done to ensure that wood remains local and benefits local companies:

*"If someone comes to them and says, well we want to buy a special spruce, in this size diameter and stuff like that, if they paid the going rate than they would sell it to them, they'll sort for them...one of the thoughts was that they should have an inventory of the small operators and what their needs are and see if they can help them out. But the board's decision at the time was no, it's up to them to come to us." (Participant 8)*

However, another participant mentioned that the demand for specialty wood was fairly low, which limited the ability for the WGCF to sell larger quantities for value-added purposes:

*"Everybody's always trying to push the value of the small, value-added side of the world, but do you know what? There's only so many people doing the value added thing. It's extremely difficult for them too. But we do provide the opportunities to people to source*

*what they need. So around here we have a birch mill, we've also got a mill that is using large spruce, and we have a specialty mill in town that uses straight and big fir, so a lot of products go to those three guys, and it's not a massive amount, it might be 5% a year, but, they've come and asked and we've made it happen too."* (Participant 15)

Similar to Barriere, value-added mills in Clearwater find a niche for specialty wood that larger companies do not want, including birch, large spruce, and large fir (Participant 15). The WGCF at one point looked into doing post and rail from tree tops, but it was not economically feasible (Participant 10). Making wood chip biofuel was also found not to be feasible, because of the difficulty of transporting the chips out of steep terrain by truck (Participant 10). Finding the balance between benefiting local value-added mills and getting a competitive price for greatest return is also a challenge for the WGCF.

#### **5.2.4 Local Grant Recipients**

As mentioned earlier in this chapter, one major avenue for local control and self-determination for both communities was through the grants given by the CFs. In a general sense, grants from CFs promote equity because they allow profits that would normally leave the community to instead be re-invested into it through community groups. However, it is important to determine whether the boards for each CF pursue any level of social equity in terms of which groups receive grants through the application and decision processes.

#### **5.2.5 Grant Application and Decision Process**

Overall, most participants perceived that the grant awarding process was equitable for a number of reasons. These included things like grant opportunities from both CFs being advertised in local newspapers and on the CF websites ahead of time with clear deadlines, giving organizations enough time to hear about the opportunity and to fill out an application and apply. All applicants are required to use the same application forms, following the set

processes and procedures. The application form for both CFs is available for anyone to download from each website, and includes clear guidelines and criteria for eligibility and what information is required.

The application form for a grant from the WGCFS is lengthier than the LNTCFS, with additional information required from groups such as organization purpose, annual operational budget, number of staff or volunteers, most recent financial statement and annual report, start and completion dates for proposed project, and break-down of expenses for the project (WGCFS, 2016a). Additional requirements upon receiving a grant from the WGCFC include submission of a report after the project is complete, and finding ways to advertise and promote the CF tangibly, through signs, pictures, displays, tours or publications demonstrating how the funds were spent and how they benefitted the organization and community.

Despite this difference in application requirements, the simplicity of the grant application process was described by a number of grant recipients from both CFs, especially in comparison to applications for funds from other sources. One reason given for this by some participants is that because CFs are local organizations, they are familiar with the groups in the area and do not need a whole lot of proof as to how groups benefit the local community:

*"I'm the one who does it [the grant application], and it's very simple...what's your outline, what's your projected outcomes, and who's it benefitting. It's pretty simple, and I just reuse the same paper year after year [laughs]...I think because they're, the Community Forest, is connected to the community, they don't need a whole lot of explanation, as compared to if it's United Way or Gaming or something like that, you know, they don't know who we are or that it's legit." (Participant 13)*

Decisions regarding grants are made by board members based on how widely the perceived benefits will reach in the community. Both CFs also take into account whether an

organization can leverage funds from other sources for a project, and the WGCFS also states that a greater percentage of total funding amounts are available to groups who leverage funds (WGCFS, 2016a). Both CFs consider how each application applies to their organizational purpose and provincial mandates associated with operating a CFA, as described by the some participants:

*“Well we sit down as directors, and we look at all the grants that are applied for, and then the money that we’ve actually got available to us, and then we look at our core guiding principles, and also the eight principles that we have from the Provincial government, and so we try to make a decision based on funding going to the five communities that are involved within the Community Forest, and also funding that might help with First Nations, and then we try and split that funding up between some of the core social aspects of the community, like the Volunteer Center, and also education. And so the decision is made as a group by the board, based on the values that the Community Forest has.” (Participant 2)*

*“...We usually take two weeks on our own, and we go through [the applications], and we kind of have a criteria laid out, you know, the social/economic benefits, what’s the demographic it’s impacting, is it, you know, a large impact to the community or are you impacting a narrow group, and we have a bunch of criteria that you kind of go through and you look at, and then we get together and then we make a decision. We go through each application and come to a consensus on them.” (Participant 8)*

## **5.2.6 Grant Decision Process – Tensions and Trade-offs**

There were a few examples where tensions were revealed between competing values related to social equity in the granting process. These tensions and how trade-offs were managed by each CF is described in depth below.

### **5.2.6.1 Flexibility versus Procedure**

One trade-off that emerged in relation to the granting process was that of being flexible versus following set procedures, as with deadlines for applicants. Some participants mentioned that grant deadlines were not necessarily hard deadlines for applicants, because often these groups are volunteer-operated and they understand that people have multiple commitments,

therefore extending a deadline within a reasonable time period is acceptable. It was also mentioned that having some flexibility allows for the CF to take advantage of opportunities that emerge, allowing them to fund something in a more timely manner:

*“Currently for the last six years now, we give \$100,000 every spring, and \$50,000 every fall. And, that is regardless, that is advertised, and that is the guaranteed amount. We also, will take and consider special applications in between those funding periods...We like to stay flexible. We try not to, you know, be so firmly regimented that there is no ability to consider special requests, should they come up, absolutely no question the best application in the world comes in, well then we can consider that in between our application periods.”* (Participant 9)

Other participants insisted that it is the responsibility of the applicants to have all information submitted on time, and that deadlines are what makes the grant process equitable for all groups:

*“...They set guidelines, like it has to be in by a certain date, if it's not, we don't even look at it. If you don't look at the requirements, we don't look at it. And you know what? With how many grants they get in a year, they have to do that. They have to set up rules...they have to have guidelines.”* (Participant 25)

This difference in understanding has the potential to create conflict, as some may value flexibility for applicants over equal treatment of applicants in regards to deadlines.

Another example where flexibility and procedure came up was related to communication with an applicant when a decision was made regarding their application. Both CFs get in touch with applicants after the decision process is complete, by phone, email or in person. However, one participant from the LNTCFs described their frustration with the process when their application was initially rejected, and the reasons were not clear to them. Rather than telling the person to re-apply at a later time, the CF kept asking for additional information and documents that the participant felt were already given:

*“It was a long, long process, in fact we were initially turned down for the grant, because they said that we hadn’t done enough to raise money on our own...I mean the actual application was easy, but once they started looking at it I found that, the whole process, the directors weren’t reading the material that they were being provided, there was only a few people that were kind of making some of the decisions, and some of the decisions that were being made by the group weren’t educated decisions. And they kept requiring, they wanted statistics, they wanted budgets from us, they wanted to see the quotes...And I’m saying this not to get anybody in trouble, but I found the process extremely frustrating.”*  
(Participant 18)

The WGCFS works to avoid this kind of miscommunication through their detailed guidelines included their application form, and through clear feedback for applicants who do not receive a grant as to the exact reasons they were not successful. Applicants are encouraged to reapply in a future granting cycle if the only issue is a lack of funds on the part of the WGCFS. The WGCFS also requires more information in their grant application to ensure they have the same detailed information for each applicant at hand when the applications are reviewed. This is a trade-off because by having a simple application form, the LNTCFS may allow for the inclusion of applicants with little experience with grant applications, or those who have little time, especially since many applicants are volunteers and have other commitments or full-time careers. However, by requiring a more extensive application, the WGCFS can make a more informed decision from the beginning regarding who receives a grant, not dependent on prior knowledge of an organization.

Another factor to consider in the trade-off between flexibility and procedure is the size of each CF and how they have developed over time. The LNTCFS has had fewer applicants and funds available for grants than The WGCFS. In fact, board members from LNTCFS shared that they have turned down very few applications for funding in the past, and have instead opted to give reduced grant amounts to each applicant, as described by some participants:

*“In the last few years there hasn't really been too many choices made. Sometimes the amount of the grant has been reduced, but I think everyone who's applied has actually received a grant. Some day in the future, it's certainly possible that that will have to change.”* (Participant 1)

*“..There's always more money that people want than what we seem to be wanting to give away, so I think that's been a challenge for them, and I don't think that they like to turn people down either, so we tend to try and split up into smaller amounts, or increase what we give away if we can, so based on the merits of the applications.”* (Participant 14)

Now that the LNTCFS is able to give out more funds as grants, and word about grant opportunities has spread, a more detailed grant application may need to be considered.

### **5.2.6.2 Building Social Capacity versus Efficiency**

One of the main criteria for awarding grants given by participants from both CFs is to provide socioeconomic benefits for the wider community. Therefore, a trade-off when it comes to distributing grants is how to decide whether to give a grant to a group that is well prepared and organized with their application, or one that is less organized perhaps due to lack of experience with the process, but still may provide significant benefit to the community and build capacity. For example, some participants describe how the WGCFS has had a number of groups receive grants in multiple granting cycles because they are well prepared with their applications, have all quotes and information regarding their project ready, and have shown past efficiency in making their project happen:

*“That's true, you know, that's why the high school has been very...successful in getting grants, because they do a good job of knowing what they want, and having it all ready to go, as soon as they're approved of the grant, they're ordering it, they've got it in, and they've got the community forest looking at it to see how good it is, right?...With the North Thompson Communities Foundation, people have had grants and they're, two or three years, and you don't want to pull the money from them, but it's a lot of work to keep after them...”* (Participant 28)

*“...We tend to find a lot of the applicants that we receive are the same from year to year. But that's good as well because they plan their projects. You know, these aren't*

*spontaneous projects, there's a lot of thought that goes into these projects, and again, the benefit to the community becomes double."* (Participant 9)

However, groups who are not as organized or well-equipped may be excluded from the process, as they may have a harder time competing with groups who have learned how the grant process works. By extending grants to applicants with less experience, there is opportunity to build the capacity of these organizations and the skills of people who run them. For example, the LNTCFS gave a grant to a community hall, which took a year and a half to use for the designated project because they had to wait for volunteers to become available to complete it. However, the upgrade was hugely beneficial to the area, and allowed for the group to be included in the benefits from the CF.

### **5.2.6.3 Giving Grants versus Reserve Funds**

Another tension that both CFs experienced was how to determine how much to give as grants, and how much to reserve for ongoing operations. CFs are required to distribute their profits for community benefit, but how to determine what those profits are is not straight forward, especially when starting a new forestry operation, a tension described by some participants:

*"...And the idea was that originally, because we were scared about cash flow, and whatnot, that we'd be just giving out the money we earned on our investments. Which is about \$30,000 a year. So, for a year or two there, we were sort of capped around 30. And it was sort of, from my point of view maybe they weren't really moving as fast as I thought they should, but I'm not going to tell somebody they're moving too slow if that's the way they want to move."* (Participant 3)

*"I know there was some dissention, people saying, how come you got all this money, and you're not giving it to the community? But one of my questions, when I came on the board, right away was, what happens if we go flat? We still have to operate. How much a year do we need [emphasized] to sustain us? If we had no money coming in, absolutely no money, how much do we need? We came up with a number and we said, let's make it a two year [window] So we'll put that in a reserve fund... And then what happens if we have*

*a blow out on the road somewhere and we had to repair a bunch of road? So we put a road, and then we also have to put into silviculture, and so that money is sitting there not being used by us particularly. Once we've got all the operation, all the reserves, how much money do we have left over? This will be the amount that we give. And that amount we will transfer. And we do it twice a year, before the spring call for applications, and before the fall. And you know, you put it into your budget, and you say to the Society, we think we can give you \$100,000, and at the end, we say, sorry, we can't give you that.”*  
(Participant 10)

Both CFs did not start giving out grants until 2011, even though profits were being made before this date, because they needed to establish enough funds to cover silviculture costs, as well as road building and unforeseen circumstances such as changes in market prices or timber supply.

The WGCFS gives out more money in grants than the LNTCFS, partly because the WGCFC has a larger AAC, and is able to keep their contracting costs lower. Another reason is that the LNTCFS has chosen to distribute profits in different ways apart from grants through reserve funds, which include the FSF, as well as funds to support economic development, education, and future capital projects. This is a trade-off, because funds in these reserves are not available for groups currently looking for funds, and there is no set timeline for when the funds in these reserves will be used. Therefore, groups that could benefit from these funds or need them to continue their organizations do not have access to them. However, setting aside reserve funds may contribute to the long-term stability of the community if spent wisely and used to leverage bigger opportunities, draw new industries, or build community capacity through forest education. Focussing on grant giving as the only way to distribute profits may give benefit to the community in the short-term, but may not leverage bigger opportunities to sustain the community if the CF were to no longer exist or function at its current capacity.

## **5.2.7 Pursuit of Social Equity through Grants**

In theory, community groups have equal access to CF grants, if they fall within the benefits area as described by the CF and meet eligibility requirements. However, in order for there to be equitable benefit sharing, CFs must pursue social equity through their initiatives. Participants identified a few ways in which each CF does this.

### **5.2.7.1 The WGCFS Social Grants**

The main way that the WGCFS pursues social equity in a general sense is through social grants. On their grant application, it is stated that 25% of their funds will be allocated to organizations that apply for grants to serve social needs in the community. Some examples of these kinds of grants include Girl Guides, to support families who cannot afford registration, Evergreen Acres for upgrades to keep seniors housing safe and affordable, books and equipment for Raft River Elementary and Clearwater Secondary schools to support the education and development of youth, and Yellowhead Community Services which supports adult literacy, child and family programs, and employment resources. One participant described how social grants support community needs when organizations fall short of funding:

*"..we look at the social benefits, because of our definite requirement for social benefits, you know, the help that is needed by those who don't have the ability, and so we try and meet as much as, you know, the community needs, while also understanding that there are, you know, government agencies but things fall short, as we say, in the schools, well we try and pick up the slack, or the areas that there's holes that people can fall through."*  
(Participant 9)

### **5.2.7.2 The LNTCFS Community Meetings and Grants**

The LNTCFS also pursues social equity through giving grants to community groups that serve social needs, such as community halls and 4H clubs. One clear example of a grant that supported the notion of social equity was the Simpcw First Nation Student Program. The

program was supported through the band's Natural Resource Department, and its purpose was to prepare students in middle school and high school for future employment. Some aspects of the program included safety certification, resume writing, a camp out, and work experience related to the students' interests, such as fisheries or archaeology (Participant 21). Some participants felt this grant was important because it helped a group of vulnerable youth gain valuable experience and training to equip them for their future and effectively bring them into the local resource economy.

The LNTCFS also gave grants to the Lower North Thompson Community Foundation for workshops and networking events to support non-profits and build community capacity. By having these events focus on topics such as how to write grant proposals, this equips community members with practical skills related to operating a charity or non-profit which in turn promotes social equity and builds community capacity.

