

**A Comparative Policy Analysis of Community Forest Tenures in Canada:
Lessons for Manitoba**

by Savannah Eidse

Supervisor: Dr. Ryan Bullock

Advisory committee: Drs. Alan Diduck and Richard Westwood

A thesis submitted in partial fulfillment of the Honours Thesis (ENV 4701/6) Course
Department of Environmental Studies and Sciences

The University of Winnipeg

2017

Abstract

With mounting pressure for more sustainable forest management practices, and the global trend towards more local control over natural resources and community based natural resource management, there has been a revitalization of interest in community forestry as a possible method to advance these objectives in Canada. The primary objective of this thesis is to identify potential policy options for the development of a community forest tenure in Manitoba. The second objective is to test the property rights analytical framework developed by Luckert et al. (2011), to determine whether and how it can inform our understanding of community forest licenses. The Luckert et al. framework was used to analyze and compare community forest legislation and regulations across British Columbia, northern Ontario, and Nova Scotia, in order to identify potential policy options for reforming Manitoba's *Forest Act* and creating a community forest tenure. Some of the biggest challenges identified for the success of community forest tenures are decentralized decision-making authority and the extent to which exclusive resource rights and their associated benefits streams are granted. Key lessons identified by this study include a need for the development of a long-term area-based tenure that provides rights to a variety of forest resources; a multi-attribute framework for tenure allocation, and; devolved decision-making authority at the strategic and operational planning stages.

Acknowledgements

First, I would like to sincerely thank my supervisor, Dr. Ryan Bullock. Without his guidance, insights, encouragement, and time, this project would not have been possible.

I would also like to show my gratitude to my committee members, Dr. Alan Diduck and Dr. Richard Westwood whose continued support throughout the year was instrumental to completing this thesis.

Table of Contents

Abstract.....	ii
Acknowledgements.....	iii
CHAPTER 2 - LITERATURE REVIEW.....	5
2.1 <i>Community forest tenures in Canada</i>	5
2.1.1. <i>Ontario</i>	5
2.1.2. <i>British Columbia</i>	8
2.1.3 <i>Nova Scotia</i>	9
2.1.4. <i>Manitoba</i>	11
2.2 <i>Community involvement in Manitoba's forest sector</i>	13
CHAPTER 3 - METHODS.....	15
3.1 <i>Framework</i>	16
3.1.1 <i>Initial allocation of tenure rights</i>	17
3.1.2 <i>Comprehensiveness</i>	18
3.1.3 <i>Allotment type</i>	19
3.1.4 <i>Exclusiveness</i>	20
3.1.5 <i>Duration and renewability</i>	21
3.1.6 <i>Fiscal obligations</i>	22
3.1.7 <i>Operational requirements and controls</i>	22
CHAPTER 4 - RESULTS.....	28
4.1 <i>Initial allocation and allotment type</i>	28
4.2 <i>Comprehensiveness and exclusivity</i>	33
4.3 <i>Duration and renewability</i>	36
4.4 <i>Fiscal obligations</i>	38
4.5 <i>Operational requirements and controls</i>	39
4.5.1 <i>Strategic planning</i>	39
4.5.2 <i>Operational planning</i>	42
4.5.3 <i>Specific forest practices</i>	45
4.5.4 <i>Compliance and enforcement</i>	47
CHAPTER 5 - DISCUSSION.....	49
5.1 <i>Framework and limitations</i>	54
CHAPTER 6 - CONCLUSION.....	56
REFERENCES.....	57

Table of Tables

<i>Table 1. Initial allocation and allotment type for MB tenures</i>	29
<i>Table 2. Initial allocation and allotment type for BC, ON, and NS tenures.....</i>	29
<i>Table 3. Comprehensiveness and exclusivity for MB tenures</i>	34
<i>Table 4. Comprehensiveness and exclusivity for BC, ON, and NS tenures.....</i>	34
<i>Table 5. Duration and renewability for MB tenures</i>	37
<i>Table 6. Initial allocation and allotment type for BC, ON, and NS tenures.....</i>	37
<i>Table 7. Operational requirements and controls for MB tenures</i>	49
<i>Table 8. Operational requirements and controls for BC, ON, and NS tenures.....</i>	50

CHAPTER 1 - INTRODUCTION

Although considered a prairie province, over half of Manitoba's land is forested, 97% of which is publicly owned (Canadian Forest Service 2009). Despite most forests falling under public ownership, the capital required for harvesting and processing timber resources resides largely in private hands. Because of this relationship, public forest policy makers face several important issues, including: how to transfer rights to use of forest resources from the public to the private sector; how to generate an equitable financial return for public forest owners; and how to ensure the protection of broad public interests and achievement of public goals when private firms use public forest resources (Luckert et al. 2011).

These concerns have been addressed through the use of Crown forest tenure systems. Forest tenures allocate responsibilities to governments, and other agents like private firms, First Nations, and communities for the management of public forestland (Luckert et al. 2011). Tenures have played a key role in determining how firms behave and to what degree their management strategies meet public values and objectives. There has been increasing perceptions in Canada that these provincial forest tenure systems are no longer providing the economic and social benefits that meet public demands (Haley and Nelson 2007). Furthermore, conventional tenures may in fact be the root cause of many serious issues that continue to grow around the forest sector (Haley and Nelson 2007). With mounting pressure for more sustainable practices, and the global trend towards more local control over natural resources and community based natural resource management (CBNRM), there has been a revitalization of community forestry as a possible method to advance these objectives in Canada (Bullock and Hanna 2012).

Community forestry is an approach to forest management that allows communities to play a central role in the management and decision making for local forests (Teitelbaum and

Bullock 2012). While various definitions exist for community forestry, the main concepts that bind the definitions together are community control of decision-making, local benefits, multiple-use management, and sustainability (Duniker et al. 1994; Teitelbaum et al. 2016). This approach to forest management is seen as a way to address deforestation. It is also seen to provide socio-economic aspects of forest management, including supporting the rights of Indigenous and rural communities, as well mitigating localized impacts of fluctuating markets and employee layoffs associated with single-resource dependent tenures (Davis 2008). In Canada, while the use of community forestry is still limited, decentralization reforms over the past three decades have helped promote local, and more democratic, participation in governance (Agrawal et al. 2008). Specific community forest tenures have been increasing in use since the introduction of the Community Forestry Agreement License (CFAL) in British Columbia during the late 1990's (Teitelbaum & Bullock 2012). To date, four out of ten provinces have established area-based tenures for community forestry: British Columbia, Ontario, Quebec, and Nova Scotia (Teitelbaum 2016).

In Manitoba, however, there has been limited progress towards community forestry, and no tenure or enabling legislation is in place to facilitate any potential movement towards community forestry (Teitelbaum 2016). In fact, the word “community” appears only under one section of Manitoba’s *Forest Act* in relation to the ability of persons in low employment communities to obtain cutting rights where timber harvesting will enhance the social and economic well-being of the community. Furthermore, this section is prefaced by stating that rights to timber harvest must, in the opinion of the minister, secure “the maximum benefit to the forest industry of the province” (S.M. 2009, c. 5, s. 6.). Exploring the potential of community forestry in Manitoba is of even more relevance now with both Canada’s National Forest Strategy

(CCFM 2008) and the province of Manitoba (Manitoba Conservation 2002) identifying an increase in Indigenous involvement via community-based forest management as being a priority for sustainable forest management and community development (Lawler and Bullock 2017). Non-timber forest products, special community timber allocations, and co-management opportunities have been explored in the province and associated legislation, however, Indigenous people remain under represented in Manitoba's forest economy (Manitoba Conservation 2006). Collaborative initiatives with Indigenous people, the provincial government, and the forest industry have not advanced very far (Fortier et al. 2013; Griffith et al. 2015).

The primary objective of this study is to identify policy options that are available to inform provincial policy discussions regarding the possible creation of a community forest tenure for Manitoba. By looking for lessons from British Columbia, Ontario and Nova Scotia, this study seeks to identify revisions to the Forest Act and relevant policies in Manitoba that may facilitate community involvement in forest development. While the main driver for community forestry in Manitoba revolves more specifically around Indigenous and rural involvement, the scope of this paper does not allow for adequate in-depth analysis of the rights and issues pertaining to such distinct communities. Therefore, this research serves as an overview of successful community forest policies and characteristics, providing a launch point for potential future research into distinct communities, and how the policy options outlined in this study may be applied to meet the specific goals and objectives of these communities. The second objective is to test the Luckert et al. (2011) analytical property rights framework (described below), to determine whether and how it can inform our understanding of community forest licenses.

CHAPTER 2 - LITERATURE REVIEW

2.1 Community forest tenures in Canada

The practice and enabling policy of community forestry have been steadily evolving since about the 1990s (Bullock and Hanna 2012). This evolution has involved devolving government control of forest lands and resources to citizens and local groups, and the development of new government programs, policies, legislation, organizations, and information to help guide and support implementation (Bullock and Lawler 2015). Policy advocacy and social movements that have been associated with the evolution towards community forestry and tenure reforms, have sometimes coincided with the provocation of social tensions revolving around claims of Indigenous peoples within forest zones (Agrawal et al. 2008). In this section I briefly explore the history of community forestry in Canada, specifically in the study provinces.

2.1.1. Ontario

Prior to European colonization, the forest system configuration, in most of what is now known as Canada, was a social-ecological system based on Aboriginal land use, occupancy, and the fur trade (Palmer et al. 2016). The major disturbance of colonization caused the collapse of this original system followed by the rise of a centralized command-and-control system in much of the country. In northern Ontario this top-down approach was formalized as a policy monopoly that was governed under the Crown Timber Act of 1849, and development of the regions forest system was impelled by a desire to exploit the regions timber in order to provide provincial development post-colonization (Palmer et al. 2016).

Ontario has missed several opportunities to utilize community forestry as a viable alternative to its industry centered system (Palmer et al 2016). The emergence of community forestry as a concept in Ontario came as the province entered its natural resources conservation

period, beginning in the 1930's (Palmer et al. 2016). The industrial forest system had become well established in policy and practice, and public criticism began to increase around wasteful forestry practices, leading to cracks developing in the command-and-control oriented system. Public concerns supported the creation of several community forestry initiatives.

The first documented proposal for community forestry was A.J. Auden's 1944 proposal for a 'Forest Village' in Nipigon, Northern Ontario. The proposal included integrated management of the forest for a range of uses, and while it was well received within the academic community, it was disregarded by the provincial government (Dunster 1993; Palmer et al. 2016). Despite the rejection of Auden's proposal, public concerns did eventually support the creation of several community forest initiatives. These initiatives included the Algonquin Forest Authority (AFA) in 1974, as well as the Ontario Community Forest Pilot Project Program and Westwind Forest Management Inc., both in the early 1990's. All of these examples demonstrated relative success, but also ongoing resistance in the province to the concept of total local control over resource decision-making (Bullock and Hanna 2012; Palmer et al. 2016).

Some of the struggles that community forest models faced included questions of adequate representation within the governance model of the AFA and lack of appropriate attention to First Nation rights and interests, as well as common struggles with limited staff and resources (Bullock and Hanna 2012). The Ontario Community Forest Pilot Program was established for a three-year period and received unprecedented policy and financial support, providing a valuable contribution in creating public awareness about the concept and practice of community forestry (Palmer et al. 2016). The pilot projects created under this program also provided important lessons in terms of the success factors required for community forestry including, the need for a meaningful forest tenure that provides security, delegated responsibility, and meaningful revenue

autonomy and inclusion of interests (Harvey and Hiller 1994). Despite all this, the program involved limited transfer of property rights and the projects had very limited rights to influence forest-management decisions and create economic benefits from the forest (Harvey and Hiller 1994; Palmer et al. 2016). However, during this time another very important change in support of public involvement was the creation of the 1994 *Crown Forest Sustainability Act* (CFSA). The CFSA marked the point where the sustained-yield paradigm of the *Crown Timber Act* was legally replaced with the new sustainable management paradigm (Robson and Davis 2015).

Despite the many community forest initiatives that took place in Ontario, none could dramatically alter the deeply entrenched industrial forestry system, and a command-and-control approach was maintained. However, this was not the end of community forestry initiatives in the province. The industry crisis of 2005 led to the closures of many mills, the decline of employment within the forest industry, the outmigration from municipalities, service reductions, a loss of social capital, and a serious lack of well-being in affected communities (Palmer et al. 2016). The collapse led to widespread acknowledgment in northern Ontario that the tenure system was broken and there was a need for major reform. One of the responses was a call for bringing back research into community forestry initiatives, as by 2009 the province recognized that minor adjustments to the current tenure system would not be sufficient to improve the policy setting. This acknowledgement of the need for transition led to an unprecedented forest tenure reform process beginning in 2009. The reform process involved several Indigenous consultation processes throughout northern Ontario that elicited a call from communities to accommodate community forestry, and ultimately helped advance the creation of policy frameworks that have facilitated the development of entities like Mitigoog Limited Partnership, a collaborative

management company involving communities and industry (Palmer et al. 2016; Zurba et al. 2016).

Another new governance model that was born out of this reform is the Local Forest Management Corporation (LFMC), governed by the *Ontario Forest Tenure Modernization Act*. The LFMC is an Ontario Crown Corporation that can hold more than one Sustainable Forestry License (SFL) and has the obligations that are associated with this license. The LFMC is set up to have a board of directors with primarily local representation including Indigenous and other local group representatives. The first LFMC, known as the Nawiinginokiima Forest Management Corporation, became operational in the spring of 2013 (Palmer et al. 2016). Despite a tenure reform, there have been arguments that the forest sector continued to play a significant role in the formation of the new tenure legislation (Palmer et al. 2016). How well the LFMC supports community forestry is the subject of the northern Ontario analysis of this study.

2.1.2. British Columbia

The province that has elicited the most attention and research in terms of community forestry is British Columbia. The current form of community forestry in British Columbia emerged in a similar way to Ontario, in a decade of heightened social conflict in the 1990's (Ambus 2016). The conflict in the province was focused on the forests, and was dubbed as the "War in the Woods" (McCarthy 2006). At the time, the forest industry consisted predominantly of a few large corporations that had close linkages to the provincial government, and were facing great scrutiny from labour and environmental groups, communities, and First Nations (Ambus 2016; Wilson 1998). This "crisis" also led to a call for community forestry as a potential solution. Different groups supported community forestry for various reasons. Environmentalists saw it as the appropriate scale of organization to implement ecosystem-based management

(Hammond 1991), for the labour movement, community forestry was a way to protect local jobs and shift power away from the large corporations and the government (Ambus 2016). With most of the province still subject to unresolved questions of Indigenous title, some First Nations viewed the community-based model as an opportunity to gain greater control of their traditional territories (Ambus 2016; Nathan 1993). In 1998 the government implemented the Community Forest Pilot Project and a new tenure—the Community Forest Agreement (CFA). This movement towards community forests was, however, a long time coming. Industrial forestry is entrenched in the social and economic makeup of British Columbia, and most timber harvesting rights are still mostly allocated to a small number of large forest product companies (Ambus 2016). Within the analytical framework adopted for this study, I take a deeper look into the strengths and weaknesses of the CFA and hope to gain further insight into how to facilitate more community tenure allocations.

2.1.3 Nova Scotia

The most recent adoption of community forestry is in Nova Scotia, where there remains very little research on the development of community forestry in the province leading up to the introduction of the Medway Community Forest Pilot Project. The limited research may be due, in part, to the fact there was no substantial forewarning that this was the direction the province was heading (Duinker and MacLellan 2016). Duinker and MacLellan (2016) suggest that the lack of traction experienced by community forestry in the province, until now, may be because up to this point community forestry has appeared to succeed mostly under conditions where there is a great deal of Crown land. In Nova Scotia half of the forested land is in the ownership of small private holdings and roughly a quarter in large industry holdings, leaving one quarter in

Crown ownership. It may also be because when the forestry industry is thriving, there is less inclination to implement change.