As mentioned earlier, the LNTCFS also hosted community meetings in each community in the partnership in 2014, in this way trying to intentionally pursue some level of social equity in their operations among the communities involved in the CF (LNTCFS, 2014a). One of the results from these meetings was that more people heard about grant opportunities, applied for grants, and spread benefits to outlying communities. Some participants described being contacted by the LNTCFS, and how that led to an information meeting and opportunity to apply for grants:

*“Well when they came out for their meeting. That’s how I heard about it. I knew one of the members it was... [board member name]. And he phoned me and said, are you guys interested? I said sure, come on over, have a meeting. Well they came and had a meeting and said what their plan was, and then it wasn’t ‘til, I think later, like they had one*

*meeting here and then they had the other one and said, we now have some money that you guys can apply for grants.” (Participant 20b)*

### **5.3 Innovative Organizational Processes and Outcomes**

Given the discussion above regarding the socioeconomic benefits and outcomes of CBFM for local communities, this next section examines the extent of innovative processes being used by each CF to achieve SFM. Innovation is said to increase the sustainability of organizations by allowing them to navigate operational challenges effectively using bottom-up approaches to management, and contribute to sustainable outcomes by addressing complex societal problems using new methods (Dormann & Holliday, 2002; Ridley-Duff, 2008; Madill et al., 2010; Teitelbaum, 2014). This section first outlines the processes related to the beginning stages of the CF tenures, their operations and the benefit-sharing strategies which participants identified as innovations. Next is a critical assessment of the extent of innovative processes and outcomes for each CF, using dimensions of innovation from Crossan & Apaydin’s (2010) framework as a guide, identifying the limitations and opportunities presented by the CFA tenure system and wider economy.

#### **5.3.1 CF Innovations**

A number of processes within CF operations were identified by community members as innovations. However, a common theme in responses from participants was that innovative processes were developed firstly in response to the challenges faced by the loss of forestry jobs in the local area created by changing government policies, and secondly to the challenges presented by meeting the CFA tenure agreement and its many requirements on a small land base. Table 5.8 summarizes the innovations identified by participants, categorized as processes and outcomes according to Crossan & Apaydin (2012).

**Table 5.8 Summary of innovative processes and outcomes  
identified by participants for WGCFC and LNTCFS**

<b>Innovative Processes (How)</b>	<b>Innovative Outcomes (What)</b>
CF start-up and establishment (WGCFC and LNTCFS)	Three board structure (WGCFC)
	Forest Stewardship Fund (LNTCFS)
	Independent Timber Supply Analysis (WGCFC)
Strategic plans and community meetings (WGCFC and LNTCFS)	Strategic partnerships (LNTCFS and WGCFC)
	Economic development planning (LNTCFS)
	Restricted/Unrestricted fund accounting (LNTCFS)
	Advocacy (LNTCFS)

**5.3.1.1 Innovative Processes in the Start-up and Strategic Planning of CFs**

Many participants from both CFs identified innovative processes in their beginning stages, as they rallied their communities and lobbied government representatives to be given permission to apply for a CF tenure. These processes included setting up a stop at the side of the highway to engage people and spread awareness of the efforts being made to organize a CF, hosting public meetings to identify community goals and to create action committees, and applying political pressure.

Innovation was also described by some participants in the ways they found start-up capital since each CF was not provided with the funds to act on their invitation to begin operations. High levels of funds were required to create a management plan for a set area and to begin harvesting. As described in chapter four, the LNTCFS was able to secure a loan from

Tolko, enter into a NRFL agreement in partnership with Simpcw First Nation, and find a forest planning company willing to advance the upfront costs associated with creating a management plan until the CF started making a profit (Participant 1, Participant 3). The WGCFC was able to secure a loan from the local Credit Union to create a management plan and begin operations (Participant 7).

Development of a strategic plan in 2014 by each CF was also identified by some participants as an innovation. Innovative processes included hosting community meetings and gathering input for goals, objectives and measurable outcomes to guide operations and distribution of benefits from revenues. These community meetings demonstrated a clear commitment to connect with the wider community to ensure that all knew of the benefits from operating a CF in the local area, and had input into how the CFs moved forward as they created their strategic plans (Participant 2).

#### ***5.3.1.2 Definitions of Innovation in Management Plans***

The most recent management plans for both CFs state that they will pursue innovation, the WGCFC through what they identify as innovative forest management practices such as fertilization, pruning, and thinning to ensure a healthy, sustainable forest; and the LNTCFS through educational opportunities, research projects, and taking advantage of innovation focussed funding from outside sources (LNTCFS, 2015c; WGCFC, 2012c). The LNTCFS restates their commitment to innovation in their 2014 strategic plan (LNTCFS, 2014a). The LNTCFS has demonstrated their commitment to innovation through hosting a UBC student group project in 2013, summer students from UBC in 2014 and 2015 for work terms, and using funds from FP innovations to improve the CF land base (Participant 1, Participant 14). The WGCFC has

demonstrated their commitment to innovation through their ongoing efforts towards creating a silviculture and tactical plan, as well as bringing in hydrology and steep terrain experts to make reports and recommendations on harvesting and ways to care for the land base (Participant 15).

### **5.3.1.3 The WGCF Three Board Structure**

Some participants explained that the governance structure comprised of the WGCF, the WGCFs and the CFAC, was an innovative outcome from the initial committees that were formed to gain the invitation to begin a CF. Together, all three boards fulfill the mission of the WGCF and form a framework for the operation and implementation of their mission. Having a society apart from the operations to hold the shares and distribute grants prevents the corporation from being questioned regarding equity and distribution of grants (Participant 15). Additionally, having the CFAC specifically in charge of public input and engagement frees up the corporation and society to ensure that the operations are run sustainably and grants are distributed equitably. However, there have been some issues and concerns regarding communication and understanding how each board functions. There is evidence, however, that each group is in the process of learning their roles and relationships to one another, as described by the following participants:

*“We’re in the process right now of developing all the policies and the management agreement between [the CFAC] and the Community Forest, so we’ve been working on that, and that’s probably one of the biggest challenges, now we have to have a board to board meeting, and go over that and have the understanding of what our role is, in relation to them, and their role in relationship to us.” (Participant 8)*

*“...The Society has more responsibilities for oversight than we originally thought. And we just learned that in the last year. So the Society also has a responsibility to make sure that the cut is right too, otherwise we’ve got some explaining to do. You know, as shareholders, what type of oversight did we provide to ensure that it’s a sustainable cut?”*

*And not sort of, cut a whole bunch, and then find you can't log for a few years because you made a mistake. It could be embarrassing...But we didn't realize that until recently. We just thought we could give money out. (Participant 7)*

#### **5.3.1.4 Restricted/Unrestricted Fund Accounting**

The LNTCFS operates under a society legal structure, using restricted and unrestricted fund accounting for operations and distribution of revenue. However, unlike most societies, where restricted funds are designated for donations and unrestricted funds for operations, the LNTCFS has reversed this, with the reason being that since their operations must be clearly defined and run, according to provincial CFA tenure regulations, and grants and donations may be distributed more generally, for community benefit, that it makes more sense to organize accounting in this way. One participant described how using restricted/unrestricted fund accounting like this better accounts for the funds ascribed for community benefit, and may be considered innovative in this regard:

*"We have a restricted fund type of accounting, although it's turned on its head from the normal, not-for-profit, because for most not-for-profits, the restriction is based on their donations. People come in with money, and say, I'm giving you \$20,000 out of my will to go toward x, and here's a piece of paper and you're going to sign it, and you have to do x with it. Or you only give out the interest. There are restrictions upon it. That's where the restricted in restricted funds accounting come from. We've turned that on its head. Our profits are the community's profits, so we don't have a concern regarding donations...We have to have our philosophy around our operations well defined, as to what we want to keep in house, and then we have to have our restricted funds, internally restricted funds, not external restricted funds, well defined." (Participant 3)*

However, in order to remain accountable and ensure community benefit from unrestricted funds, the LNTCFS has created internally restricted fund categories in which funds are placed and kept for different aspects of community benefit. These categories came out of the purpose and objectives, as well as feedback from the strategic planning community

meetings in 2014, and include scholarships and bursaries, education, community grants, splash pad, forest stewardship, environment, and expansion/job creation (Participant 3).

#### **5.3.1.5 Strategic Partnerships**

Strategic partnerships and community meetings were identified as innovations by some participants from both CFs, because these are practices not seen under industrial forestry tenures used to create local socioeconomic benefits. Strategic partnerships were only made possible through the creation of a grant process from profits, and demonstrate creativity in bringing together existing groups and available resources, such as the WGCFS, together with DOC and Clearwater High School in creating a gym and programming, and the LNTCFS, Employment Center, and Provincial and Federal governments in creating the JCP program (Participant 7, Participant 30).

#### **5.3.1.6 Economic Development Planning**

The LNTCFS from the beginning has placed a high value on creating local jobs which, through their strategic planning process, led to the creation of an expansion and job creation fund. This money is being set aside for a future project, to possibly partner with an industry or business that may establish itself in the area, in effect growing the local economy. Some participants described the economic development fund as a way to plan for future opportunities:

*“So this is something that we put a lot of money into, and we’ve taken nothing out. The idea was, that we were going to lobby the government to increase the size of the Community Forest. Or, we were going to buy a plant in the industrial park and build a place to make widgets out of wood. So whatever we were going to do, we haven’t done it yet, but the money’s there for opportunity in the future.” (Participant 3)*

The LNTCFS also hosted an economic development planning meeting in June 2016 called Let's Talk Business Opportunities in the North Thompson. The focus of the event was to hear from various organizations and business leaders focussed on rural development in order to brainstorm ideas and build connections to bring new opportunities to the region (LNTCFS, 2016b). This meeting, in addition to the fund set aside for expansion and job creation, demonstrates clear steps towards seeing a new economic opportunity come to fruition in the local area. Participant 2 describes the next steps the LNTCFS hopes to take to this end:

*"...what I'd like to see is a group of people in the district of Barriere, the Lower North Thompson Community Forest, the Chamber of Commerce, the TNRD, get together and see what we could develop for this area, and even if the Lower North Thompson Community Forest had to use its funds to assist it, and leverage more funds, then maybe we could work together towards driving an economic possibility for this area." (Participant 2)*

Community members from the WGCFC also identified economic diversification as a need for the area, communicated in community meetings hosted by the WGCFC (WGCFC, 2014b). However, economic diversification was not well identified in the strategic plan document following these meetings (WGCFC, 2014b). One participant described their disappointment with this omission, and felt that the document did not clearly identify community values:

*"they did what they called a strategic plan, and it's not a strategic plan at all, it's simply an operations plan that, this is how we're going to do business, and the CFAC and the Society and different people tried to give them input and sway them to tell them no, that's not a strategic plan, you have nothing in there that tells you what you value, or anything. But you gotta give them credit, they tried, they didn't really understand what a strategic plan was, so they have this operations plan that they go by, but if you read it, you would not know what this community forest stood for. You wouldn't know if they valued visuals, or wildlife or [laughs] water, or anything." (Participant 8)*

However, the WGCFS has just created an application for a letter of intent, for organizations interested in creating larger projects for the purpose of economic growth and social benefit, who will then be invited to apply for a grant, if approved by the WGCFS board. This may demonstrate some movement towards economic diversification and exercising this kind of innovation for community benefit (WGCFS, 2016b).

#### **5.3.1.7 Advocacy**

One of the outcomes from the strategic planning community meetings in 2014 was an opportunity for the LNTCFS to become an advocate for the other communities in the partnership. Since three of the communities in the partnership are very small and not incorporated, they are unsure of who to talk to about different issues, aside from their TNRD representative. One participant described how the role the LNTCFS played in advocacy for outlying communities was something that major forest companies never did:

*“The input that we have from the different communities where we have the meetings, and being able to develop a strategy that helps the area is very important to the Community Forest, in the sense that it gives people in those areas someone that they can talk to with a vested interest in their problems, and the majors don’t do that, they don’t meet with the public. For the most part they do their minimal sort of requirements but they don’t deal with the public.” (Participant 2)*

One community had some issues with harvesting on another nearby tenure by a different company, which was negatively affecting their horseback trails. Community members were unsure of how to go about resolving the issue, or who to contact. The LNTCFS advised them on how to move forward, and offered to help put them in touch with the right contacts.

*“And then the other piece that, sort of personally we found really helpful, was kind of the advocacy and support piece, there’s a big logging operation going on right now in Orchard Lake, which is right across from us on the highway, and it’s where we ride our horses, and*

*we do a lot of recreational activities, and they, just over the last 2 years have clear cut a huge part of the forest that we used to ride in and stuff, and the Community Forest group just was really helpful in helping us to understand how to engage with [the company] who's doing the logging, and sort of how we could present our interests and try and work with them to ensure that, maybe some of our voice gets heard and our concerns with what was happening. And I thought that was really neat to have some professionals that could help us just understand how to navigate that and understand what their obligations were.” (Participant 24)*

Other examples include improvements to watersheds and river banks, and lobbying government to put in an official railway crossing to eliminate train whistle noise.

#### **5.3.1.8 Forest Stewardship Fund**

The creation of the FSF by the LNTCFS demonstrates long-term thinking for survival on a small land base. Since the CF tenure for the LNTCFS is relatively small, putting the extra investment from profits now to rehabilitate sites and improve forest health will maintain AAC and should increase profits into the future. The FSF also demonstrates a sense of ownership and commitment to stewardship of the land base, as it takes responsibility for past tenure holders who have used harvesting techniques which led to the creation of these poorer sites. Some participants described this fund as an innovation, because no other organization invests their own profits into this kind of initiative:

*“...this particular program we are investing our own cash back into the land base. This is very unusual and unique, anywhere by any organization or company in BC, no company or organization invests their own cash back into the land base...this is a novel situation that we have created, and we have the financial resources to do that, and particular stands that can benefit from that...with this investment not only do we get these sites restocked and producing more, but it sustains our Annual Allowable Cut in the long term.”*  
(Participant 1)

#### **5.3.1.9 Timber Supply Analysis**

The timber supply analysis that the WGCFC is conducting to reduce the AAC prescribed by the province demonstrates a high level of concern and long-term investment on a small land

base. Normally the Timber Supply Analysis conducted by the province is accepted by the tenure holder, especially if the AAC is raised, so to bring this into question is unusual. Additionally, the costs of such a study are significant, meaning that for the WGCFC to pay for this out of pocket they feel that long-term forest health and future harvest may be threatened by the uplift. This study also demonstrates that the WGCFC is acutely aware of their role in managing for the other values on the forest tenure, including watershed management and user groups who share the land base for recreation, trapping and ranching. Even if the amount of timber for the uplift exists on the land base, the consideration of other user groups means that harvest of that timber may negatively affect visual quality, water quality, wildlife, or cattle. Some participants from the WGCFC shared their concerns regarding the uplift, and felt that conducting an independent, longer-term plan was an innovation that may address these:

*"I'm not so sure that timber is actually out there. Because as you know, when you do all those calculations, there's a lot of theory involved, and the theory of course is that you can access most of that timber, but sometimes you can't access all of it, and you know, between cutting for pine and our obligations to meet visual standards, and then there's other obligations too, like not harvesting on unstable terrain in the watershed, those types of things, I'm not convinced the AAC is realistic; it might actually be lower. But what the corporation's working on now, and I know [the General Manager] is working diligently at it, is to get a longer term plan to find out exactly where that timber is, if we got 33,000 that we can cut, well where is it all? You know, looking out 15 years, even beyond that, and maybe it's there, I hope it's there." (Participant 7)*

### **5.3.2 Assessment of CF Innovations**

Two innovative processes corresponding with seven innovative outcomes were identified in this research, as shown in Table 5.8. The fact that a greater number of innovative outcomes than processes were identified for both CFs may demonstrate that the organizational capacity for each CF supports innovative processes and facilitates innovative outcomes, which is an indicator for sustainability (Seelos & Mair, 2012). However, using Crossan and Apaydin's (2012)

dimensions for innovation, the outcomes from this research were all categorized as incremental, process innovations, as a referent to industrial forestry, with the FSF and voluntary Timber Supply Analysis as technical innovations, and the remaining outcomes as administrative in nature. This would suggest that even if these outcomes could be characterized as innovations, they are small in scale and related mostly to CF management and organizational structure rather than novel forms of production, which may limit degree of sustainability outcomes.