Participation in Nova Scotia over the years has been intermittent. Following the election of the New Democratic Party (NDP) in 2009, participatory processes in forest resource management expanded with the publication of *The Path We Share: Natural Resources Strategy for Nova Scotia 2011-2020* from the Department of Natural Resources (DNR) in August of 2011 (Beckley 2016; Miller and Nadeau 2016). The strategy included recommendations for a deliberate departure from past decades of forest management goals that were focused on government support of industry as the primary means to create jobs (Miller and Nadeau 2016). In the documents section on shared stewardship, the government made a commitment to “explore ways to establish and operate working community forests on Crown land” (Nova Scotia Department of Natural Resources 2011, 38). In the years prior to the introduction of the new strategy, the major industrial players, consisting of a small number of large companies that held access to most of the timber harvesting rights in the province (Miller and Nadeau 2016), were struggling (Beckley 2016). Nova Scotia appeared to be in financial crisis as mills were forced to lay off employees and even place operations on hold or close altogether¹. Following years of declining employment opportunities but no significant reduction in harvest levels, some citizens began to show interest in the idea of new management models such as community forestry (Beckley 2016). With the adoption of the new natural resources strategy, there was a shift from limited partnerships to collaboration, leading to a call from government for community forest

¹ Following financial difficulties that lead to layoffs and down time, Bowater Mersey Paper Company’s Liverpool operation was purchased by Resolute Forest Products in 2011. Despite substantial government financial support, the new mill owners announced its indefinite closure in 2012. Around the same time the New Page mill in Port Hawkesbury went into receivership and was shuttered in August 2011. For more details, see Beckley 2016.

pilot projects (Miller and Nadeau 2016) and the eventual agreement signed with the Medway Community Forest Cooperative.

While land ownership is vastly different between Nova Scotia and Manitoba, the history of economic stability in the forest sector, and the relatively recent movement towards community forestry in both provinces, make Nova Scotia a helpful province for a comparative analysis.

2.1.4. Manitoba

As with other provinces, there have been several barriers to community forestry in Manitoba. Large-scale industrial forestry developed much later in the prairie provinces than it did in other parts of the country. In the late 1990's forestry became subject to environmental impact assessments that included provisions for public involvement. Around the same time, requirements for forest companies to include Aboriginal people and local communities in operations were introduced based on the belief that forestry was going to bring opportunity for northern communities as well as help boost the provincial economy (Teitlebaum et al. 2016). This combination of large companies and community involvement seemed to give the government optimal benefits from both worlds by having the potential benefits of larger international companies while at the same time ensuring the inclusion of local, northern, and Indigenous communities interests in decision making. With this movement in policy, communities and government were not as concerned with smaller-scale ideas, and from the beginning the focus was not on small community-oriented development, but rather on large-scale industrial development under long-term lease from the provincial government (Teitelbaum et al. 2016).

Manitoba's experience with public participation and land and resource management is a much more recent development than other places in Canada (Griffith et al. 2015). In British

Columbia, the major movement against provincial land-management practices had been preceded by many smaller battles, occurring since the 1970's. These continuous fights brought, and kept, the spotlight on BC and its government, and specifically on its forests and land-tenure system. In Manitoba, and the prairie provinces in general, environmental organizations did not play a major role in debates involving protection of boreal forest ecosystems. As there was no explicit demand among environmental and community organizations for community engagement or alternative forest models, it is perhaps understandable that community forestry has not emerged as a significant influence on forest landscapes and communities (Parkins et al. 2016).

In addition to the industrial structure and regulation factors discussed above, aspects of physical and human geography may also be contributing to the hindrance of community forestry in Manitoba. The province is made up of many small communities which are geographically distant from one another. The level of isolation as well as a lack of physical infrastructure has the potential to weaken a community forest, depending on its priorities (Gunter 2000). This does not, however, mean that there is no hope for development of community forestry in these smaller communities. In an evaluation of community forest case studies in British Columbia, Gunter (2000) proposed a list of 'enabling conditions' necessary for sustainable community forestry, one of the most important factors was large land area available for community management, a criterion which Manitoba certainly meets (Lawler and Bullock 2017). Another element is a key variable in the increasing demand for more local control, and that is the environmental concerns that come with industrial forest practices in more remote areas, especially those required for protection of the declining moose and caribou populations (Gunter 2000). These types of concerns surrounding harvesting and creation of access roads, and the subsequent effects on

wildlife, could create excellent opportunities for community forests that facilitate opportunities for community-based forest management planning.

2.2 Community involvement in Manitoba's forest sector

While there is currently no specific community forest tenure in Manitoba, communities are involved in forest management through other programs. In general, there are three main ways in which the government allocates timber rights in the province; Forest Management Licensees (FMLs), Timber Sales Agreements (TSAs) and Timber Permits (TPs).

There are currently no FMLs that have been allocated to communities at this time, and the only two that exist in the province are allocated to large mills, Louisiana Pacific Ltd., and the more recent Canadian Kraft Paper Industries Ltd². Currently, the only involvement communities have in terms of an FML is as part of stakeholder advisory committees, which have been defined as small groups of people “who are convened by a sponsor for an extended period of time to represent the ideas and attitudes of various groups and/or communities for the purpose of examining a proposal, issues or set of issues” (Lynn and Busenberg 1995, 147).

Communities may also be involved through several types of TSAs. Specially, Community Timber Allocation TSA and Quotas will be examined in this study. TSAs allocate specific volumes of timber from a given timber sale area to a specific cutting right holder either directly or through competitive processes (Manitoba Forestry Branch ND). Fisher River Cree Nation is an example of a community that has received a community allocation. In the case of

² In August of 2016 Tolko Industries Ltd. Announced that as of December 2nd 2016 it would be closing its kraft paper mill and sawmill facility in The Pas, Manitoba, stating the operation was not financially sustainable. The company, which had been operating in the province since purchasing the mill in 1997 from Repap Manitoba Inc., then later announced in November 2016 that the facility had been successfully purchased by Canadian Kraft Paper Industries Ltd. (Tolko 2016).

Fisher River Cree Nation, the council applied for a Community Timber Allocation TSA in December 2013, and were awarded a commercial allocation of 4,400 m³ of softwood and a Non-commercial allocation of 600 m³ of hardwood in late 2014 (Fisher River Cree Nation 2016). Were this purchased through equivalent open market quotas, a Fisher Cree progress report (2016) estimated that this would likely have cost between \$200,000 and \$300,000. However, Fisher River Cree has yet to act on their TSA, which may be a sign there are insufficiencies in the successfulness of the TSA legislation or community capacity.

Timber quota allocations entitle holders to possess an annual allocation of wood, however, a TSA or Timber permit are still required to harvest the quota (Manitoba Forestry Branch ND). Indirect allocations are done through competitive auctions. These auctions are generally initiated by Manitoba Sustainable Development with the goal of promoting economic development. However, where an individual or company expresses an interest in harvesting wood in a specific area that may be of interest to others, an auction may be held to provide equal opportunity to all those interested in accessing the wood (Manitoba Forestry Branch ND).

Finally, Timber Permits are provided for both commercial and personal harvest, and are often used for purposes such as cutting firewood, fence posts, or small lumber/sawmill operations (Manitoba Forestry Branch ND). These permits are provided free of charge to Indigenous people with status, in recognition of and “Aboriginal right” to harvest timber for domestic use (Manitoba Forestry Branch ND).