Three of the indicators identified within the dimensions of innovation as a process by Crossan & Apaydin (2012) – driver, direction, and source - support a high degree of innovation involved in CF start-up for both LNTCFS and WGCFC. The driver for applying for a CF tenure came out of concern for employment and future opportunities within each community. In terms of direction, although the CFA tenure was developed by the province and administered through the tenure system in a top-down way, the development of a CFA application by both CFs demonstrates many bottom-up elements, including lobbying government, gathering community members, identifying shared values, and securing start-up capital. The source for applying for a CFA tenure came from the community level, also demonstrated through the identification of shared values in forest management for community benefit. These three indicators point to a bottom-up, community-initiated and led process, which shows strong support for sustainability (Madill et al., 2010; Pinkerton et al., 2008; Ridley-Duff, 2008; Seelos & Mair, 2012; Teitelbaum, 2014).

Applying these three indicators to the other process innovation, strategic plans and community meetings, shows similarities. The driver for creating a strategic plan was a need identified by each CF to create a plan to re-affirm values and identify practices to achieve short-term and long-term goals and objectives (LNTCFS, 2014a; WGFC, 2014b). The direction for both CFs in this process was bottom-up, with each CF hosting community meetings for input and creating the documents, with help from facilitators. The source was also from within the community, and is shown through supporting documents to the strategic plan that records community input, and through the uniqueness of each strategic plan (LNTCFS, 2014d; WGFC, 2014c).

Despite strong support for innovative processes, based on criteria of bottom-up, community initiated drivers, direction, and sources, it was found that definitions of innovation within organizations greatly affected the type and extent of innovative outcomes. One thing that can be noted from the above sections is that each CF defines and values innovation differently, reflected through management plans, strategic plans, and practices reported by participants through interviews, despite the fact that they both operate within the same kind of tenure with very similar forest conditions. This brings into question the meaningfulness of the term innovation, as it seems largely subjective in CF practice and is not clearly defined in one of the eight provincial objectives for CFs to 'foster innovation' (MFLNRO, 2015a). The WGFC defines innovation in their management plan along the lines of enhanced or novel silviculture practices, whereas the LNTCFS defines innovation more along the lines of forest research and education. These differing definitions of innovation have led to different kinds of processes and initial outcomes, as described above.

The strong emphasis on technical forest mapping and high levels of silviculture by the WGCFC demonstrates a high value placed on forest health, productivity and profitability to support socioeconomic benefits. The three board structure may reflect a high value placed on efficiency and fairness, but it seems that there are differing understandings regarding who is responsible for setting the direction of the CF. The fact that the driver for the WGCFS and the CFAC boards were top-down legal and regulatory requirements from the province as a condition for continued tenure approval may demonstrate weak evidence for increased sustainability as it was not planned for by the community (Pinkerton et al., 2008). However, the board structure may still hold potential for supporting innovative outcomes if efforts are made towards working together and communicating more effectively.

The emphasis on forest research and education for the LNTCFS in their definition of innovation reflects a high value placed on developing forest health, productivity, and building socioeconomic capacity through strategic partnerships. It seems that the LNTCFS is taking a less technical route in their innovative practices than WGCFC, opting to support more summer students and the JCP program. Since these practices differ from the referent of industrial forestry and were developed and taken on by the CF voluntarily using a bottom-up approach, they are more likely to produce innovative and sustainable outcomes (Madill et al., 2010; Pinkerton et al., 2008; Ridley-Duff, 2008; Teitelbaum, 2014). For the LNTCFS, initial outcomes which show limited evidence of innovation include a regional economic development planning meeting, changes in fund accounting, strategic partnerships and advocacy for the surrounding communities within their partnership. These initial outcomes show promise, but it is important for LNTCFS to find ways to account for and measure progress to ensure sustainability.

Although both CFs held community meetings and created strategic plans in 2014, there is no mention of innovation in the strategic plan from the WGCFC. This may suggest that the WGCFC feels confident that they can maintain their AAC and profitability on timber harvested from their tenure primary through increased silviculture and adjustment of their AAC to reflect a more realistic sustainable timber harvest level. However, neglecting innovation in other spheres, such as community engagement and improved board communications could threaten long-term sustainability of their operations. If sustainable outcomes are dependent on developing organizational capacities through innovative processes, as suggested in the literature, then neglecting pursuit of innovation could be detrimental (Crossan & Apaydin, 2010; Seelos & Mair, 2012).

One challenge to innovation that was brought up by many participants was the limitation of the size of the land base in the CF tenure. At 20,000 m<sup>3</sup> for the LNTCFS, and 33,000 m<sup>3</sup> for the WGCFC, these tenures are very small compared to the tenures operated by larger forestry corporations. Additionally, the CFA tenure is held to the same standards for silviculture and land management as the large corporations with more resources, and also expected to provide socioeconomic benefits at the community level. This makes CFs more vulnerable when the market prices for timber drop, as highlighted by their low profitability. The 15% stumpage rate that CFs pay to the province certainly helps, however without the discount, CFs would not be financially viable within the current forest tenure system. Therefore the FSF and independent Timber Supply Analysis are clear examples of measures CFs must take to improve forest health and therefore productivity, indicating innovation out of necessity to ensure ongoing survival on a limited land base. The need for CFs to innovate out of necessity is

supported by Pinkerton et al., (2008) and seen as a response to market forces which favour major industrial forestry corporations.

Both CFs have looked into other ways of gaining revenue beyond timber, as this was a goal set out by the provincial government in initial forest stewardship plans for CFs and could be characterized as innovation in comparison to industrial forestry. The lack of ability to regulate NTFPs was considered a primary reason for not developing these resources as more significant revenue generating initiatives in each CF. Issues surrounding site control and inability to charge fees for access are significant barriers to development, as currently any person is able to access NTFPs on CF tenures without limit.

Some participants suggested that more formal agreements and regulations between First Nations and the province regarding traditional knowledge and intellectual property rights would have to be created for them to secure access and further pursue NTFP development. These concerns stem from the fact that the Government of BC has not settled land title with most First Nations groups, and treaty negotiations are ongoing through the British Columbia Treaty Commission (Haley, 2002; McCarthy, 2006). Although the CFA tenure may be viewed by some as a step towards allocating resources and greater control over traditional territories to First Nations, the issues which arise in relation to developing NTFPs demonstrate that CFAs are inadequate structures to resolve issues pertaining to First Nations land title (McCarthy, 2006). Some participants felt that their CF could develop NTFPs further if the province worked out First Nations-CF specific agreements to regulate access:

*The inherent problem is that Non-Timber Forest Products is although we've been given a Community Forest mandate to regulate them, we haven't been given any laws by the*

*provincial government, and also, you have to be careful about... rights of First Nations, and so, say, there's blueberries on our Community Forest, the local people have historically gone and picked them for free. And, also the First Nations feel that [it] is their right to go and pick them for free. And, until we establish a regulation through the provincial government that says we work with First Nations and community people to regulate that Non-Timber Forest Product, it's very hard to do anything with it, structurally.*  
(Participant 2)

However, this view overlooks the fact that if the issue of land title is settled between the province and First Nations groups that CFs are likely not going to be given more jurisdiction to enforce exclusive access to NTFPs, or even maintain the same extent of access to timber. Even though both CFs said they would like to support NTFP development and business start-ups more formally, treaties between the province and First Nations may greatly limit or remove this possibility.

Despite limits to operational innovation stemming from CFA policy, these examples above demonstrate that the CFs are making attempts to be sustainable on a small land base through practices which show limited innovation. However, one participant mentioned their concerns that CFs were still not taking enough initiative to diversify or innovate within their operational frameworks:

*"Well to me the main mission or goal of the community forest is to take the resources that are, you know, around your community and be utilizing it in a sustainable manner, to the benefits of the community socially and economically. And to me, there's more than forestry. I mean there's other values out there that could be, they need to be paying attention to, or they could tap, there's other resources on that land base they could tap into for revenue as well, rather than just being forestry-centric, for example, you know, if you have a really good area that would make a great gravel pit, why wouldn't you go after that and diversify yourself too. I think the community forest needs to diversify itself."*  
(Participant 8)

There are ways that CF organizations could diversify through innovative products and marketing, and are free to do so under the current system. Both CFs have looked into doing

post and rail from tree tops, biofuel from wood chips created from slash piles, and cedar oil from cedar branches. Value added initiatives such as sawmills or log sorting are under the CFA tenure. As mentioned earlier, LNTCFS did have a value-added mill associated with their tenure, but it only operated for five years before closing down (LNTCFS 2006; Participant 1).

**Photo 5.8 Former value-added mill associated with the LNTCFS**

Photo by Anne Rooban (2015)



However, these opportunities did not progress far beyond initial stages of development, due to economic infeasibility or lack of authority to enforce exclusive access in the case of NTFPs. These attempts at diversification demonstrate the need for greater policy, institutional support and resources for value added business, NTFPs, and local log sorting and processing for CFs, which are strategies highlighted by many as ways to stabilize against market prices and increase the sustainability of small forest tenures (Ambus & Hoberg, 2011; Bullock et al., 2009; McCarthy, 2006; Parfitt, 2005; Pinkerton et al., 2008; Pinkerton & Benner, 2013). Capital, skill-building and technological support alongside greater devolution of forest management

authority through legislation could go a long way towards ensuring that innovations which foster timber and product diversification move beyond initial phases into viable initiatives and businesses within CFs to increase sustainability (Ambus & Hoberg, 2011; Benner et al., 2014; Bullock & Hanna, 2012; Dahal et al., 2012; Haley, 2002).

#### **5.4 Chapter Summary**

The data presented in this chapter shows that both CFs demonstrate financial self-sufficiency and generation of local socioeconomic benefits, clearly establishing this link with SE. The CFs in this research demonstrate strength in their support of groups and projects that provide benefits to a wide range of community members contributing to enhanced community cohesion, support for vulnerable groups, accessibility to opportunities and increased quality of life, all benefits which are highlighted in both CBFM and SE literature as supporting sustainability (Dahal et al., 2012; Furness et al., 2015; Madill et al., 2010; Ridley-Duff, 2008; Teitelbaum, 2014; Whitelaw & Hill, 2013). Innovative strategies both CFs used to secure start-up capital alongside community and political support, in addition to development of strategic plans and partnerships to leverage funds and opportunities to support economic development demonstrate a bottom-up approach to governance, which is another benefit promoted in both CBFM and SE literatures (Armitage et al., 2009; Borch et al., 2008; Diduck et al., 2015; Grimes, 2010; Madill et al., 2010;).

The local nature of the CFs and importance of local control is in alignment with benefits ascribed to SE, as well as with participatory governance as highlighted by Teitelbaum (2014) for the evaluation of Canadian CFs. People in both case communities perceived their CF as giving local people greater influence regarding how the forest is used, and how the profits are spent in

the community and local area. Degree of investment into various community sectors reflects community values, demonstrating a level of autonomy and decision-making authority (Charnley & Poe, 2007; Teitelbaum, 2014). This perception of influence is an important component for successful stakeholder participation (Reed, 2008). Based on the data, it was found that LNTCFS pursued social equity more intentionally than WGCFF through follow-up community meetings and wider economic development planning. This active striving towards social equity by LNTCFS is key to ensuring that vulnerable groups are not excluded from benefits from resource management, and is linked to increased sustainability (Bullock & Hanna, 2012; Schlosberg, 2007).

Although there were a number of outcomes which demonstrated strength for both CFs, there were also limitations which may threaten sustainability. Even though the CFA tenure system allows CFs to operate a forest license, distribute profits as grants for community benefit, and pay a lower stumpage rate, the system itself limits operational innovation by requiring CFs to harvest timber under the same standards as industry. Although NTFPs development is encouraged within the CFA tenure, this structure is not adequate for enforcing exclusive access or for addressing issues pertaining to First Nations land title. Both CFs expressed a desire to increase the size of their land base and AAC to ensure economic profitability over the long term, citing the FSF and independent Timber Supply Analysis as innovations which may help ensure timber supply in the meantime. However, these initiatives are more of a reflection of the pressures the Provincial tenure system and markets place on CFs to produce high volumes of timber while maintaining ecological integrity, rather than innovations towards sustainability (Furness et al., 2015; McIlveen & Bradshaw, 2006).

Changes in the tenure system have supported consolidation of larger companies, exacerbating economic pressures for CFs by creating fewer log buyers and reducing opportunities for CFs to diversify or sell logs to local sawmills or specialty enterprises (Furness et al., 2015; Teitelbaum, 2014). These market conditions have also decreased the number of small-scale local contractors making it more difficult for CFs to gain competitive bids and support local economies or develop additional businesses. Having a small land base contributes to the problem of finding available contractors, as neither CF is able to provide enough work to support the scale of these businesses on a full-time basis. This lack of economic development is reflected in the literature on CBFM (Furness et al., 2015).

These systematic factors alongside CFs' mandate to produce numerous local socioeconomic benefits within the provincial tenure system are in many ways unrealistic. Wider market or government factors are also identified as a challenge for both CBFM and SE organizations (Haugh, 2005; Madill et al., 2010; Ridley-Duff, 2008; Teitelbaum, 2014). However, simply increasing the land base without consideration of systemic factors could threaten sustainability by replicating industrial forestry. Greater consideration of input from CFs regarding land base size and AAC required for sustainability in meeting all provincial goals and objectives should be examined further by the province, as well as how policy changes in industrial tenures affect communities.

At the community level, engaging community members was identified as an ongoing challenge for both CFs, and a concern also identified in the CBFM literature (Dahal et al., 2012; Teitelbaum, 2014). Full community representation on boards was also identified as a short-

coming, as both boards currently lack First Nations representation, and for the LNTCFS, representation from outlying communities in the partnerships. Reasons given for this lack of representation were limited community capacity and few people to draw from for governance, which are common issues pertaining to CBFM and SE initiatives (Abrose-Oji et al., 2014; Benner et al., 2014; Bullock & Hanna, 2012; Charnley & Poe, 2007). Being more intentional with outreach and prioritizing public participation and equitable representation may help build capacity and address challenges related to sustainability (Dahal et al., 2012; Furness et al., 2015; Teitelbaum, 2014). Actively building capacity and providing resources for groups to increase participation in benefits through education is cited as another way to mitigate inequity in CBFM and SE (Ridley-Duff, 2008; Teitelbaum, 2014).

Although it is great that community members feel they have greater local control through community grants, it is concerning that community members feel that social services and public institutions, such as schools, fall short of the required funding to provide adequate support and opportunities for people in rural areas. Increased investment into local non-profit social service organizations by CFs may reflect a wider societal trend of reduced government funding and increased reliance on volunteerism, a concern highlighted by many in the SE literature (Dart 2004; Dey & Steyaert, 2010; Mason, 2012; McCarthy, 2006; Teasdale, 2012;). If responsibilities are in fact being downloaded to communities, government must ensure that capacity development is invested in and supported.

One opportunity which shows promise for increasing the sustainability of SEs and CFs is finding ways to evaluate and measure economic, social and ecological progress over time

(Haugh, 2005; Ruebottom, 2011). In doing so, CFs may be able to make a stronger case for CBFM and advocate for support for innovative practices within the Provincial CFA tenure. The next chapter will look at the mission and vision of each CF, changes over time in practices and understanding of their purpose, and ways that each CF currently measures their progress. SFOL will be used to identify the extent of learning for sustainability from these evaluative practices, and ways to enhance these practices for the development of innovative progress measurement tools.

## **Chapter 6 : SFOL and Measuring Progress**

Progress measurement has been widely cited in the SE literature as a means for organizations to move towards greater economic self-sufficiency, participation, social equity and innovation (Haugh, 2005; Madill et al., 2010; Ridley-Duff, 2008; Ruebottom, 2011). The need to establish a clear mission and vision and to evaluate progress on multiple levels over time is key to the long-term sustainability of an SE (Haugh, 2005; Ruebottom, 2011). As mentioned in chapter 2, SFOL shows promise for helping organizations move towards greater sustainability. The SFOL framework by Molnar and Mulvihill (2003) will be applied to each CF in this section, using headings to discuss the level of implementation and degree of commitment to being a sustainable organization. In this way, practices currently being used by each CF will be evaluated, leading to policy implications in the following chapter.

### **6.1 Sustainability Vision and Mission**

Both CFs have a clear mission which incorporates ecological, social and economic considerations into forest management (LNTCFS, 2016g; WGCFC, 2016d). These mission statements are designed to communicate their purpose concisely and clearly, and have been amended within the last five years. The LNTCFS communicates a desire for local control of forest resources for the purposes of self-determination, economic stability, and environmental stewardship, leading to long-term sustainability of the five communities in the partnership (LNTCFS, 2016g). The WGCFC expresses its mission of managing the forest tenure in an ecologically and socially sustainable way in order to generate economic opportunities and benefits for Wells Gray Country (WGCFC, 2016d). Both mission statements incorporate

economic, social and environmental aspects of CF management for sustainability, and clearly define who the beneficiaries are.

Many board members in both communities communicated that they clearly understood the main mission of the CFs by bringing up core ideas of forest sustainability and long-term community benefit. In fact, the LNTCFS has their mission statement written on the white board in the office in clear view (Participant 2; Observation, October 28, 2015). One participant described sustainability as a primary focus of their CF, to ensure that a forest remains for many generations to come:

*“Number one it’s to manage the forest around the community, the best way it can. To make sure that there’s a forest there forever [emphasis] for the community, not to just take and cut everything and say well we’ve got it done, now we just let it go. No, we’re not that kind of company. We’re one that looks to five generations down the road, that there will always be trees, they may not be the same kind of trees, you know global warming might change things, but at least we’re going to do the best we can, with the best seed and the best trees, the best whatever we can do, so that the future is there. That to me is the number one goal.”* (Participant 10)

The LNTCFS also has clear social, economic, and resource management objectives, listed in their most recent management plan (LNTCFS, 2015c). The eight provincial objectives for CFs are also listed, along with exactly what the LNTCFS is doing to meet each of these objectives (LNTCFS, 2015c). The LNTCFS also has a very clear set of purposes, which are listed in their society legal document and on every financial statement produced by the society. Figure 6.1 shows these purposes, taken from the LNTCFS (2014a) strategic plan.

## Figure 6.1 The LNTCFS purpose statement from 2014 strategic plan

From (LNTCFS, 2014a, p. 5)

**“The purposes of the society are:**

- a) To create a long term sustainable plan for forest resources that benefits the people of the Lower North Thompson;**
- b) Preserve ownership of local natural resources for the people of our area, promoting self-determination for the people of this valley;**
- c) To create sustainable employment, new business opportunities and investment;**
- d) To provide a new opportunity for community management of local crown land;**
- e) To provide long term opportunities for achieving a range of community objectives including:**
  - i. employment;**
  - ii. skills training;**
  - iii. forest related education;**
  - iv. social, environment and economic benefits.**
- f) To meet the objectives of the government in respect of environmental stewardship including the management of timber, cultural and heritage resources.”**

The LNTCFS also added areas of focus, along with goals and objectives for each area of focus, from their strategic planning meetings to highlight their priorities moving forward (LNTCFS, 2014a). For the LNTCFS, the strategic plan states that the statements in their objectives column are designed to be measurable outcomes to determine how well their actions meet their goals and areas of focus in relation to their vision (LNTCFS, 2014a). These are shown in Table 6.1 and support the purpose statement of the society.

**Table 6.1 Areas of focus, goals and objectives in the LNTCFS strategic plan**

Adapted from (LNTCFS, 2014a)

<b>Area of Focus</b>	<b>Goals</b>	<b>Objectives</b>
Education	Engage LNT residents in knowledge of LNTCFS, CFs, and NRM.	-Provide, enable, facilitate training and education. -Public resource for community outreach and awareness.
	Opportunities for innovation and research.	-Develop or facilitate forest research and innovations.
Forests and Environment	LNTCFS will be managed sustainably for benefit of citizens in LNT.	-Manage CF with long-term investments into land base.
Communities	LNTCFS will provide stable source of revenue and employment for benefit of citizens in LNT.	-Manage CF to provide long term, stable source of revenue and employment.
Expansion and Investment	LNTCFS will manage and own lands in addition to CF land base for benefit of citizens in LNT.	-Increase land base management or volume harvested by LNTCFS. -Financially prepare for investment opportunities

The LNTCFS is pursuing their management objectives and purposes through their operations, grant giving, support to programs, and their strategic plan with its areas of focus. Many of these objectives are fulfilled through practices such as investment into the land base through FSF and Land Based Investment Program, strategic partnerships such as the JCP and Lower North Thompson Fall Fair and Rodeo to leverage funds and support recreation tourism, hosting UBC students, creation of an economic development fund, and visiting outlying communities to engage more people in the benefits. The strategic plan and areas of focus guide

the CF to pursue education and public outreach, innovation, long term investments in land base, and investment opportunities to grow CF land base.

The objectives that the WGCFC uses are the ones set out in their management plan which pertain to the management and harvesting techniques on the land base of the CF itself (WGCFC, 2012c). The WGCFC also lists CFA provincial goals and what they are doing to meet each one (WGCFC, 2012c). The WGCFC also had four goals with corresponding objectives coming out of their 2014c strategic plan, shown in Table 6.2.

**Table 6.2 Goals and objectives from the WGCFC 2014 strategic plan**

Adapted from (WGCFC, 2014c)

Goals	Objectives
Manage WGCFC as a sustainable business	Expand the AAC managed by WGCFC
	Maintain and enhance AAC within the WGCF
	Develop 15 year timber supply plan to provide flexibility to changing markets
	Develop a 5 year operational plan
	Invest in intensive silviculture activities
	Manage WGCF sustainably
	Maximize value of log sales
	Expand use of fiber from WGCF
	Give priority to local DOC and WG contractors
	Develop NTFRs
Promote safe work environment in WGCF	
Establish and maintain open communications	Maintain and enhance communication with resource users and land owners
	External audits communicated to public
	Use variety of media to inform community of WGCF
	Maintain and enhance communication between parties
	Keep communication open with First Nations
	Foster positive relationships with MFLNRO Minister and District Manager, local MLA
	Develop process to provide funding projections to WGCFS
Refinement of society's	Review and amend policies for funding disbursements

policies and procedures	Develop a communications process
	Post society funding applications and requirements on WGCF website
Encourage Educational opportunities	Use land base of WGCF as educational resource for public schools
	Provide opportunities for post-secondary institutions to use WGCF for educational activities
	Establish linkage to post- secondary educational programs

Goals for the WGCF, as stated on their website are:

“The Wells Gray Community Forest (WGCF) will be guided by a sustainable forest management ethic. The WGCF will manage for multiple resources. These values are consistent with Kamloops Land and Resource Management Plan as well as other Local Resource Use Plans within the Thompson Rivers, Okanagan Forest District. The WGCF is designed to benefit the people of Wells Gray Country while maintaining a high standard of forest stewardship on the land base.” (WGCF, 2016d)

What can be ascertained from these lists of objectives is that the WGCF is almost exclusively focussed on operations and sustainable land management practices on the forest tenure while the LNTCF, in addition to managing the land base sustainably, is putting forth a more concerted effort into improving the social benefits and long-term sustainability of the communities in their partnership. The strategic plan for the WGCF did make some initial steps towards directing the WGCF to clarify how they benefit the social aspects of the community beyond grants, but did little to empower the CFAC to address education and public participation aspects (WGCF, 2014b). It seems in the WGCF partnership that the WGCF has the most power and influence, and as mentioned earlier, all three parties are working towards understanding their roles in relationship to one another.

Although the purposes of the LNTCF and the WGCF have remained relatively unchanged since their inception, both organizations have shown some evolution regarding their

mission statements over time. Changes in the mission statements for both CFs are shown below in Table 6.3.

**Table 6.3 Changes over time in the mission statements of each CF**

Adapted from (LNTCFS, 2014a; LNTCFS, 2016f; WGCFC, 2011; WGCFC, 2012c; WGCFC, 2013a; WGCFC, 2014a; WGCFC, 2015; WGCFC, 2016d; WGCFS, 2016a)

LNTCFS	Year	Source	Mission Statement
	2014	Strategic Plan	“Our mission is to endure and provide to the Lower North Thompson through sustainable forestry.”
	2016	Website	“To establish local control of dedicated forest resources for the long-term sustainability of the five participating communities. To secure for these communities an opportunity to be more self-determined. To engender economic stability in these communities. To practice and model exemplary stewardship of the local forest environment”
WGCFC	2011	Annual Report	“The mission of the Community Forest is to manage, harvest, protect and expand the timber and non-timber resources of the Community Forest in a professional, balanced, sustainable and transparent fashion for the benefit of the community.”
	2013-2015	Annual Report	“To operate and manage a Community Forest Agreement License on a long term, sustainable, environmental and social plan that will maximize the economic opportunities and benefits for the residents of Wells Gray Country.”
	2012	Management Plan	
	2016	Website	
WGCFS	2011	Annual Report	“The purpose of the Society is to hold the CF shares and to receive surplus funds from the WGCFC & to distribute the funds to community organizations for community projects.”
	2012	Annual Report	“To promote the economic and social welfare of the residents of the Wells Gray Country (including the District of Clearwater), including the provision of support for benevolent and charitable enterprises, federations, agencies and societies engaging in furthering these purposes.”
	2012	Management Plan	
	2016	Grant application form	
CFAC	2016	Website	“To be a volunteer advisory body to the Wells Gray Community Forest Corp. (WGCFC ) Board of Directors; To raise the public’s awareness of the Community Forest

			(CF) and how it can benefit them; To encourage and foster the public participation in the CF by holding public meetings, open houses, joint field trips, and information session; To assist with the development of a communication plan that holds the CFAC and WGCFC accountable to the public’s concerns and input.”
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One shift for all the mission statements over time is that they provided greater clarity over who the beneficiaries of the CF are. For example, the WGCFC’s and the WGCFS mission statements shift from describing their roles for community benefit, to the specific benefit of Wells Gray Country. For the LNTCFS, what is meant by sustainable forestry is expanded on in the most recent mission statement to incorporate both forest stewardship and community sustainability (LNTCFS, 2016g). For the WGCFC, there is a shift towards mention of the social and economic benefits from the management of forest tenure (WGCFC, 2011, 2016d). The WGCFS expands on community benefit, to describe what kinds of organizations receive benefits and the purpose of those benefits - for increased welfare (WGCFS, 2011, 2016d).

The important process of aligning mission statements with community values over time was brought up by many participants. Community input into strategic planning was seen as a primary driver for this shift. Some participants described this process of alignment with community values:

*“Well when I came on, we had no mission or vision. We had, I think we had a vision statement I believe, and that was actually put into the very first management plan. But it wasn’t something that was necessarily direct to our area and direct to our people that were within the area, so out of the meetings that we had, came our vision and our mission statement that’s more aligned with what the people in the community believe in.”*  
(Participant 2)

Some participants shared that their perception regarding what constituted community benefit shifted, as well as their understanding of the CFs role in providing these benefits:

*“You know, initially, what I felt the society, I’ll use my point of view, is that what the society should be funding is touchy-feely. If it’s not something... [that one can] touch and visually see, then we shouldn’t be interested in it. And you know, then you start receiving these applications, seeing the demands, and you realize that, you know, everything is not brick and mortar, that it goes so far beyond that, and in order to meet their requirements of what the community wanted, and what best benefits the community, you realize that, no, I would have to say, we on the society have been a full change in circle in looking at all the different grants, and the type of grants that, you know, that go beyond our original, first thoughts were, which I mean, is a learning curve, it’s a process.” (Participant 9)*

Despite the shifts in mission statements though, another participant mentioned how the core purposes of the CF have remained largely unchanged over time:

*“In regards to the purposes of the society, written by those original board members, back 12 years ago, I think, even though it’s a little wordier than that... And, I think for the most part, they hit the nail on the head with those. You can start dividing things up and, is it a vision statement? Is it a mission statement? Vision, strategic planning, we have all these different layers of how to put things together, but I think we’re evolving, and I think we’re still writing our policies...” (Participant 3)*

What can be ascertained from this section is that both CFs are committed to sustainability, and demonstrate this through clear mission and vision statements which have evolved over time to better reflect community values. This commitment to sustainability vision and mission, as well as changes over time towards clarification of goals demonstrates that CFs fulfill this first criteria for SFOL.

## **6.2 Sustainability Education**

Neither CF invests in formal sustainability education for its board members or staff. The WGCFC chooses board members based on the forestry or business expertise they can bring to their committee in this regard (WGCFC, 2012a). The LNTCFS does provide an information packet to new board members who join, which includes the official society document, policies, maps, and board member responsibilities (LNTCFS, 2014c). Both CFs are a part of the BCCFA network, and send representatives to the annual conference to learn about practices other CFs are

implementing. Participating in the BCCFA indicators report also helps each CF learn about practices that are sustainable and areas to grow in.

Some informal learning regarding sustainability has also occurred in each CF. For example, one participant described the initial stages of learning about how to diversify the local economy in their community, and the role a CF tenure could play in accomplishing this. Another participant described the process of learning that the CF is more than just harvesting trees and selling them for profits, and that there are many other spinoffs from silviculture, land management, and processing that also benefit the local area and increase sustainability. Another avenue of learning which some participants mentioned was how to bring different ideas together as a board to accomplish the mission of the CF.

### **6.3 Organizational Learning Elements**

Both CFs demonstrate organizational learning elements in their operations. The LNTCFS, for example, has a clear shared vision, which emerged from the strategic planning process, of hosting community meetings and compiling feedback into a strategic plan with areas of focus, goals and objectives (LNTCFS, 2014a). Although there was no clear process or activity related to team-building, there was some evidence of a sense of team in making decisions with a high value placed on coming to a consensus together as a board (Participant 2, Participant 3, Observation, November 12, 2015). There was no evidence of pursuit of personal mastery or mental models, but there was some evidence of board members growing in skills and understanding of what the CF does and all the activities involved to ensure sustainability. Finally, the LNTCFS did demonstrate systems thinking, in the way they understood their role as a CF not just about operating a successful forestry business, but about supporting

socioeconomic sustainability and the future of the local area. This is shown through their strategic plan and focus on education and investment into economic development, and the JCP program to develop skills and safety training for local people.

The WGCFC does have a vision, but it is not as widely shared among the board and between boards. There was no clear process or activity related to team-building, personal mastery, or mental models, but it was clear that at least one board member learned about what is involved in running a forestry business, including silviculture, regulations and markets. There was some evidence of systems thinking when it came to forest health and considering compounding and competing issues such as watersheds, steep terrain, fire prevention and visuals in harvesting and management. However, systems thinking did not extend towards a wider understanding of community socioeconomic benefits, which was largely still limited to giving profits to the society to distribute.

The WGCFS had a more clearly defined shared vision and focus on team building, in terms of making decisions together and coming to a consensus on grant recipients (Participant 7, Participant 8). There was no clear process or activity related to personal mastery, or mental models, but some board members did grow in their understanding of forestry business and community values based on granting requests. The WGCFS demonstrated some evidence of growth in systems thinking, as they are now considering the role they play in keeping the WGCFC accountable to operating at a sustainable harvest level and disbursing operational profits.

The CFAC also has a clearly defined shared vision of engaging the public about forestry. In addition, they demonstrate team building through their use of a debriefing tool for NFW to learn from one another and improve outcomes in subsequent years (Participant 8). Although there was no clear process or activity related to personal mastery or mental models, there was some consideration of systems thinking and a desire to play a larger role in the overall function of the CF to improve sustainability.