CHAPTER 3 - METHODS

The framework adopted for the analysis, and outlined below, was structured using a property rights analytical framework developed by Luckert et al. (2011). A qualitative policy analysis approach was used to evaluate and compare the content to which the framework was applied, with the main source of data coming from primary document sources such as government legislation, policy statements, and regulations. Secondary sources, including peer-reviewed literature and relevant government reports, supported the analysis where relevant. The Luckert et al. framework was used to analyze and compare legislation and regulations across the provinces of British Columbia, Ontario, Nova Scotia, and Manitoba to examine what changes may need to occur in Manitoba, and what the benefits would be from reforming the Manitoba Forest Act and developing a community forest tenure. While community forestry initiatives have been identified in several other provinces as well, only the aforementioned provinces have been evaluated under this framework due to limitations in access to information, as well as time constraints. These provinces were selected as they are the jurisdictions with active models that meet the core components of community forestry and whose regulatory regimes and forest policy evolution bare similarities to that of Manitoba. The specific tenure models and associated legislation that have been compared are:

- i) Manitoba's Forest Management License (FML), Timber Sale Agreement:
Community Allocation, Timber Sale Agreement: Quotas, and Timber Permits (TPs).
Enabling legislation: *The Forest Act* 1987, and its regulations.
- ii) British Columbia's Community Forest Agreements (CFAs). Enabling legislation:
The Forest Act 1996, the *Range and Practices Act* 2002, and their associated regulations

- iii) Local Forest Management Corporations in northern Ontario. Enabling legislation: *Ontario Forest Tenure Modernization Act 2011*, and the *Crown Forest Sustainability Act 1994*.
- iv) The new Community Forest Pilot Project in Nova Scotia, the Medway Community Forest Co-op (MCFC). Enabling legislation: *Crown Lands Act 1989*, and associated regulations, and the Medway Community Forest license agreement

3.1 Framework

The analytical framework divides Crown forest tenures into twelve separate characteristics that provide information on how rights are transferred from public to private sectors, the nature of those rights, and to what extent these rights are constricted. Due to the time constraints of this study, this paper will focus on seven of the twelve characteristics identified in the Luckert et al. framework, which are 1) Initial allocation of rights; 2) Comprehensiveness; 3) Allotment Type; 4) Exclusiveness; 5) Duration and renewability; 6) Fiscal Obligations; and 7) Operational requirements and controls. These seven characteristics (outlined below) were chosen due to their inclusion of factors that, following Pagdee et al. (2006), have been associated with success of community forests, and their relationship with sustainable forest management. A content analysis was performed on the primary and secondary data to identify and evaluate these seven characteristics.

Application of this approach was deemed appropriate for the study based on the assumption that Crown tenure systems may be characterized in terms of the rights they provide to tenure holders, the obligations tenure holders assume, and any constraints imposed on them that restrict the rights provided (Haley and Nelson 2007; Luckert et al. 2011). Additionally, success of community forestry has been linked to a well-defined property rights regime (Pagdee

et al. 2007). It is also a current framework developed by leading experts in the forestry policy and planning. While certain characteristics of the framework may be more difficult to measure, as will be discussed later in this section, this framework was found to adequately address underlying principles of governance that affect the design and operations of forest tenure systems, and the framework addresses the specific characteristics that directly affect the success of community forests. As this framework was developed for larger tenures, some of the components have been adjusted to work for smaller community tenures.

3.1.1 Initial allocation of tenure rights

Provincial governments may allocate tenure rights by a variety of different means, the method used by each study province will be evaluated under the category it falls under. The first is the “highest bid process” (Luckert et al. 2011) where a tenure is allocated through a competitive process to the applicant submitting the highest bid. The second category is the multi-attribute bidding process where bids are taken that include a specific set of components, rather than price. Under this process tenure is not granted exclusively based on price, but on the bidder whose offer comes closest to the objectives outlined by the government. Lastly, governments may award a tenure to a firm or individual of their choice without recourse or a competitive proposal or bidding process. This process is the “non-competitive process”.

Luckert et al. (2011) identified two issues based on initial allocation of tenure rights, which may have the ability to influence sustainable forest management objectives, and which will provide the basis for comparisons in this study. The first is the degree to which the allocation of new tenures is competitive. More competitive processes, which generally have open calls for tenders, tend to attract more applications than a less competitive closed process. The second is the large range of attributes that governments consider when evaluating tenure

applications. Where evaluations are narrow, the approach will focus on the amount of revenue that will be returned to the Crown. If, for example, tenures are allocated to the highest bidder, then economic sustainability will be served, since tenures will often be awarded to the most efficient operators that can generate the most net revenues (Luckert et al. 2011). Where evaluations are more broad, criteria will include factors that address not only economic values, but also social and environmental values beyond financial returns. In terms of community forestry, this would include aspects such as the number of jobs provided for local community members or a prescribed approach to forest management that could be implemented.

3.1.2 Comprehensiveness

The comprehensiveness of tenures was evaluated based on the extent to which the model grants rights to actual products and services and their associated benefits streams. The more resource rights granted by a tenure, the more comprehensive it is said to be. A tenure that grants rights to the land itself, botanical products, the soil, fish and wildlife, water, and subsurface minerals, for example, would be considered fully comprehensive. Where rights are more limited, such as in cases where there are separate tenure arrangements for harvesting of pulpwood and for sawlogs, Luckert et al. (2011) point out that there may be serious implications in terms of sustainable forest management from ecological, economic, and social perspectives. For example, reforestation and other silviculture-related expenditures may be treated as “current production costs that are weighted against the benefits of processing stocks of mature timber” (Luckert et al. 2011, 85). This problem may become more severe where policies implement the “allowable cut effect” (ACE), a term coined by Schweitzer et al. (1972) (Luckert and Haley 1995). Under an ACE arrangement, provinces may provide tenure holders with an immediate increase in their AAC, if they are able to demonstrate that they have undertaken expenditures on silviculture that

will increase the rate of growth of immature stands and thus the AAC of the management unit as a whole (Luckert et al. 2011). Under these types of arrangements, expenditures that generate increased future crops are immediately rewarded with the benefits arising from harvesting of mature timber in areas where "...species, timber quality, and harvesting costs could well be completely different from the sites where the silvicultural activities actually take place" (Luckert et al. 2011, 85).

3.1.3 Allotment type

Allotment type considers whether the rights granted are area-based or volume based. Volume-based tenures grant tenure holders the right to harvest specific amounts of timber from a broadly defined area, and several licensees can hold such rights within the same area. While these types of tenures provide an incentive to harvest trees through a specified annual allowable, or periodic-harvest, they may not succeed in providing an incentive for tenure holders to sustainably manage the resource over the long term, or provide sufficient opportunity to accumulate site-specific knowledge of the areas in which they work (Luckert et al. 2011). Area-based tenures, on the other hand, grant virtually exclusive rights to harvest timber within a specified area. The control over a defined area has more potential to offer area-based tenure holders a proprietary interest in the allotted land. Luckert et al. (2011), point out that these tenure holders face more judgment from licensing authorities, their neighbours, and society in general, for their management skills as reflected in the conditions set out for the licensed area. Thus area-based license holders may have more incentives than volume-based tenure holder to act in terms of long-term management objectives.

3.1.4 Exclusiveness

The exclusiveness of a tenure is the extent to which the tenure holders may prevent others from freely accessing the benefits of the property to which they hold rights. Although Crown forests generally include exclusive rights, there may be exclusive rights that are allocated separately to a variety of products, such as different types of trees (Luckert et al. 2011). In the case of BC's Community Forest Agreements, exclusive rights may be given to manage and harvest timber on public land, for example, but may not necessarily provide exclusive rights to botanical non-timber forest products (Ambus and Hoberg 2011).

For this study I have examined who has access to the forest and forest resources, and shares in its benefits streams, and who participates in key decisions for forest management. Where more than one group can access benefit streams, determining who takes how much from streams of returns might become more complicated. Also, there may be added difficulty in the decision-making process for future investments, as each party will be aware of any difference in share of returns captured by the other (Luckert et al. 2011). The exclusiveness of a tenure will be evaluated based on the idea that complete open-access will provide no incentive for tenure holders to invest in projects that increase net benefits streams, as this opens up the inevitable issue of "free riders" that will capture the returns, rather than the investor (Luckert et al. 2011). Thus the more exclusive the rights and the more clearly defined the ownership to use and manage a resource is, the more successful the community forest tenure will be (Pagdee et al. 2006).