#### **6.4. Leadership Towards Sustainability**

Many participants confirmed that both CFs experienced significant growth in their operations from their inception to present, seeing huge increases in volumes of timber harvested alongside revenues. In response, both CFs have increased their level of investment into the land base through silviculture beyond provincial requirements, as well as in reporting and management for wildfire, watersheds, and visuals. This growth in CF operations also led to changes in the role of directors, from more hands on forest management to more policy and decision-making, delegating management to general managers and other supporting staff members.

Many participants also mentioned an increase in the number of policy and administrative tools and addition of more skilled board members as evidence of their maturation as an organization. Some of these policies include ones involving board member selection, local contractors, and grant distributions to make these processes more transparent and equitable, which is an important aspect of accountability, especially as profits and cash flow increase. One major shift for the LNTCFS that some participants shared was improved fund

accounting to better understand costs, such as silviculture liabilities, in order to be free to distribute more funds for benefit while ensuring ongoing financial sustainability.

As profits from the CFs grew, both were able to increase the number and size of grants given to community groups as both documents show and many participants indicate. This increase in profits also gave rise to greater opportunities for strategic partnerships with other local non-profits and government to leverage greater opportunities, as well as funds set aside for larger capital projects to generate greater socioeconomic opportunities for communities within the benefit areas.

Many participants mentioned an increase in getting the word out on a more regular basis through a greater number of avenues, such as websites and radio. This increase in advertisement, alongside the increase in funds and applicants through the grant process was seen as having increased awareness of the existence of CF in each community, but not necessarily the understanding of the operational activities carried out by the CF, as some participants explained:

*“Well the Community Forest Society had a pretty low profile in the beginning years, certainly we had articles in the newspaper and such, but people really didn't understand what this, this thing was. And we have a small office downtown, however as we give out more funds and support more activities, the profile is rising and certainly a lot of local societies are putting up their hand and saying we have a project we'd like to support, and could you support us? So our profile is certainly rising so that's a good thing. I think that's the whole idea.” (Participant 1)*

These examples above demonstrate that both CFs have developed leadership capacity towards greater sustainability over the course of their operations. The LNTCFS board members and staff clearly demonstrate leadership towards sustainability on an ecological and

socioeconomic level, integrating these values in forest management over time. The WGCFC board does clearly pursue ecological sustainability in its operations, but is less clear in its pursuit of socioeconomic sustainability for the local area. The WGCFS board does seem to be moving towards a more holistic approach to sustainability as it considers its accountability role in relation to The WGCFC (Participant 7). The CFAC board seems to have a focus on socioeconomic sustainability, with a stronger desire to integrate this aspect of forest management into the operations (Participant 8). There is a need for more integration between the WGCFC boards in pursuing sustainability on all levels.

### **6.5 Rigorous and Systematic Measurement of Progress and Accountability**

When asked about how progress was identified for each CF, many participants mentioned operational profits and amount of funds distributed and re-invested into the community as grants. Infrastructure built using CF grants was also seen as evidence of progress. Other measures included number of bursary recipients who have finished their education, number of participants involved in the JCP program, and volume of wood logged by local contractors. Additionally, many people felt that local forest management was a drastic improvement from industrial forestry, indicated by increases in level of silviculture and forest mapping, and amount of funds invested into the CF landbase. Level of reporting to the community was also seen by many as a key indicator of progress, along with how effectively problems and complaints are addressed by the CF. AGMs by both CFs were also mentioned by many participants as a platform to invite public input and identify progress.

When asked how progress was actually measured, again operational profits and distribution of funds to the community was mentioned. Both CFs hire accountants to organize

financial statements and make these available to the public, although these are not audited. Harvesting and silviculture on the CFs is carefully managed and reported to the province, because of provincial requirements and also the commitment of both to improving the land base.

The strategic plans were also mentioned by many participants as important tools to evaluate and measure progress beyond economic and silviculture goals, because they include input from community meetings, in addition to concrete steps (measurable objectives for the LNTCFS and goals and activities for the WGCFC) that tie in with the mission and values that the organizations and wider community hold. The follow up community meetings hosted by the LNTCFS were also seen as a way to assess progress on the initial strategic plan by asking community members for feedback.

Some participants mentioned that annual plans, newsletters and reports by each CF are designed to report on the level of progress in different areas of CF performance, including finances, silviculture, local contracting, and grants. Restricted fund accounting by the LNTCFS was seen as a tool by some participants that allows board members to see progress by putting funds into accounts associated with strategic plan goals. Participation in the BCCFA forest indicators report for both CFs was seen by some participants as a way to measure progress, allowing for reflection using BCCFA metrics, comparison to other CFs through baseline trends, and areas for improvement. Additionally, the WGCFC has had a number of external reports, such as a forest practices board audit, forest practices report on community watersheds, fuel assessment reports, and an external audit, which contribute to progress measurement through input from organizations independent of the CF (Participant 8, Participant 15).

The CFAC measures their progress regarding NFW through a series of questions that lead to a discussion on what worked well, what was tricky, and what could be improved in hosting NFW in the following year (CFAC, 2016). Also included are action items with roles for specific people to accomplish before the next meeting (CFAC, 2016).

In terms of progress assessment towards goals, some participants from both CFs reported that their organizations are reviewed at least annually at specific board meetings through comparing policies to practices in relation to goals to evaluate progress. WGCFC states in their policy manual that annual assessment of and evaluation of organizational performance for governance as well as management must be completed (WGCFC, 2012). Some participants reported that cut plans, budget, yield and long term sustainability of forest are evaluated by the GMs, who in turn reports to board members of LNTCFS and WGCFC annually to determine whether practices are investing in the long-term future of the land base (Observation, October 22<sup>nd</sup>, 2015). For the LNTCFS, financial statements are provided at monthly meetings, which compare current monthly and annual expenditures to the previous year's (Observation, November 12, 2015). Beyond these general statements from participants and observations, there was no clear protocol, or set meeting reported in documents or personally observed, dedicated to assessing progress.

Although indicators of general progress were identified by participants, no formal process for reviewing progress was revealed through interviews for both communities beyond silviculture obligations and reporting to the province. As described above, it seems that both CFs have policies and documents in place that are designed to measure their progress over time, however, data show that progress measurement in practice is not systematic or rigorous.

## 6.6 Chapter Summary

Within the SFOL framework, both CFs have a clear mission and vision for their organizations that identifies the economic, ecological and social components of sustainability as well as who benefits. However, there were no formal avenues for education for board members identified in this research for either CF, and learning outcomes that were identified by board members were largely experiential. One reason for this may be that sustainability education development is not included in the eight provincial objectives for CFs, or built into the structure of the CFA tenure, therefore, it is an element overlooked at the community level. This omission of education in the policy framework for CFs may be a reflection of offloading governance responsibilities onto CFs, with expectations placed on individual CFs to develop their own capacity with little to no support in this regard. It may also reflect a prioritization of receiving consistent revenue from timber harvest over development of community capacity within the CFA tenure. The criticism of devolution of authority alongside a lack of capacity development is shared widely in the CF literature, as reliance on existing community capacity creates wide variations in success and reduces sustainability outcomes (Ambus & Hoberg, 2011; Benner et al., 2014; McCarthy, 2006; Teitelbaum, 2014).

Despite the lack of institutional support, development of sustainability education, personal mastery and mental model strategies are opportunities which may still be pursued within CFs through community members who bring extensive experience and knowledge of the forest industry. There is no doubt that the success of the CFs in this study is due to several dedicated and well versed individuals who were well aware of the benefits, opportunities and shortcomings of the CFA tenure. Ensuring this knowledge is shared and understood by incoming

board members and boards at large should be a key consideration to ensure sustainability within each CF. Potential formal avenues that could be pursued by CF boards include annual or bi-annual events for board members such as guest speakers, discussions on books or articles, or forest tours. Another avenue for formal learning could be sending more representatives to the BCCFA annual conference, ensuring that each board member has at least one opportunity to attend.

Systematic and rigorous progress measurement was severely lacking within both CFs, a challenge highlighted in the literature for both CBFM and SE (Benner et al., 2014; Paton, 2003; Sharir & Lerner, 2006; Teitelbaum, 2014). The province leaves identification and measurement of socioeconomic benefits largely to the communities themselves, without policy support or capacity development. Although strategic plans for both CFs present measurable goals and objectives for socioeconomic benefits, demonstration of this measurement was not observed, reported on, or found in any documents. Lack of systematic progress measurement at the community level may be linked with the absence of formal sustainability education, capacity development, and challenges and tensions inherent in measuring socioeconomic benefits (Haug, 2005; Ruebottom, 2011). Despite lack of capacity support from the province, CFs need to focus more on systematically measuring their progress so that they know whether their decisions and management are resulting in sustainable outcomes, and will continue to have success well into the future (Benner et al., 2014; Paton, 2003; Sharir & Lerner, 2006; Teitelbaum, 2014).

## **Chapter 7 : Conclusions and Policy Implications**

The purpose of this research was to determine how community-based approaches to forest management create socioeconomic benefits, and whether these approaches demonstrate innovation that result in more equitable distribution of benefits and sustainable outcomes. The related objectives were to explore how CBFM benefits from operations and revenues that are shared and distributed locally; to examine outcomes of benefit sharing in CBFM in relation to markers of SE; to explore how CFs measure progress and how SFOL may contribute to more innovative approaches to measurement; and to identify policy implications and provide recommendations for CFs and Province of BC.

A case study strategy of inquiry was used, and two cases in BC were selected, the Lower North Thompson Community Forest Society (LNTCFS) located in Barriere, and the Wells Gray Community Forest Corporation (WGCFC) located in Clearwater. Document review, participant observation and interviews were used to collect data and understand how each CF operates, how benefits are shared, and how progress is measured over time. The following captures my conclusions and recommendations in relation to the objectives set and the data collected.

### **7.1 Local Distribution of CBFM Benefits through Operations and Revenues**

The first part of this research aimed to determine what kinds of socioeconomic benefits are generated from CBFM. The data revealed that both CFs provide benefits to their communities in five main ways: extra investment in silviculture, hiring local contractors, local participation and control in governance, grants to community groups, and strategic partnerships to create wider benefit. These benefits are summarized in Table 7.1:

**Table 7.1 Summary of local distribution of CBFM benefits from operations and revenues**

<b>Benefit</b>	<b>LNTCFS</b>	<b>WGCFE</b>
<b>Extra investment in silviculture</b>	✓	✓
<i>FSF</i>	✓	
<i>Independent TSA</i>		✓
<i>Silviculture and tactical plan</i>		✓
<b>Hiring local contractors</b>	✓	✓
<b>Local participation and control</b>	✓	✓
<i>Volunteer board members</i>	✓	✓
<i>AGMs and community meetings</i>	✓	✓
<i>Community-specific values in management and decision-making</i>	✓	✓
<b>Grants to community groups</b>	✓	✓
<i>Community Halls</i>	✓	✓
<i>First Responders</i>	✓	✓
<i>Education and Schools</i>	✓	✓
<i>Social and Community Service</i>	✓	✓
<i>Recreation</i>	✓	✓
<b>Strategic partnerships</b>	✓	✓
<i>District (Clearwater/Barriere)</i>	✓	✓
<i>Fall Fair and Rodeo</i>	✓	
<i>UBC Students</i>	✓	✓
<i>Job Creation Partnership</i>	✓	
<i>Clearwater Secondary</i>		✓

The most widespread benefits found in this research came through the grants distributed to community groups and through the strategic partnerships created to leverage funds from other sources to create larger projects and opportunities than would otherwise be possible. One reason for this may be that the CFA tenure leaves revenue distribution through grants largely up to communities, giving them a greater ability to fulfill needs that are identified in ways that are relevant to local realities. Although benefits also come through greater

investment in silviculture, it was found that these are quite limited by the CFA tenure, which has strict regulations on timber harvesting, land management and reporting. Socioeconomic benefits related to hiring local contractors were present, but limited by the overall decline of small contractors, as well as small land base size and AAC, which is unable to support full time forest contract work. Local participation in governance is supported by the CFA tenure, and demonstrated by board members who show clear commitment to managing the CF land base sustainably and for community benefit. However, both CFs struggled to have full representation from outlying communities and First Nations, sustaining participation from the wider public, and creating opportunities for education about forestry. Some of these issues regarding participation stem from small populations to draw from for governance, and from efforts being directed towards day-to-day activities, such as managing operations and grants.

Based on the findings above, I suggest that over time, the constraints of operating within the tenure system and on a small land base have caused CFs to shift focus more towards achieving socioeconomic benefits through revenue generation rather than through operations per-se (e.g., hiring local people to do forestry work). Supporting evidence for this view is the lack of diversification beyond timber harvesting, which is a concern identified among CFs within the provincial tenure system (Ambus & Hoberg, 2011; Bullock & Hanna, 2012; Furness et al., 2015; Teitelbaum, 2014).

The support of projects and programs through grants and strategic partnerships builds community cohesion, instilling a sense of greater local control for the future of the areas. However, benefits from grants go towards things that do not directly create new economic opportunities or build capacity of existing community groups. Some grants do support tourism

through funding of festivals and recreation, building on existing economies, but not much has developed beyond this. A large reason for this is that the CFA tenure does not provide any support for capacity building for communities as they develop plans and strategies for distributing and generating socioeconomic benefit. Therefore, communities focus on grant distribution without establishing meaningful ways to measure the extent of socioeconomic benefits from any given initiative or to determine which kinds of initiatives are most beneficial according to local values and needs, overlooking long-term development. With that being said, the LNTCFS is demonstrating some long-term thinking through a fund dedicated to economic development, the Let's Talk forum, and grants for capacity building events focussed on grant writing and networking. Without clear support from the CFA tenure however, outcomes regarding long-term socioeconomic development for communities will be varied and few.

## **7.2 Equity and Sustainability in Benefit Sharing**

The second part of this research aimed to understand whether CBFM constitutes innovation that leads to greater equity and sustainability in benefit sharing. It was proposed that SE could help answer this through providing an organizing framework to identify the extent of innovation, equity, and sustainability in two CFs in relation to outcomes of benefit sharing. Three main linkages to SE that aligned closely with CBFM literature, and were supported by this research were:

- **Financial self-sufficiency and creation of local socioeconomic benefits**
- **Wider participation in governance and socioeconomic benefits**
- **Innovative organizational structures and practices leading to new strategies and outcomes.**

Therefore, it can be concluded that SE provides a very relevant framework for enhancing understanding of CBFM benefit sharing practices and outcomes, as literature from both fields highlights similar opportunities and challenges regarding innovation, equity and sustainability, also demonstrated in the CFs in this research. These challenges include securing financial stability for socioeconomic benefit, ensuring equity in governance and benefits, defining and pursuing innovation, and measuring socioeconomic progress, especially when economic and social benefits compete. Innovation in particular is a theme that links this framework and is used to frame the following discussion.

It was found in this research that the CFA tenure within the provincial tenure system limits and does not support innovation in CFs. Some evidence of this includes high levels of regulation, with the same expectations as industrial forestry operations for meeting AAC and silviculture obligations, yet with operations on a significantly smaller scale and long-term license on a single land base. Charging a lower stumpage rate still does not mitigate these costs. Also, the creation of the CFA tenure came out of negotiations with industrial tenure holders, which facilitated concentration of operations to a few multinational companies and mill closures in rural areas, creating a climate hostile to small-scale production or diversification by CFs. Another limitation for innovation stems from unrealistic expectations placed on CFs to fix ongoing problems. For example, barriers to NTFP development reveal an underlying directive for CFs to manage issues of relationship and resource ownership with First Nations, when what is actually required are treaty and legal arrangements at the provincial level. There is also no concrete support for value added businesses within the CFA tenure such as log sorting yards or specialty products, activities that have been shown to increase the sustainability of

smaller forestry enterprises. Local level capacity building for education in small business or how to develop goals or measure progress is also not supported within the CFA tenure, which could enhance development of innovative processes at the community level. Finally, although the CFA tenure is said to foster innovation, this is not defined in the provincial objectives, making it a challenge to meet and/or evaluate this unclear expectation.