While exclusivity of rights lends itself to a more successful tenure agreement, there are certain forest rights where exclusive rights are not, and likely cannot, be given. The benefit streams resulting from a tenure holder that maintains or increases biodiversity, for example, may

be enjoyed by society at large, and not exclusively the tenure holder for the area (Luckert et al. 2011). In such cases, depending on the goals of the tenure holder, there may be inadequate incentives to manage for these resources, and thus public regulation may be required.

3.1.5 Duration and renewability

The duration of time over which property rights are granted under a community forest tenure, along with renewal options and associated renewal provisions, has important implications for sustainable management and success of a community forest (Luckert et al. 2011; Pagdee et al. 2006). Forest tenures that extend for a sufficient duration, encourage community involvement and help facilitate the achievement of community-defined objectives (Cortex 1996; Gunter 2000). In such cases, the tenure holder is also more likely to consider the relative merits of harvesting right away (Luckert et al. 2011). Where rights are granted to future crops, tenure holders are more likely to ensure that their management practices preserve soil and site productivity. They are also more likely to invest in reforestation and other silvicultural treatments that will provide return in the future (Luckert et al. 2011). Thus, the longer the duration of a tenure agreement, the more successful the model.

In terms of renewability of a property right, the presence or absence of renewability or replicability of a right is likely to impact the behavior of tenure holders (Luckert et al. 2011). Where renewal or replacement of a right is guaranteed, duration will be of less importance. However, where replacement of a right is not allowed, or renewal is uncertain, the duration of the tenure agreement is of vital importance in terms of how a tenure holder behaves. While shorter terms provide governments more opportunity to modify tenure arrangements such as social values and public objectives change, in order for a community forest to successfully meet

the values and objectives of the community for which it is being managed, longer duration, and renewability/replicability will be deemed more successful.

3.1.6 *Fiscal obligations*

Fiscal obligations are payments that tenure holders are required to provide to the government. Crown forest arrangements are all subject to levies, which may be in the form of land rents, renewal fees, reforestation fees, and stumpage fees. The type and number of fees can have significant impact on a community's ability and willingness to develop a community forest, even if a tenure has been granted. Luckert et al. (2011) developed an entirely separate framework for the evaluation of fiscal obligations, specifically stumpage fees. I found the authors framework to be better suited for commercial tenures and the relationship between stumpage fees and the wood supply market, and less suited for addressing how fiscal obligations impact the success of a community forest. As fiscal obligations remain an important indicator for the success of community forests (Pagdee et al. 2007), I have chosen to include fiscal obligations, but adjust how it is evaluated so that it is better suited to community forests and the scope of this paper. The main fiscal obligations set out for community forests in each province will be listed and compared in terms of how they may affect net revenue, such as whether the stumpage fee system takes into consideration the sensitive nature of the community forest land base (Gunter 2004).

3.1.7 *Operational requirements and controls*

Operational requirements refer to the conditions that tenure holders are required to meet to exercise and maintain their rights, while operational controls refer to the measures developed and used by governments to monitor the performance of tenure holders and enforce the operational regulations. In general, operational requirements are used to ensure licensees

continue to exercise their rights in such a way that furthers and protects the interests of the public beyond timber values (Luckert et al. 2011). In the case of forest tenures, Luckert et al. (2011) broadly classify operational requirements into two main groups: management and harvesting. These regulations are generally put in place to ensure forests are sustainably managed and to produce a socially desirable mix of forest products. Requirements may include aspects like reforestation, silvicultural requirements, and forest protection. These requirements can severely impact the ability of tenure holders to operate efficiently, or to operate at all. In the case of operational controls, Luckert et al. (2011) include all mandatory planning and reporting procedures that tenure holders are required to undertake, such as strategic working plans, operational plans, and annual reports; measures that are adopted by governments to monitor and enforce standards; and the mechanisms in place for penalizing tenure holders for non-compliance (Luckert et al. 2011). Controls are necessary for ensuring that the operational regulations are being monitored, working effectively, and continue to be applicable for, in this case, the community. Due to the importance and complexity of the role operational requirements and controls play in forest policy, Luckert et al. (2011) developed a separate framework for evaluating this characteristic.

The Luckert et al. (2011) framework adopted for this section has four categories: 1) strategic planning; 2) operational planning; 3) forest practice requirements, and; 4) compliance and enforcement. Strategic plans refer to the higher-level plans that establish resource management objectives, often through the designation of differentiated zones across the relevant land base. Operational plans address the development and approval of forestry activities that are more site-specific, such as the specific silvicultural prescriptions and location of roads and cutblocks. Within these two levels, the analysis examines plan content, the process in place for

development and approval of plans, and whether plans are binding on lower-level plans or forest operations. In continuing with the Luckert et al (2011) framework, specific standards for forest practice requirement will be analyzed based on the following areas:

- reforestation and other silvicultural operations;
- riparian buffers – to what extent water courses must be protected, and;
- ecological requirements – spatial regulations, including opening sizes and green up/adjacency constraints; representation/stand structure requirements.

The level of impact created by any set of rules and regulations is greatly influenced by the mechanisms that are in place for compliance and enforcement (Ambus and Hoberg 2011; Luckert et al 2011; Pagdee et al. 2006). Within the compliance and enforcement category, the review will address who is responsible for inspections and any requirements for inspections and audits, the system for penalties for non-compliance, and the mechanisms for review and appeal of enforcement actions (Luckert et al. 2011). Before review of operational requirements and controls can take place, it is important to understand the different approaches to forest regulation and rule setting that exist in different jurisdictions. The following descriptions of approaches are provided by Luckert et al. (2011) and are used in the evaluations of this characteristic across the study provinces.

There are four general approaches to forest practice regulations across jurisdictions. The first approach is the best practices, or “guidelines”, approach. This method can be used to identify recommended practices where the standards are not legally binding, and there is no penalty for operators who do not adopt them. This approach can be seen in some southeastern states in the United States (Cashore and Auld 2003). Second is the technology- or practice-based regulations, also often referred to as “prescriptive”, which specifies forest practices that must be

used in certain circumstances. Luckert et al. (2011) give the example of a thirty-meter buffer strip on a fish-bearing stream. The third approach is the performance- or results-based regulations that specify an outcome to be achieved as opposed to a specific practice. Continuing with the example of stream protection, this could be regulations requiring water quality within the natural range of variation be maintained. The final approach for regulating forest policy is compulsory management planning, which requires an operating plan be created by the operators, but does not specify any practices or results that must be achieved. This approach, therefore, concentrates on the input requirements rather than outputs (Luckert et al. 2011). Unlike the first approach, guidelines, the other three approaches are legally enforceable. It is also important to note that these four approaches are not mutually exclusive, and policy makers may use several combinations within a single regulatory regime.

Designing the most appropriate approach, or mix of approaches, can be a challenge for policy makers as many factors influence which approach is the optimal choice. This being the case, a qualitative approach evaluating the strengths and weaknesses of the approaches used for each of the four regulatory categories will be applied, as it is difficult, and likely inappropriate, to assign quantitative rankings to the legislative regimes. The analytical approach to deciding whether the regulation approach used is appropriate or not will be based on the following rationale, as outlined by Luckert et al. (2011):

- where objectives are easily measured, performance- based regulations are desirable, as operators usually have superior information about methods to achieve particular results and thus performance standards can be more cost-effective,
- where objectives are not easily measured, practice-based regulations may be more reliable for adequately protecting the value of concern and;

- when problems are highly diverse, uniform practice or performance regulations are likely to be ineffective, and thus compulsory management planning may be the best alternative as it allows operators to tailor forest practices to specific local circumstances.

Although Luckert et al. (2011) does not explicitly outline when, or if, guidelines are appropriate, following the core community forest components, which include a devolution of rights, guidelines may be considered appropriate where problems are more diverse and thus guidelines allow the tenure holders to tailor practice to specific circumstances. There remains, however, the risk that under a voluntary approach compliance rates may be poor (Cashore and Auld 2003). Therefore, where specific values are deemed more appropriately protected under legally binding rules and regulations, guidelines may not be a reliable approach. Another challenge in designing any forest policy regime is how to provide for variability over space and time (Luckert et al. 2011). This is especially true for community forest tenures, where each community will have varying goals and values they wish to protect. Where rules are uniform and apply across jurisdictions, they may be more clear and easy to understand. However as Luckert et al. (2011) point out, rules will not be effective or efficient if the circumstances in which they apply vary significantly. The inverse applies to policies that are designed to account for variation in ecological, economic, and social conditions across a jurisdiction, as in this case they may be more effective in some ways, but their complexity may make it more difficult to assure the public that the values they want in the forest are being protected. Following the steps outlined by Colin Diver (1989) for the optimal precision of rules, which includes: simplicity in the number of steps involved in the decision rule; transparency in the clarity of the rule and; congruence in terms of how well the design of the rule matches the problem it is intended to address, the Luckert et al. framework outlines three alternative approaches for addressing the issue of rule

congruence. These approaches will be used in the analysis portion of this study and are described as follows:

- 1. Prescriptive congruence:** The complexity of rules is increased so that they vary to take into account all possible variations. While this approach improves congruence, it departs from simplicity and may lack administrative practicality to develop effectively, and very difficult to implement.
- 2. Professional delegation:** This approach relies on professional discretion through delegation of significant authority to foresters and other professionals to utilize the practice they deem to be appropriate in the circumstance. In contrast to prescriptive congruence, this method has the advantage of simplicity, but it sacrifices transparency.
- 3. Geographical delegation:** In this case authority is decentralized to lower levels of an organization to decide on how to tailor solutions to local situations. This approach is more complex than that of professional delegation, but depending on how it is designed, may be more transparent. For the purposes of this study “lower levels of an organization” will refer to devolving decision making authority to the community.

Local authority over decision-making is a key component of community forestry. For communities to be able to respond to changes in local conditions it is important that they also have the authority to make tactical and some higher level strategic decisions (Ambus and Hoberg 2011). While each of the legislative regimes analyzed in this study will have different approaches that may be appropriate based on how the rest of the tenure regulations are set out, and while complete devolution of decision-making power to the community may not always be possible, or desirable, geographic delegation will often be the favourable approach for evaluating how well the policy meets the goals of a community forest.

CHAPTER 4 - RESULTS

4.1 Initial allocation and allotment type

All three study provinces evaluated for comparison allocate area-based tenures for some form of community management (Table 2). This differs from Manitoba (Table 1), which only has area-based tenures available for FMLs (TSA community allocations are volume-based tenures allotted for a specified area). Manitoba also differs from the study provinces in that the criteria for tenure allocation is far narrower within the governing legislation. All tenure allocations in the province may be issued when the licence, permit, or agreement is deemed by the deciding minister to provide maximum benefit to the forest industry of the province, including forest-based employment and production. The only exceptions are for FMLs and Community Timber Allocations where additional criteria are required. Under an FML the agreement also includes the provision that investment in a wood-using industry in Manitoba is sufficient to require continuous timber supply, and in the case of Community Timber Allocations, the TSA must additionally be deemed to provide economic and other benefits to the community. FML and Community Timber Allocations also differ from the other two tenures in that they are generally awarded by direct award from the minister. Quotas are allocated either through competitive processes or direct purchase, similar to timber permits, which may be awarded directly or by competitive auction to the highest bidder. While the Luckert et al. (2011) framework describes competitive tenures as attracting more applicants, as mentioned earlier, auctions may prevent small rural and Indigenous communities that do not have the capital necessary to bid on substantial volumes.

Table 1. Initial allocation and allotment type for MB tenures

Characteristic	FMLs	TSA: Community Allocation	TSA: Quotas	TPs
Initial allocation	Direct award by minister; must secure maximum benefit to the forest industry of MB	Direct award by minister; issued when TSA deemed to provide economic and other benefits to community, and will secure maximum benefit to forest industry of MB	Direct award by minister, or competition; must secure maximum benefit to the forest industry of MB, including forest-based employment and production	Direct award or auction; personal (up to 100m ³) or commercial timber permit (up to 300m ³)
Allotment type	Area-based	Volume-based for specified area	Volume-based	Volume-based

Table 2. Initial allocation and allotment type for BC, ON, and NS tenures

Characteristic	CFA	LFMC	MCFC
Initial allocation	Invitation or direct award by minister; pecuniary and non-pecuniary criteria	Awarded by minister recommendation; no legislated evaluation criteria	Multi-attribute competition or direct award by minister; pecuniary and non-pecuniary criteria
Allotment type	Area-based	Area-based	Area-based

In British Columbia, CFAs are awarded competitively or through direct award following an invitation to apply from the minister to an applicant from a community-based organization. A community-based organization may be defined as, according to the *Forest Act*, several legal bodies including a First Nation, a Municipality or regional district, a corporation, or a society as defined under the *Society Act*. For an application to be accepted it must meet the prescribed requirements set out in the Community Tenures Regulation (July 2004). The evaluation criteria include both pecuniary and non-pecuniary factors, including; whether the proposed business plan will provide a reasonable chance for the applicant to operate successfully from a business

perspective; whether the plan is suitable for managing the resources in the community forest agreement area; whether the application documents community awareness and support for the proposed project; if the plan is appropriate for achieving goals of the community and the government with respect to forest management; the degree of community and stakeholder involvement in the proposed governance model; results of a public review of the application; and whether entering into a community forest agreement would be in the best interest of both the community and the public. While taking into account the degree of community involvement, there is no set criteria for jobs to be provided to community members, or in what way the community members need to be involved, if at all, in decision-making processes.

Nova Scotia's community forest tenure (Table 2) bares many similarities to that of BC's CFA, in that it is also an area-based tenure that is awarded competitively or through direct award. The Nova Scotia tenure differs in that it is currently only in the pilot stage of the province's first official community forest co-operative, and there has not yet been any implementation of specific legislation for a community forest regime. The government of Nova Scotia put out a request for proposals for a three-year community forest pilot project, and following a multi-attribute competitive process, signed a Forest Utilization License Agreement (FULA) for the land base of 15,064 ha with the Medway Community Forest Cooperative Ltd. (MCFC). While there is currently no specific regulatory framework for community forests in Nova Scotia, the MCFC agreement is subject to many of the same requirements as a FULA, except that the main objectives emphasize a range of values and community benefits as opposed to a sole focus on timber harvesting. The agreement between the department of natural resources (DNR) and MCFC provides a template for community forest licenses until such a time as one exists in formal legislation. For the evaluation of allocation criteria, the criteria for allowance of a

replacement agreement set out under the MCFC license agreement was analyzed. Similar to the CFA, the criteria for continuance addresses both pecuniary and non-pecuniary aspects, however, once again does not include requirements for number of jobs provided to local community members. Following the completion of the three-year pilot term, the minister may provide a replacement agreement if the following criteria have been met:

- i) The MCFC must have made a minimum of 50% of the calculated AAC available to the market each year, and a minimum of 60% and maximum of 110% of the AAC over the entire three-year term;
- ii) A management plan has been developed and is being used to guide operations, and operations are in accordance with the management plan;
- iii) The MCFC has implemented practices that are consistent with the Nova Scotia Code of Forest Practice, and the required Management Practices;
- iv) Substantial compliance with Acts and Regulations regarding forest management in Nova Scotia has been demonstrated; and
- v) There is demonstrated compliance with the license agreement and the MCFC has made progress in achieving the pilot project objectives, criteria and indicators of success as set out in the agreement.

The criteria for success include: representation of a balance of interest on the Board of Directors, information transparency for activities and decision-making processes, clear engagement with Mi'kmaq communities and support of Aboriginal rights on the land, support for a significant level of business innovation and financial returns to the province that are greater than the cost of the program funding provided by the government, protection of Aboriginal values on the land

base, development of recreation opportunities, and maintenance or increase in the health of the forest.