At the community level, these shortcomings and hindrances of the CFA tenure in relation to innovation are demonstrated through CFs' high vulnerability to market prices, exacerbated by the scaling-up of multinational corporations and high operating costs relative to these companies (Haley, 2002; McCarthy, 2006). Attempts at developing NTFPs and value added businesses have not had long-term success or profitability (Ambus & Hoberg, 2011; Furness et al., 2015). Lack of First Nation representation on boards demonstrates that CFs are not adequate structures to solve larger issues related to land title and treaty (McCarthy, 2006). The lack of educational opportunities or capacity building initiatives means that innovation outcomes at the community level are highly dependent on existing skill-sets of board members, leading to widely different outcomes between CFs (Assuah et al., 2016; Benner et al., 2014). Progress measurement is not rigorous, making it challenging to know to what extent CFs are making progress in meeting socioeconomic goals beyond profitability or number of grants distributed (Teitelbaum, 2014). Finally, definitions among CFs are not uniform and practices and outcomes that community members identify as innovations may not actually be innovative.

The lack of support for innovative processes and outcomes through the tenure system negatively impacts equity and sustainability, because it limits the emergence of new

understanding. Equitable outcomes are largely dependent on how individual communities choose to pursue CF, and whether equity is identified as a priority. Sustainability is dependent on historical context, community values, and how the forest is viewed or related to, dependent on the perspectives people already hold rather than growing or shaping them in novel ways. In fact, there is limited evidence that CBFM in BC is changing perceptions of what constitutes sustainable forestry. Participants from both CFs clearly understand that they do forestry for community benefit, but forestry is still conceptualized and approached from a sustained-yield perspective. The CFs are committed to doing forestry well, investing in silviculture and doing a better job than large industry, but still look to increasing land base size to become more economically sustainable. The lack of diversification initiatives may also be evidence of this view.

Despite constraints presented by the tenure system, both communities have found ways to assert their agendas and gain benefits. To this end, it would seem that the CFA tenure, through the provision of revenues from forestry, gives communities the ability to support local values, including employment, self-determination, and stewardship. However, these benefits depend on generation of profits from forestry operations well into the future. The CFA system as it stands is vulnerable, unless innovation can be fostered to overcome constraints and challenges that threaten profitability and sustainability. Moving forward, SFOL has potential to foster innovative approaches to CF operations, revenue sharing, and measuring outcomes in relation to sustainability.

### **7.3 SFOL for Innovative Progress Measurement and Sustainability**

Building the learning capacity of CFs through SFOL has potential to inform how progress towards sustainability is measured and accounted for. Both CFs show evidence of growth over time, in level of operations and grants, policy and procedure, and ways to account for and measure progress. They also present a clear, sustainability-focussed mission and vision that defines the communities and members who are to benefit and that has evolved over time to reflect community values.

Although it was found that CFs in this study have a grasp on sustainability, the viewpoints regarding what constitutes sustainable forestry are shaped by factors including historical context, local economies, and values held by community members. Investment into formal sustainability education through development of personal mastery (an individual's capacity to create a personal vision for growth) and mental models (self-reflection on interactions with others to develop skills of inquiry) for board members is currently lacking, and needs to become a priority in order to support learning and growth towards wider, shared understandings of sustainability. The lack of investment into formal sustainability education can be partly attributed to a lack of support within the CFA tenure, which prioritizes sustainable forestry operations over capacity building and community development. It may also be the result of time and capacity constraints on board members as they manage the complexities of day-to-day forest management.

No formal process for assessing progress was revealed for either CF in this research, beyond reporting on AAC and silviculture to the province. Strategic plan documents were an attempt by each to better account for progress towards goals, but it was not clear how these

plans were being used to inform practice. Capacity building support from the province may be required so that communities can develop more effective bottom-up approaches to progress measurement, which may also be supported through investment in formal sustainability education for board members. It would be beneficial to invest in board members and include them in the development of clear criteria and ways to assess progress, so that it is not just left to the GMs and the province, a finding also supported by Assuah, (2016). In doing this, both CFs could better secure long term socioeconomic community benefit and sustainability.

#### **7.4 Policy Implications**

Based on the conclusions of the research a number of policy implications emerge for both CFs and provincial regulators.

##### **7.4.1 Pursuing Social Equity in Board Representation**

Both CFs should pursue greater equity in board representation to ensure full participation in decision-making and benefit sharing within their defined areas. This research demonstrates that in policy, full representation is desired, but not always realized in practice due to the limited number of volunteers to draw from, as well as the limits outlined in policy for set terms. The CFs in this study should consider ways to recruit or invite under-represented groups to serve on their boards, such as members from outlying communities and First Nations, through direct invitation or through networking. Pursuing community awareness through events and education, especially towards under-represented groups may also build awareness of the benefits of participating, as seen by the community meetings hosted by the LNTCFs, and interest in becoming involved in governance.

#### **7.4.2 Formal Educational Opportunities**

Both CFs could benefit from investing in more formal educational opportunities for board members to build capacity for managing the CF sustainably and for developing rigorous, systematic processes and ways to measure progress. This may help with understanding what is possible in terms of sustainable profits and harvest from a smaller land base, and whether CFs can truly be made sustainable. This research demonstrates that there has been lots of informal learning among board members as they have become involved in managing a CF and distributing grants in the community. However, there was a gap identified in formal sustainability education, to develop personal mastery or mental models regarding sustainability. As mentioned above, some of these opportunities could be realized through discussions on articles or recent news, or through ensuring board members have the opportunity to attend the BCCFA conference at least once.

Additionally, capacity could be built by delegating tasks and supporting board members in hosting community outreach events such as NFW, or even supporting capacity building workshops for community groups interested in applying for grants. In doing this, board members and community members alike may learn and benefit. Building reflective practices into board meetings regarding specific issues, or outcomes of new initiatives could also build capacity for each CF. The CFAC already uses reflective questions to assess NFW, and it may prove to be a simple and effective way to review performance and adjust their course of action for subsequent events.

### **7.4.3 Pursue New Economy through Diversification and Grants**

Both CFs need to consider diversification in their operations beyond timber harvesting in order to ensure long-term sustainability. This may involve lobbying government for more policy support regarding NTFPs, or for resources for capacity building or small business development for processing facilities or log sorting yards.

Although grants demonstrate clear socioeconomic benefits to community members and support important community services, it was found that the majority of grants do not create new economic opportunities in either community. LNTCFS shows some initiative to this end through a designated fund for larger economic opportunities, and the economic development planning forum hosted in Little Fort. However, this remains an area which needs greater focus to ensure community socioeconomic sustainability.

### **7.4.4 The LNTCFS Policy Implications**

There are three policy recommendations for LNTCFS from the outcomes of this research:

- 1. Ensure that clear procedure and policy are followed regarding distribution of grants to ensure long-term equitable and sustainable outcomes**

It was found that the LNTCFS does have a clear policy and process for application and distribution of grants, and most groups have followed this process and received grants without issue. However, other groups not familiar with the CF have found the process challenging as expectations regarding information required were not made clear, making timelines much longer than anticipated. Additionally, 2014 saw more grant money given than was reported at the start of the grant process, and some groups reported taking more time to implement

projects, or changing projects altogether after receiving a grant. Although flexibility may result in greater possibilities for short-term benefits, the LNTCFS should consider adhering more closely to policy and procedure as operations and revenues grow. This may involve asking for more information from groups in their application regarding their purpose and role in the community, giving out the amount of grants stated at the beginning of the grant process, setting clear timelines and ensuring grant money is used for stated purposes, and saying no to some groups in order to ensure timelines are not extended unnecessarily. In doing so, the granting process will continue to operate sustainably and equitably, serving the local communities well into the future.

## **2. Develop ways to account for and measure additional benefits already being provided**

This research found that the LNTCFS demonstrates a holistic approach to CBFM through their pursuit of ecological, social and economic outcomes in their operations and grants. Some of the ways they show their commitment to social equity is through the JCP program, FSF, follow-up community meetings, advocacy, and initiatives towards wider economic development for the region. This demonstrates wider benefits beyond revenues and net profit, so finding ways to account for and measure some of these investments and their outcomes will go a long way towards lobbying for continued policy support, and maintaining support from the community members for the CFs and growth in the conviction of its benefits and success.

## **3. Pursue wider economic development for the area**

This research found that community members from the Lower North Thompson have a number of ideas for ways that the North Thompson Valley as a whole could create wider

economic development, through tourism, sustainable agriculture, or the addition of another business to supplement the economy alongside forestry. Steps towards economic development through the creation of a restricted fund, a meeting held in partnership with Clearwater, and the addition of a large grant for the purpose of leveraging funding for a new opportunity for the area show promise. In connection with recommendation number two, finding ways to factor in pursuit of wider economic development into the progress of LNTCFS could go a long way towards convincing community members of the merits of this initiative, especially since it may involve hard work and long-term investment before larger benefits are realized. Wider economic development should continue to be fostered and pursued by the LNTCFS, as it has large potential to increase the sustainability for the area, and for the CF as well.

#### ***7.4.4.1 Recommendation Outside of Policy***

##### **1. Investigate operational costs**

In section 5.1, income analysis of financial statements, it was found that costs for operations were significantly higher for the LNTCFS than the WGCFC, by about \$500,000 each year for 2013-2015 for the harvest of less timber. These higher expenses are reflected in lower percentages of revenues and fewer dollars distributed as grants to community groups, although these expenses may also demonstrate stronger support for local contractors. Either way, having such high operating costs may be draining potential benefits, so reducing any unnecessary costs may help ensure the LNTCFS is able to generate maximum value from operations over time. If it is found that higher operating costs are creating wider socioeconomic benefits to local contractors or creating employment, then these benefits should be acknowledged and accounted for.

#### **7.4.5 WGCFC Policy Implications**

##### **1. New operational procedures for better communication between the three boards and integration of CF mission**

The data revealed that in the three board structure set-up for the management of the WGCFC, each operates separately from one another, with the WGCFC overseeing operations, the WGCFS overseeing grant distribution, and the CFAC overseeing public input and participation. This has led to a fragmentation in roles and understanding of the overall mission of the CF, with each committee focussing narrowly on its own tasks and responsibilities. Results highlighted that communication needs to be improved between the boards, and value placed on involvement and input for reports such as the strategic plan, especially from the CFAC. There is also a need for the WGCFS to step into its role of holding the WGCFC accountable in its management, which is a goal that is currently being pursued and realized. The three board structure of the WGCFC holds much potential as a vehicle for great participation, and improving communication among the boards could increase sustainable outcomes.

##### **2. Consider job and skill development initiatives to build capacity**

Although the WGCFC does have a clear mandate and process for hiring local contractors, some concerns were raised regarding whether some contractors are excluded while others gain a competitive advantage in the hiring process as they accept contracts and become more familiar with CF operations over time. Another concern was that some contractors do not possess capacity for all parts of a given contract, and therefore are not eligible for hire. Other capacity building initiatives beyond hiring local contractors for operations could be supported by WGCFC to mitigate some of these concerns. This may include sponsoring a JCP or other type of hands on training program within the CF, supporting start-up contractor businesses through

grants or loans, or an educational initiative focussed on forestry or on operating a small business. Initiatives such as these have the potential to foster capacity and local economic development in the forest sector, despite market forces and industry which work against small businesses.

**3. Consider additional ways to pursue and measure benefits, beyond economic bottom-line or number of grants or dollars**

There is no doubt that operationally, the WGCFC is doing well in its role of managing the CF land base sustainably, and doing so profitably. However, as outlined in policy implications one and two and throughout this research, the WGCFC, by narrowly focussing on operations, is missing the potential of increasing sustainability through pursuit of socioeconomic benefits in ways beyond direct operations and grants. Some examples identified include building capacity of local contractors or grant-recipient organizations, and pursuing social equity for participation in employment, forest governance or grants. The initially narrow focus may be starting to shift with the creation of a special grant this year to leverage a larger project or economic opportunity for the area. Having the boards communicate and work more closely together may continue the process of understanding what constitutes wider community benefit, and create new ways of conceptualizing and measuring progress over time for sustainability.

***7.4.5.1 Recommendation outside of policy***

**1. Organize and update reports on website**

Although WGCFC has a website with general information, reports, newsletters and updates, there are some improvements that would ensure all information is up to date and easy to access. The lists of board members need to be updated, and the links for archived annual reports and financial statements are broken. Some documents, such as the external

audit conducted in 2014 were promised to be posted on the website in the 2014-2015 annual report, but to date are not present. Financial statements are posted, but challenging to find, and some years do not include information regarding assets and liabilities. Organizing financial statements on one page would enhance transparency and accountability with community members. Also, compiling a complete list of grants given to organizations and what they were used for prior to 2015 directly onto the website would make benefits clearer to the wider public. Making these changes to the website would go a long way towards giving board members and community members alike easier access to information and knowledge regarding the ways the WGCF is benefitting both the forest land base and local community.

#### **7.4.6 CFA Policy Suggestions**

##### **1. Continue to support and maintain lower stumpage rates within the CFA tenure**

This research on CFs highlights the importance of the reduced stumpage rate to the province for the profitability of CFs. Without this discount, the CFs in this study would not be profitable, simply because the costs of operation on a small land base and AAC would exceed revenues from log sales. This research demonstrates that CFs provide socioeconomic benefits well beyond economic profitability, and that the value of these benefits should compensate for, or even exceed, income forgone from stumpage.

##### **2. More support for diversification within the CFA tenure**

This research found that CFs have been able to do little regarding diversification of forest products through NTFPs, log sorting yards, local processing, ecosystem-based management or eco-certification, even though these are strategies cited as ways to increase the profitability and sustainability of smaller forestry tenures. Both CFs have tried to pursue

NTFPs, but ran into issues regarding enforcement of exclusive access, and lack of economic feasibility for products such as biofuel or post and rail from tree tops. The province could do more regarding support for diversification such as having policies and start-up grants to support new initiatives.

### **3. Support for bottom-up approaches for measuring socioeconomic benefits through CF**

This research suggests that measuring socioeconomic benefits is an ongoing challenge for CFs, as they navigate the tensions between operational profitability and benefits derived from revenues. SFOL is one framework that uses learning to increase sustainability of organizations and that includes learning how to measure progress in innovative ways. Therefore, the CFA tenure could do more to provide resources and tools for capacity building in CFs as they design ways to incorporate metrics to measure progress and benefit outcomes. Connecting CFs with the BC Social Innovation Council may be one way to share tools usually used for social issues, and apply them in new ways for CFs.

### **7.5 Concluding comments**

Although this research was only able to examine two CFs, it is evident that CBFM provides a range of socioeconomic benefits for communities in BC, which have disproportionately suffered from the impacts of major shifts and downturns in industrial forestry in the province, a finding supported by many other scholars (BCCFA, 2015; Bullock & Hanna, 2012; Haley, 2002; Teitelbaum, 2014). As the literature highlighted a gap in context-specific study regarding benefit sharing in CFs (Assuah, 2016; Benner et al., 2014; Bowler et al., 2012; Furness et al., 2015), this study took an in-depth approach to understanding how the LNTCFS and the WGCFC operate and distribute revenues. Despite logistical challenges,

especially in their start up phases, both have been successful in growing their operations, hiring locally, and distributing revenues as grants to local community organizations within the last five years. They have matured from groups primarily concerned about creating local employment to decision-makers and stewards of the local land base and future of their communities. Future research examining factors that facilitate development of organizational capacity to measure socioeconomic benefits or progress would be beneficial as CFs take shape and grow towards maturity.

In the future, CFs in BC will have to continue to face the challenges of maintaining profitability and providing benefits, making a case for continued policy support. As they grow in number, learn to operate more effectively, and measure progress, they will continue to contribute significantly to the province of BC and act as an example for other jurisdictions interested in pursuing CBFM.

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## Appendix I: Community selection criteria

From Assuah et al., 2016

Community	Length of operation	AAC	Community Grant Process	Jobs	Education	Recreation	Legacy Fund	Reports/Meeting minutes available	Other benefits
Burns Lake Community Forest Ltd	Since 2005	86,000	3.2 million to community groups and organizations (2012)	1000s of hours employment , local contractors, investment into job creation	Courses, workshops, classroom visits, support of FPM, on the job training	Support of sites and trails, programs, partnerships with recreation groups	No	Annual reports on website (2010-2011) Operations info on website	Local processing, sustainable forest practices, tree-planting, First Nations involvement, NTFP development/diversification, support of local economy (millions)
Harrop-Procter Community Co-op	Since 2007	10,000	HPCC disburses money \$8600 in wood product donations, \$3000 annually to support water quality and research	5600 work hours provided by mill (4 full time plus 2 part time students)	Research	Trail upgrades, bridge over creek,	No	Newsletters available online	2 organizations, one for operations and one for stewardship, water quality monitoring, free wood slabs and wood chips to community, Donations of wood,
Sunshine Coast Community Forest	Since 2011	20,000	Yes		No	Support of local projects, mapping	Yes	Reports on website (2013), minutes available	Free firewood permits

Community	Length of operation	AAC	Community Grant Process	Jobs	Education	Recreation	Legacy Fund	Reports/Meeting minutes available	Other benefits
McBride Community Forest Corporation	Since 2010	50,000	Yes: policy For projects, economic development	No	No	No	No	Reports on website	No
Kaslo and District Community Forest Society	Since 2010	20,000	Yes, policies for dividend disbursement	local employment	Trades Scholarships ,	No	Yes	Monthly minutes available on website (policy)	Regular updates on activities/events
Lower North Thompson Community Forest Society	Since 2010	20,000	Yes, surplus revenue to non-profits	Job Creation Partnership	Scholarships and bursaries, education field trips	No	No	Annual financial statements, biannual newsletters	No
Cheakamus Community Forestry Society	Since 2009	20,000	No	Direct Employment (1260 person days)	Educational field trips	No	No	Annual reports and board minutes on website	70% work by First Nations 3 accounts
Dunster Community Forest Society	Since 2009	15,000	No	No	No	No	No	Financial statement and AGM minutes on website	No
Wells Gray Community Forest Corporation	Since 2010	33,500	Yes, the Society gives grants to community projects	Prioritizes local contracting (at least 85% local)	Forest tour, grants to schools	Yes, ski hill, trails	No	Financial Statements, Annual Reports, Annual plan	CFAC for public input, seat on corporation board for First Nations rep

## **Appendix II Interview schedule used for semi-structured interviews**

**Opening:** Hi, my name is Anne MacLean, thanks for meeting with me today. I am a researcher from the University of Manitoba doing a study of the socioeconomic benefits of community-based forestry, and how this contributes to the long-term well-being of your community.

**Purpose:** I would like to ask you some questions about forestry operations, how benefits are shared, ways you or others have benefited from community forestry, and things you have learned through your involvement in community forestry.

**Motivation:** Your input in this study will help us understand how this community benefits from forestry operations and revenues, and which approaches may lead to long-term success. It may also help other communities interested in starting their own community forestry operations to know which approaches work best.

**Time line:** This interview will take about an hour of your time. I have a consent form here which I would like to go over with you. [read through transcript with participant and sign]. Is it alright if I use this recording device for our interview? The recording will be used to make a typed transcript, which will remain confidential and be used for analysis.

**Transition:** I would like to start by asking you a few introductory questions regarding your community and role in forestry.

### *1) Introduction/Involvement in Community Forest*

- a) **How long have you lived in the community (or LNT area)?**
  - i) Are you originally from here?
  - ii) What brought you to this community?
- b) **What is your role in community forest management (if any)?**
  - i) How do you use the forest?
  - ii) How long have you been using the forest in this way?
  - iii) How long have you been involved in managing the community forest?
- c) **What was your reason for becoming involved?**
  - i) Why do you feel that community forestry is important for your community?

**Transition:** Next, I would like to ask you some questions comparing past forestry practice with current practices

### *2) Forest Management, Past and Present*

- a) **How would you describe the relationship between forestry and your community before the community forest agreement was implemented?**
  - i) Did people from your community work for (the local mill)?
  - ii) What did people in your community think of forestry (general perceptions)?

- iii) Were there any issues during the time the company was in business?
- iv) Were there any benefits to your community from forestry when (a company) managed the tenure?
- b) What made your community decide to apply for a Community Forest Agreement?**
  - i) Who was involved in creating the application for the CFA for your community?
  - ii) How was this decided? (in terms of who was involved in the creation)
- c) When creating the CFA application, what did you include as important values?**
  - i) How were these values decided?
- d) What made you decide on a Society legal structure, rather than a corporation?**
- e) How does the CF invest in Silviculture?**
- f) Is the CF satisfied with AAC and cut control requirements?**
  - i) Is the CF able to meet these requirements and fulfill the forest plan and community values?
  - ii) Has operating a CF increased opportunities to sell logs or fibre to small and medium, or specialty manufacturers?
- g) Is the community forest investing in the development of Non-Timber Forest Products?**
  - i) If so, what products are being developed, and who is developing them?
  - ii) If not, then why do you think this is the case?
- h) What are some main differences you have noticed in the community since the implementation of the CFA?**
  - i) Are there any notable benefits or drawbacks?
  - ii) Are there any issues or conflicts?

**Transition:** Now I would like to ask more questions about the ways your community benefits from community forestry.

- 3) *Operational Benefit streams and revenue benefit sharing*
  - a. How does the community forest hire contractors for logging, silviculture and site preparation?**
    - i. Are 'local' contractors used for logging and silviculture in the CF? Are there rules or policies about this?
    - ii. Have there been any new logging or silviculture companies established as a result of the CF?
    - iii. Do you know of people who have come into your community to work for the community forest? How many?
    - iv. CONFIRM the CF is the sponsor for the JCP program. How did this come about? Do you know people who have, or are currently a part of the JCP? How many?
    - v. Do you feel that the JCP has been successful? In what ways?
  - b. What groups in your community have received grants from revenue?**

- i. How were grant recipients decided on? (what was the decision process like)
  - ii. How do these grants benefit the wider community?
  - iii. Does the community forest invest in local recreation/trails or tourism?
  - iv. Is the community forest involved with local schools or university research?
- c. Are regular updates/meeting minutes/annual reports made available to the community?**
- i. If so, how are these updates provided? (website, newspaper, mail, etc)
  - ii. Is information regarding community forest operations easy to access to you?
  - iii. Do you regularly read these documents?
  - iv. How do people find out about who receives grant money in your community?
- d. Have you seen any economic development in the community as a direct or indirect result of community forestry?**
- i. Is there any long-term economic planning? Or any plans for economic diversification?
- e. What is the most significant benefit the community forest provides to you personally?**
- i. Is this the same for others in your community?

**Transition:** The last part of our interview relates to what you and members of your community have learned through operating a community forest agreement.

#### 4) *Learning*

- a. What have you learned from your involvement or role in community forest operation?**
  - i. What is a significant personal challenge you have faced in your involvement in the community forest?
  - ii. Have you received training in how to operate a community forest? From where?
  - iii. If not, how did you gain the skills necessary for your role with the community forest?
  - iv. What other things have you learned from your involvement?
- b. What was, (or is) a significant operational challenge that occurred (is occurring) related to the community forest operations?**
  - i. How was/is the problem (being) addressed?

- ii. Are there practices which the community forest has included in response to challenges or issues?
- c. **How would you describe the community forest's main goal or mission?**
  - i. Do you think this mission widely known within the organization? Within the wider community? Beyond the community?
- d. **How does the community forest measure progress over time, if at all? (ecological, social, and economic? One or all 3?)**
  - i. Do you think that the measurement used reflects what is really happening? Why or why not?
  - ii. If progress is not being measured, why do you think this is the case?
- e. **How has the organization changed over time, if at all, in:**
  - i. Vision or mission statement
  - ii. Employment and job training (JCP)
  - iii. Performance measurement
  - iv. Accountability reporting

**Closing:** Thank you very much for your time. This has been a very helpful and valuable conversation for my research, and I enjoyed hearing your perspective on forestry in your community. Do you have any final comments or questions for me?

I will be in contact with you next winter about the transcript from this interview for you to review for accuracy. If you are interested, I also plan on sending out my initial research findings, and a research summary next fall. Would you be interested in receiving a copy by mail or email?

## Appendix III Informed consent form for participants



**Research Project Title:** Socioeconomic Benefit Sharing through Community-Based Forest Management in British Columbia: Innovation, Equity, and Contributions to Sustainability Outcomes

**Principal Investigator:** Anne MacLean  
[Contact information]

**Research supervisor:** Dr. John Sinclair  
[Contact information]

**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.**

The purpose of this research is to determine how community-based approaches to forest management create socioeconomic benefits through their operations and thereby revenues for local communities. Understanding how these benefits are created and distributed has implications for the long-term sustainability and well-being of communities. There are many studies and reports that find community-based forest management can lead to better socioeconomic outcomes, but very few that look at specific examples. This research will aim to fill this gap.

Snowball sampling is a method being used in my research to gain interview participants. Forest operators, board members, forest users, grant recipients and local business leaders in your community will be provided with an information sheet by my initial contacts and other interview participants inviting them to contact me if interested in participating in an interview. This method of sampling will help better understand the scope of benefits which community forestry provides in my research.

Your participation will involve an interview lasting approximately one hour with questions related to forestry operations, past and present practices, learning, and ways your community benefits from community-based forestry. A recording device will be used, with your consent, to create a written transcript for analysis. At the end of your interview, you will also be given an information sheet with my contact information to pass along to other potential interview participants. This step is completely optional, and you are not obligated to pass this information sheet along to other people. I am not collecting names of potential participants.

This research and your contribution will benefit your community by providing an overview outlining strengths and areas for improvement which may increase or help sustain benefits over the long term. It may also help other communities pursuing community-based forestry learn from your experiences. This research will make a case nationally for the importance of local management of forests.

Precautions will be taken at every step in my research to ensure privacy and confidentiality. Audio and written files from your interview will be encrypted and stored on a password protected laptop and external hard drive which only myself and my research supervisor will have access to. Written files will not have your name attached to them, and will be given a designated interview number. Any quote shared in my final reporting will not reference your name or specific role in the community. If any information you share could negatively affect you personally or professionally, extra measures will be taken in reporting to ensure privacy and confidentiality, including paraphrasing or withholding specific quotes, and generalizing viewpoints so as not to reveal your role or position in the community.

Potential benefits from your participation in this research are personal learning and increased knowledge regarding community forest operations, including wider understanding regarding the ways your community benefits from community forestry.

If you wish to withdraw from the interview itself, or at any point following the interview, you are welcome to do so without penalty. You may do so in person, or through contact with me by phone or email. If you choose to withdraw, any recorded data, including your written transcript will be destroyed. However, you will only be able to withdraw and have your data destroyed up until June 2016. Once your interview is transcribed from audio to written form, you may read it over to ensure accuracy and revise the transcript as you wish. Feedback will be provided by email or by mail in a short document, summarizing initial research findings after data collection is completed, by January 2016.

After data analysis is complete, the research will be disseminated to you and members of your community in a summary document by mail or email by fall of 2016. It will also be published within the Natural Resources Institute at the University of Manitoba as is required for the completion of a master's degree. There is also strong potential that the research will be presented at conferences and published in a scholarly research journal. Interview audio recordings and transcripts will be destroyed by 12/17, through deletion from my laptop and hard drive.

**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 (REB). If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Coordinator (HEC) at [contact information], or by email at [contact information]. A copy of this consent form has been given to you to keep for your records and reference.**

Participant's Signature \_\_\_\_\_ Date \_\_\_\_\_

Researcher and/or Delegate's Signature \_\_\_\_\_ Date \_\_\_\_\_

I consent to be audio recorded for this interview: Yes  No

Participant's email or mailing address (only if you wish to receive a summary of research findings)

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**Research Project Title:** Socioeconomic Benefit Sharing through Community-Based Forest Management in British Columbia: Innovation, Equity, and Contributions to Sustainability Outcomes

**Principal Investigator:** Anne MacLean  
[contact]

**Research supervisor:** Dr. John Sinclair  
[contact]

**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.**

The purpose of this research is to determine how community-based approaches to forest management create socioeconomic benefits through their operations and thereby revenues for local communities. Understanding how these benefits are created and distributed has implications for the long-term sustainability and well-being of communities. There are many studies and reports that find community-based forest management can lead to better socioeconomic outcomes, but very few that look at specific examples. This research will aim to fill this gap.

Snowball sampling is a method being used in my research to gain participants. Forest operators, board members, forest users, grant recipients and local business leaders in your community will be recommended by my initial contacts and invited in writing to participate in this research to better understand the scope of benefits which community forestry provides.

Your participation will involve being observed at a (meeting/community event) as I make notes regarding decision-making, how people relate to one another, and any learning or changes over time related to benefit sharing. Signed consent forms will be received from each participant at the [meeting/community event] no later than the completion of the [meeting/community event]. This research and your contribution will benefit your community by providing an overview outlining strengths and areas for improvement which may increase or help sustain benefits over the long term. It may also help other communities pursuing community-based forestry learn from your experiences. This research will make a case nationally for the importance of local management of forests.

Precautions will be taken at every step in my research to ensure privacy and confidentiality. Any notes made will be kept in a designated notebook, which will be stored in a locked container. Notes transcribed for analysis will not include your name or any identifiers, and will be stored in a password protected computer and external hard drive which only myself and my research supervisor will have access to. If any information you share could negatively affect you personally or professionally, extra measures will be taken in reporting to ensure privacy and confidentiality, including paraphrasing or withholding specific quotes, and generalizing viewpoints so as not to reveal your role or position in the community.

Potential benefits from your participation in this research are personal learning and increased knowledge regarding community forest operations, including wider understanding regarding the ways your community benefits from community forestry.

If you have any concerns with my presence observing at a (meeting/community event), or with the use of any information shared at the (meeting/community event), you may tell me in person or through contact by phone or email without penalty. If you choose to withdraw, any pertinent recorded data will be destroyed. However, you will only be able to withdraw and have recorded data destroyed up until June 2016. Feedback will be available by email or by mail in a short document, summarizing initial research findings after data collection is completed, by January 2016.

After data analysis is complete, the research will be disseminated to you and members of your community in a summary document by mail or email by fall of 2016. It will also be published within the Natural Resources Institute at the University of Manitoba as is required for the completion of a master's degree. There is also strong potential that the research will be presented at conferences and will be published in a scholarly research journal. Recorded observations, both written and electronic, will be destroyed by 12/17, through shredding and deletion from my laptop and hard drive.