The Ontario area-based model (Table 2) is arguably the most different from all the other tenures in the study. One or more Ontario Forest Management Corporations may be incorporated without share capital, by the Lieutenant Governor in Council on recommendation by the minister. The *Ontario Forest Tenure Modernization Act, 2011* states that the minister must ensure a review is conducted prior to any recommendation, and that the review shall consider any existing Ontario LFMCs and entities that hold sustainable forest licenses. The goal of this review is to collaboratively determine next steps in tenure implementation. The enabling legislation does not, however, go into any further detail on what criteria will be evaluated under a review. Objectives of the corporation were therefore used in the evaluation of what criteria is considered for a tenure allocation. Under the enabling legislation, the objectives of an Ontario LFMC include:

- i) To hold forest resource license and manage Crown forests such that sustainability of Crown forests is provided in accordance with the *Crown Forest Sustainability Act, 1994* and to promote the sustainability of Crown forests;
- ii) Providing economic development opportunities for Aboriginal peoples;
- iii) Managing its affairs in order to become a self-sustaining business entity and optimize the value from Crown forest resources while ensuring the importance of local economic development is recognized; and
- iv) To market, sell and enable access to a consistently and competitively priced supply of Crown forest resources.

4.2 Comprehensiveness and exclusivity

All provinces have different degrees and components regarding their comprehensiveness and exclusivity. Importantly, no tenure is fully comprehensive (i.e. no rights granted to the land itself, soil, fish and wildlife, water, or subsurface minerals—though it could be argued that rights are granted to impact these other resources as timber rights holders wholly transform the system). In Manitoba (Table 3), the only exclusive rights to timber are provided under an FML. However, as with all other licenses, these rights remain subject to prospecting for mines and minerals. Under all Manitoba tenures, the timber to be harvested is left to the discretion of the minister, and thus where the minister does not allocate all timber in a specified area, or only certain types of timber, there is the risk of negative impacts in terms of sustainable forest management if a licence holder has no incentive to invest in sustainable management of the entire forest stand. No tenures include rights to resources other than timber, and rights to future timber only apply under FMLs where the long-term duration of the license allows for harvesting of reforested timber where the license remains active in the associated area. Manitoba does not have provisions for policy instruments that use the ACE, except in the case of FMLs where the FML area may be extended upon minister approval where the FML holder has invested in increasing mill capacity.

Table 3. Comprehensiveness and exclusivity for MB tenures

Characteristic	FMLs	TSA: Community Allocation	TSA: Quotas	TPs
Comprehensiveness	Timber harvested is at discretion of minister; rights subject to prospecting for mines and minerals; minister may extend FML area following increase in mill capacity	Timber sales permitted only under commercial community award; timber harvested is at discretion of minister	Timber harvested is at discretion of minister; AAC of future years timber may be cut in current year with minister approval	Timber harvested is at discretion of minister
Exclusivity	Exclusive rights to licensed timber; non-exclusive rights to forest use such as roads	Non-exclusive rights to TSA area and roads built by licensee	Non-exclusive rights to timber	Non-exclusive rights timber

Table 4. Comprehensiveness and exclusivity for BC, ON, and NS tenures

Characteristic	CFA	LFMC	MCFC
Comprehensiveness	Rights to manage and charge fees for botanical products; harvest levels determined by Ministry's Chief Forester or regional district office of the MFR	Rights only to timber; any profits from timber sales may be subject to a dividend for the provincial government	NSDNR has sole responsibility for all non-forestry activities; additional authority and third-party agreements for NTFP management is available to MCFC; must show self-sufficiency by end of project
Exclusivity	Exclusive rights to timber; some rights to NTFPs	Non-exclusive rights to timber	Non-exclusive rights to timber; provisions for sub-licensing may apply; exclusive rights for non-forestry related land use available by application

Under the BC CFA (Table 4), tenure holders are granted exclusive rights to harvest timber, and they are also granted non-exclusive rights to harvest, manage and charge fees for botanical products and other prescribed products. The right to NTFPs was unique to BC until the establishment of the MCFC in Nova Scotia. However, while the MCFC maintains the non-exclusive rights to NTFPs, the co-op has acknowledged that developing the licensing system for products that are already fully accessible to the public remains difficult, and is made more difficult with the short term of the agreement, which means it impedes their ability to secure investments (UNSM Forestry Workshop 2016). The public and Indigenous rights to NTFPs also

remains a difficult in BC, and thus the right to manage for NTFPs is not widely used (Ambus and Hoberg 2011). CFAs differ from other BC tenures in that while most other tenures have separate harvesting rights for sawlogs and pulpwood, CFAs include exclusive rights for both. As with other exclusive rights tenures in this study, the CFA area remains subject to agreements for other forest uses such as range permits, mineral tenures, and transportation and transmission corridors (Williams Lake Community Forest LP 2015). Rights to future forest crops are provided for the duration of the long-term replaceable agreement of 25-99 years, which is, notably, the longest agreement of any of the study provinces. Unless the agreement states otherwise, the minister must offer the holder a replacement community forest agreement every ten years. Communities can negotiate their target AAC with the Minister of Forests and Range (British Columbia MFR) during the application process, however governments possess the final decision making authority on this matter (Ambus & Hoberg 2011). It is not explicitly listed within the enabling legislation, whether changes may be made to increase the AAC in terms of the “allowable cut effect”, however, in terms of community forest agreements, the larger issue appears to be reducing the AAC rather than increasing it (Ambus & Hoberg).

In Nova Scotia (Table 4), the MCFC also grants exclusive rights to timber access, although the Crown land area remains open for public access. Unlike the BC CFA, the governing legislation for the MCFC provides non-exclusive rights for use of land for activities unrelated to forestry. It also provides exclusive rights for use the pilot project lands or resources on the pilot project lands, for purposes other than forestry activities, which may be obtained through an application to the NSDNR and any other government authority with jurisdiction in the circumstances. For the use of non-timber forest products, unlike the other provinces, the MCFC license agreement allows the MCFC to enter into agreements with any third parties to manage

and harvest NTFPs within the pilot project land, where consistent with the management plan and objectives set out in the agreement, and subject to the term limits on agreements that do not exceed the remaining term of the MCFC license agreement. Despite the difficulties associated with managing for NTFPs, the MCFC is in the process of developing a sublicensing structure for a moss harvesting license that would involve harvesting moss prior to harvest and then selling it to a local landscaper. Under the license the MCFC is also authorized to build necessary structures on the land as well as charge fees for use of roads for which MCFC is fiscally responsible. Nova Scotia does not have any provisions in place for the ACE, although under the MCFC pilot project the AAC may be changed from the original allotment upon agreement of all parties.

The Ontario LFMC license (Table 4) differs from the CFA and MCFC in that it does not confer any exclusive rights to the land, and a forest resource license may be granted to forest resources on land that is already subject to another forest resource license. Under this license, rights pertain only to timber, and any profits gained through timber sales may be subject to a dividend being allocated to the provincial government. Any forest resources that are renewed in a Crown forest are the property of the crown, which, if there is not enough assurance that the license will be renewed, may lead to a lack of investment in future forest crops and sustainable development. In terms of the ACE, harvest limits for LFMC may not be changed from that set out in forest management plan, and therefore may only be changed when new management plans are created and following required management plan approval processes.

4.3 Duration and renewability

Each province has slightly different lengths of tenure allocation, all with important implications for sustainable forest management and success of the community forest. In

Manitoba (Table 5), the longest term is awarded to the FMLs, which are renewable licenses with a term of up to twenty years. As there are currently only two FMLs operating in Manitoba, it is unlikely the province would not offer renewal, barring any major non-compliance issues, though neither of the licenses are currently awarded to community forests. The TSA Community Allocation may be granted for one to ten years. However, this license is not renewable, making the duration of the license of vital importance in terms of how a tenure holder behaves. TSAs for timber quotas have even shorter terms, ranging from a five-year non-renewable agreement for timber quotas greater than 300m³ to a one-year agreement for those less than 300m³, similar to Timber Permits, which are non-renewable one-year permits. The short term of these tenures is not aligned with what is viewed as necessary to promote SFM (Luckert et al. 2011).