**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 (REB). If you have any concerns or complaints about this project you may contact any of the above-named**

**persons or the Human Ethics Coordinator (HEC) at [contact] or by email at [contact]. A copy of this consent form has been given to you to keep for your records and reference.**

Participant's Signature \_\_\_\_\_ Date \_\_\_\_\_

Researcher and/or Delegate's Signature \_\_\_\_\_ Date \_\_\_\_\_

Participant's email or mailing address (only if you wish to receive a summary of research findings)

---

## Appendix IV Ethics approval and renewal letters



**Research Ethics and Compliance**  
Office of the Vice-President (Research and International)

University of Manitoba  
208-134 Duane Road  
Winnipeg, MB  
Canada R3T 2N7  
Phone +204-474-7122  
Fax: 204-289-7173

### APPROVAL CERTIFICATE

October 26, 2015

SSHRC  
39092

**TO:** Anne MacLean (Advisor J. Sinclair)  
Principal Investigator

**FROM:** Loma Guse, Chair  
Joint-Faculty Research Ethics Board (JFREB)

**Re:** Protocol #J2015:106  
"Socioeconomic Benefit Sharing through Community-based Forest Management in British Columbia: Innovation, Equity, and Contribution to Sustainability outcomes"

Please be advised that your above-referenced protocol has received human ethics approval by the **Joint-Faculty Research Ethics Board**, which is organized and operates according to the Tri-Council Policy Statement (2). **This approval is valid for one year only.**

Any significant changes of the protocol and/or informed consent form should be reported to the Human Ethics Secretariat in advance of implementation of such changes.

#### Please note:

- If you have funds pending human ethics approval, please mail/e-mail/fax (261-0325) a copy of this Approval (identifying the related UM Project Number) to the Research Grants Officer in OR3 in order to initiate fund setup. (How to find your UM Project Number: <http://umanitoba.ca/research/ors/ort-fac.html#pr0>)
- if you have received multi-year funding for this research, responsibility lies with you to apply for and obtain Renewal Approval at the expiry of the initial one-year approval; otherwise the account will be locked.

The Research Quality Management Office 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*.

The Research Ethics Board requests a final report for your study (available at: [http://umanitoba.ca/research/orec/ethics/human\\_ethics\\_REB\\_forms\\_guidelines.html](http://umanitoba.ca/research/orec/ethics/human_ethics_REB_forms_guidelines.html)) in order to be in compliance with Tri-Council Guidelines.

[umanitoba.ca/research](http://umanitoba.ca/research)



Research Ethics and Compliance  
Office of the Vice President (Research and International)

Human Ethics  
206-198 Duffin Road  
Winnipeg, MB  
Canada, R2S 2N3  
Phone – 204-474-7100  
Fax – 204-259-7173

RENEWAL APPROVAL

September 23, 2016

**TO:** Anne MacLean (Advisor: John Sinclair)  
Principal Investigator

**FROM:** Kevin Russell, Chair  
Joint-Faculty Research Ethics Board (JFREB)

**Re:** Protocol #J2015:106 (HS18878)  
“Socioeconomic Benefit Sharing through Community-based  
Forest Management in British Columbia: Innovation, Equity,  
and Contribution to Sustainability outcomes”

Please be advised that your above-referenced protocol has received approval for renewal by the Joint-Faculty Research Ethics Board. This approval is valid for only one year and will expire **October 25, 2017**.

Any significant changes of the protocol and/or informed consent form should be reported to the Human Ethics Coordinator in advance of implementation of such changes.

## Appendix V Copyright permission for figures and photos

<b>Figure/photo</b>	<b>Page</b>	<b>Date</b>	<b>Copyright Permission</b>
Figure 4.1	50	March 28 <sup>th</sup> , 2017	Yes. Simone Carlisle- Smith
Photo 5.6	110	March 29 <sup>th</sup> , 2017	Hi Anne, Good to hear from you! Yes I confirm I am the copyright owner of the work and permission is granted to use it as described below Cheers, Mike

## Appendix VI List of grant recipients, amounts, and purposes from LNTCFS and WGCF

### 2011-2015

Adapted from (LNTCFS 2016e; WGCF, 2015; 2016b; 2016e)

#### LNTCFS 2011 Grant Recipients

Organization	Amount Received (\$)	Purpose
North Thompson Volunteer and Info Center	1000	For storage cupboards
North Thompson Fall Fair and Rodeo Association	1000	For agriplex
Barriere Curling Club	1000	For rink/building maintenance
Little Fort Recreation Society	1000	For various community events
North Thompson Communities Foundation	750	For proposal writing workshop
Barriere Lions Club	1000	For shelter in Feadar Park
<b>Total</b>	<b>\$5750</b>	

#### LNTCFS 2012 Grant Recipients

Organization	Amount Received (\$)	Purpose
Barriere Curling Club	1000	For equipment, maintenance
Yellowhead Pioneer Residence Society	500	Landscaping and gardening
Barriere Community Quilters	300	Quilting materials
Back Country Horsemen of BC - NT Chapter	1000	for geocache / JCP partnership
Little Fort Recreation Society	1000	for various community events
North Thompson Volunteer and Info Center	1000	For cabinets
Little Fort Volunteer Fire Department	1200	For first responder system
Barriere & District Heritage Society	1000	For 'early school house'
Barriere Crimestoppers Association	1000	For awareness advertising
Barriere & District Food Bank	1000	For trailer improvement project
North Thompson Fall Fair and	1000	For agriplex

Rodeo Association		
<b>Total</b>	<b>\$9800</b>	

LNTCFS 2013 Grant Recipients

Organization	Amount Received (\$)	Purpose
Yellowhead Pioneer Residence Society	1000	for a landscaped shade/privacy berm
McLure Volunteer Firefighters & Recreation Association	5000	for new firefighter uniforms and training
Barriere & District Heritage Society	1000	for the establishment of a heritage garden at the museum
North Thompson Volunteer & Information Center	1000	for improvements to their After School Program
Yellowhead 4H Club	2500	for purchase of weigh scale, stock blowdryers, and event tents
Little Fort Recreation Society	2500	for kitchen counter top replacement in the upper community hall
North Thompson Fall Fair & Rodeo Association	3500	for replacement of the Announcers booth & crows nest structures in the Dick Ross Memorial Rodeo Arena
North Thompson Communities Foundation	750	for bursary/scholarship writing workshop
<b>Total</b>	<b>\$17,250</b>	

LNTCFS 2014 Grant Recipients

Organization	Amount Received (\$)	Purpose
Barriere Secondary School Athletics	1000	for equipment upgrades and funding assistance for youth
Yellowhead 4-H club	2500	for construction of a building & cement pad for the beef weigh scale
Simpcw First Nation	20,000	for the Simpcw Summer Student Program
North Thompson Fall Fair & Rodeo Association	3500	For washrooms repair and upgrades at the Fall Fair grounds
North Thompson Recreation Society	2000	for hut maintenance & high school ski program support at the Barriere Forks

		Ski Trails
4-H Judging Jamboree	5000	For support of the event
Barriere & District Riding Club	5000	for a roof over the Riding Club seating area
Barriere 1st Responders	7500	For teaching supplies
Squam Bay Community Club	6700	for Squam Bay Community Hall upgrades
Barriere Curling Club	2000	for funding to provide snacks for youth curling, keep league fees nominal and equipment for youth and seniors programs
Pentacostal Christian Life Assembly	3000	for carpet replacement in the sanctuary (found out later that actually built a shed instead)
Anti Violence Advocates Society	1500	for support for the "Respectful Relationships" program for Barriere elementary and secondary schools
Chu Chua First Responders	1000	For first aid equipment
Barriere Secondary School Parent Advisory Council (PAC)	2000	for student assistance with various funding
North Thompson Volunteer & Information Center	1000	For new computers
<b>Total</b>	<b>\$63,700</b>	

#### LNTCFS 2015 Grant Recipients

Organization	Amount given (\$)	Purpose of grant
Barriere and District Heritage Society	1400	For continuation/completion of the Heritage Garden project including repairs to side walk, gazebo, soil amendment, and labour)
Barriere Elementary School	1000	Support of the community garden program
Barriere Recreation Society (Curling Club)	2000	keeping youth fees low, bringing in several curling programs, and completing building repairs
McLure Firefighters & Recreation Association	6225	support in meeting increased training and equipment requirements under new Playbook

Yellowhead Pioneer Residence Society	3500	window replacements, heating upgrades and air conditioning for seniors housing units
Little Fort Recreation Society	2500	purchase of a new stage for the Little Fort Community Hall
District of Barriere	1000	establishment of a commemorative plaque for workers injured or killed in the logging and forest industry
Pentacostal Christian Life Assembly	1000	replacement of broken tables
Barriere Secondary School Parent Advisory Council (PAC)	2000	providing student assistance with various funding
North Thompson Volunteer & Information Center	4000	carpet replacement in the Volunteer Center and upgrading educational games and supplies
North Thompson Communities Foundation	750	a one day Not For Profit capacity building event
Barriere Search and Rescue	\$55,000	A building to store rescue vehicle
<b>Total</b>	<b>\$80,375</b>	

WGCFs 2011 grant recipients

Organization	Amount Received (\$)	Purpose
<b>25% to social needs in Wells Gray Country</b>		
Yellowhead Comm Services	3000	Partner assisted learning
After hours theatre	350	
Food Bank	500	
Raft R PAC	7000	Purchase new skate program
Girl Guides	1000	Assist Registration
Upper C/W Farmer's Institute	1000	
C/W and Dist. Hospice Society	4000	Purchase Equipment
<b>50% to capital infrastructure improvements</b>		
Yellowhead Comm Services	3000	After School Program
Yellowhead Comm Services	4000	Computer Purchase CRC Public
Raft Mtn Skate Club	5000	
C/W Distr Minor Hockey	5000	Purchase beginner equipment
Rotary Club	5100	Literacy Program
C/W Ski hill	20,000	Purchase groomer
Evergreen Acres	20,000	Renovate 3 units

<b>25% accumulating for larger projects</b>		
C/W Secondary School	20,000	Equipment
C/W VFD	1000	Fireworks
<b>Total</b>	<b>\$99,950</b>	

WGCFS April 2012 grant recipients

Organization	Amount Received (\$)	Purpose
<b>Social needs in Wells Gray Country</b>		
Blackpool Hall Heritage Society	4000	Renovations
Wells Gray Country Service Committee	2000	Canoe Regatta
Yellowhead Comm Services	5000	Park Maintenance
Yellowhead Comm Services	5000	Weekly bus to Kamloops
Upper Clearwater Farmer's Institute	1500	Tables and Chairs
North Thompson Arts Council	2000	Children's Art Festival
North Thompson Arts Council	500	The planter project
Vavenby Elementary School	1400	Cross Country ski equipment
Clearwater Soccer	1600	Tournament
TRU	3475	Effective meeting workshops
<b>Matching Funds</b>		
Dr Helmcken Hospital Aux	3450	Thrift Shop Roof
Wells Gray Outdoor Club	18,000	Shed for grooming equip
After hours theatre	900	equipment
Information Wells Gray	1000	Info Center upgrades
Yellowhead Community Services	5000	Toddler playground equip
Wells Gray Tourism	5000	Capital purchases
<b>Accumulating for larger projects</b>		
District of Clearwater	25,000	Dutch Lake Purchase
<b>Total</b>	<b>\$89,825</b>	

WGCFS October 2012 Grant Recipients

Organization	Amount Received (\$)	Purpose
<b>social needs in Wells Gray Country</b>		
Clearwater Secondary School	4325	Uniforms
Clearwater Secondary School	4800	robotics

Clearwater Fire Department	1000	halloween
Clearwater Rotary Club	1000	Christmas tree light up
Yellowhead community services	5500	Toy lending library
Clearwater Food Bank	1500	Christmas hamper funds
District of Clearwater	10,000	Healthy Living program
<b>Matching Funds</b>		
Clearwater Snodrifters Snowmobile Club	10,000	Purchase groomer
Clearwater Secondary School	17,500	Weight room retrofit
Clearwater Rotary Club	4500	Storage container
<b>Accumulating for larger projects</b>		
District of Clearwater	25,000	Dutch Lake Renovations
<b>Total</b>	<b>\$85,125</b>	

#### WGCFS March 2013 Grant Recipients

Organization	Amount Received (\$)	Purpose
North Thompson Pony Club	1800	
Rodeo Rednecks	963	
Clearwater Ski Hill	11,037	
Raft River PAC	2000	
Clearwater Minor Ball	1700	
Clearwater Elks #499	10,500	
Blackpool hall	6000	
Clearwater Sec School	1960	
NT Arts Council	550	
NT Arts Council	570	
TNRD	25000	
Clearwater Sec School	4050	
Clearwater Sec School	16000	
NT Aboriginal Cultural Center Society	5000	
<b>Total</b>	<b>\$88,093</b>	

#### WGCFS October 2013 Grant Recipients

Organization	Amount Received (\$)	Purpose
Clearwater Youth Soccer Assc	5760	

Clearwater Food Bank	500	
Clearwater Rotary Club	500	
Clearwater rock hounds	500	
Evergreen Acres	10,000	
Cariboo Thompson District Girl Guides	1000	
NT pony club	400	
Thompson Rivers University	2206.55	
Yellowhead Community Services Society	19,000	
District of Clearwater	10,000	
<b>Total</b>	<b>\$49,866.55</b>	

WGCFs April 2014 Grant Recipients

Organization	Amount Received (\$)	Purpose
Clearwater Fire Dept	1000	
Vavenby Legion	4483.03	
Evergreen Acres	12,935.46	
CSS High School and Woodlot Society	5000	
CSS High School and Woodlot Society	4300	
CSS High School and Woodlot Society	12000	
Clearwater Rotary	2000	
Wells Gray Seniors Society	2000	
Yellowhead Community Services Society	2000	
Wells Gray Riders Association	5000	
Yellowhead Community Services Society	7500	
District of Clearwater	7250	
District of Clearwater	10,000	
Clearwater Family Day event	700	
North Thompson Rod and Gun club	10,000	
<b>Total</b>	<b>\$88,685.46</b>	

WGCFs October 2014 Grant Recipients

Organization	Amount Received (\$)	Purpose
Dr Helmcken Memorial Hospital Aux	8500	
Clearwater Memorial Splash Park	20,000	
Wells Gray Seniors Society	5000	
Clearwater Rotary Club	500	
North Thompson Arts Council	2500	
District of Clearwater	8500	
Clearwater Ski Hill	5000	
<b>Total</b>	<b>\$50,000</b>	

#### WGCFCS 2015 Grant Recipients (April and October)

Organization	Amount Received (\$)	Purpose
Clearwater Girl Guides	1000	Pay fees for girls with no means
Clearwater Minor Ball	2000	Purchase new uniforms and equipment
Clearwater Fire Department	1000	Purchase fireworks
Clearwater Rotary Club	3000	Purchase weather tents, chairs, chafing dishes w/sternos
District of Clearwater	39,170	Prepare subgrade for trail from hospital to Hwy 5
Clearwater Minor Hockey	12,000	Purchase uniforms
Evergreen Acres Senior Citizens Housing Society	11,100	Construct outdoor gathering place (Gazebo)
Clearwater Secondary School	6000	CNC T-shirt press, computers and software
Clearwater Secondary School	3000	Rugby uniforms and equipment
After Hours Theatre	2500	Lighting dimmer pack
Clearwater Ski Hill	7350	Furnace and table cloths/napkins
Clearwater Secondary School	700	Family Day
Yellowhead Community Services	1100	Children Festival Day
Wells Gray Trails Society	3500	Wells Gray Park trails improvement
Yellowhead Community Services	200	Raise a Reader Program
Clearwater Rotary Club	300	Christmas Tree Light Up
District of Clearwater	5000	Community Recreation Health Living Equipment/Supplies
Wells Gray Outdoor Club	4836	Solar power for maintenance storage

		shed
Upper Clearwater Heritage Association	12,000	Renovation of Upper Clearwater School House
Thompson Rivers University	5120	Youth Gymnastics Equipment
Clearwater Youth Soccer Association	2545	Equipment Purchase
Yellowhead Community Services	12,000	DLC Centre Kitchen and Gym Project
Clearwater Secondary School	5600	Farm 2 School Program
Clearwater Secondary School	2000	Reading Room
Yellowhead Community Services	32,000	Splash Park
District of Clearwater	100,000	Biomass Furnace (loan)
<b>Total</b>	<b>\$275,021</b>	