Table 5. Duration and renewability for MB tenures

Characteristic	FMLs	TSA: Community Allocation	TSA: Quotas	TPs
Duration and renewability	Up to 20 years, renewable	1 to 10 years, non-renewable	5-year non-renewable timber sale agreement for quotas over 300m ³ , 1-year permits for those less than 300m ³	Maximum 1 year, non-renewable

Table 6. Initial allocation and allotment type for BC, ON, and NS tenures

Characteristic	CFA	LFMC	MCFC
Duration and renewability	Long-term 25-99 years, replaceable every 10 years	20-years, renewable	3 years probationary, replaceable for 20 years, renewable every 5 years

Up until 2009, CFA's in BC were granted for a probationary period of five years; following a satisfactory evaluation by the MFR, communities were then granted a long-term CFA (Ambus and Hoberg 2011). Since the removal of the probationary period from the *Forest Act*, CFAs have been awarded as long-term 25-99 year licenses (Table 6). The agreement is not

renewable, but is replaceable every ten years. As was the case with the CFA pilot projects, the MCFC pilot project agreement (Table 6) is for a short three-year term, which, upon completion of the license, may be replaced by the Minister for a period of twenty years, renewable every five years, providing the previously stated renewal criteria is achieved. The Ontario LFMC (Table 6) is similar in duration to the Manitoba FML, and is a twenty-year renewable license that is renewable for an additional five-year period, as long as the renewable agreement is consistent with the applicable forest management plan.

4.4 Fiscal obligations

All provinces have in place some sort of stumpage fee that the tenure holders are required to pay, and most also include application fees, initial deposits, and land rents. The main fiscal obligations for Manitoba FML holders are; monthly crown timber charges, fire renewal charges, fire protection charges, assignment fees, and waste of merchantable timber fees. The other three Manitoba tenures all require waste of merchantable timber fees, timber sale operating fees, and stumpage fees. All stumpage fees follow provincially set out guides for fees and are market based for the four main commodities, Kraft, softwood lumber, OSB, and newsprint. These prices are set monthly based on commodity prices, while the set rate for other commodities (ex. Fuel wood, hardwood lumber, posts and rails, biomass) are reviewed annually (McGimpsey 2013).

In BC, the CFA stumpage fees were recently adjusted to allow for a reduction of 70-80%. This is a critical development as can be demonstrated by regulations in Nova Scotia where the MCFC has faced difficulties in becoming self-sufficient in part due to stumpage fees remaining the same as those for any other area-based FULA (Medway Community Forest Co-operative 2016). All other fees such as land rents, harvesting and permit fees have remained relatively unchanged and continue to be the responsibility of the CFA license holder.

In Nova Scotia, the government has provided funding of \$274,000 for the three-year Pilot Project as part of the MCFC agreement to help the MCFC become fully self-sufficient by the end of the agreement (Subcommittee of the Whole on Supply 2015). Although fiscal obligations are not clearly laid out in the agreement itself, administrative costs, in addition to stumpage fees, remain the same as any other large FULA. If fees for community Forests are to remain under the conditions for FULAs, these will also include property taxes, betterment charges, service charges, business taxes and occupancy, and liability insurance of \$2,000,000. While maintaining many of the same basic fiscal obligations, such as Crown timber harvesting fees, the Ontario LFMC is also subject to additional charges such as the required payment to its members the remuneration and expenses determined by the Lieutenant Governor in Council. Additionally, while the corporations retain the base stumpage revenue (normally deposited into the Consolidated Revenue Fund of Ontario) to pay for operating costs and to reinvest into LFMC operations, if an LFMC makes a profit the province has the discretionary authority to take a dividend (Ontario NDMF 2011).

4.5 Operational requirements and controls

The operational requirements and controls have been separated into the four categories for evaluation: strategic planning, operational planning, specific forest practices, and compliance and enforcement.

4.5.1 Strategic planning

All four provinces have in place a framework for strategic level planning. All of which are some form of long-term strategic management plans that are included as a condition for holding the tenure, and which have content requirements laid out in planning manuals that have quasi-legal status. While having slightly different requirements listed in the planning manuals, all

strategic planning is thus carried out through compulsory management planning that is geographically delegated to geographic locals specified by the licence, permit, or agreement.

In Manitoba (Table 7), the long-term management plans for FMLs are required for ministerial approval within three years of the license being issued, and the content and procedures for management plans must be in accordance with guidelines provided by Manitoba Sustainable Development, and the development of plans is the responsibility of the license holder. Therefore, management plans do follow the compulsory approach, however, semi-legal guidelines developed by the provincial government are set out for the content requirements. Requirements include the adoption of a 20-year management plan that must address harvesting activities, access development, forest renewal activities, forest resources involved in operations, operating practices, and a consultation process. The other three Manitoba tenures are also subject to geographically delegated management planning that follows the guidelines provided by Manitoba Sustainable Development, however these are not required to be submitted unless requested or, in the case of the TSA Community Allocation, upon the mandatory five-year review. All lower level plans are subject to conditions laid out in the strategic management plans.

The compulsory approach to management plans is, following the Luckert et al. (2011) framework, appropriate as problems are highly diverse in terms of the varying goals and values of the license holders, however as the guidelines set out were developed by the government, and approval of the plan may be based on whether the guidelines were followed, there may not be adequate devolution of strategic planning rights to meet the requirements of a community forest tenure.

The CFA holders in British Columbia (Table 8), are also subject to compulsory management plans as well as forest stewardship plans that satisfy provincial requirements and

MFR approval. Forest stewardship plans (FSP) must be made available for review by the public, First Nations, and other stakeholders before it is submitted for government approval (British Columbia MFR 2009). Approval of the FSP is the responsibility of the forest district manager. The manager must approve the plan if the plan meets the compulsory objectives set by the government and conforms to the *Forest Range and Practices Act* (FRPA) and its regulations. Some of these objectives include soils, visual quality, timber, water, fish, wildlife, biodiversity, recreation resources, resource features, and cultural heritage resources (British Columbia MFR 2009). As objectives and values of each CFA may vary, the compulsory approach to the objectives is appropriate in that it ensures environmental values are considered, however it also allows the CFA holder to address those values based on individual circumstances. Management plans are subject to minister approval and a recommended outline for content is provided by the province. The purpose of the management plan is to link the community and their values to the management of the CFA, and to establish an AAC for the CFA (British Columbia MFLNR 2015). CFA holders may also develop plans for NTFPs, however, this is not required. While the compulsory management planning approach for CFAs allows for more flexibility in the design of plans, approval remains delegated to the government, and thus devolution of strategic planning rights remains limited. All plans developed during the strategic planning phase are binding on lower level plans.

The MCFC in Nova Scotia (Table 8) must also create a management plan that follows provincial requirements and any regulations that the Governor in Council may make at their discretion. Thus, while the management plan has the potential for the flexibility benefits that come with compulsory management planning, the authority that remains with the Governor in Council to make any new requirements or regulations, and the uncertainty of what form those

requirements will take, removes a great deal of decision-making authority from the community. Therefore, whether the community feels there is an adequate devolution of decision-making authority in the strategic planning process will likely come down to individual, subjective, cases of whether the community feels secure that the Governor in Council will not exercise those rights to the detriment of the goals and values of the community. As with the other provinces, the plans remain binding on lower level plans.

Ontario LFMCs (Table 8) are slightly different. Ontario is the only province that specifically outlines in the enabling Act, that forest management objectives must have regard for plant life, animal life, water, soil, air and social and economic values. Ontario also applies professional delegation in management plan approval, as the plan must be certified by a professional forester in accordance with the forest management planning manual before being approved by the minister. The LFMC also has the additional requirement of a business plan that must be submitted at least three months prior to each fiscal year for minister approval. In the case of Ontario, the regulatory approaches bare similarities to BC, in that compulsory management planning does allow some flexibility in plan development, but there also remains requirements for ecological values, which in the case of Ontario are set in more legally binding performance-based regulations. Management plans are, once again, binding on all lower level plans.

4.5.2 Operational planning

As with the higher-level strategic planning, operational planning occurs through geographically delegated compulsory management planning. All license, agreement, and tenure holders are responsible for developing and submitting an annual operating plan, except in the case of the MCFC (Table 8) where the initial operating plan was provided by NSDNR until MCFC had produced their own. Additionally, as with the management plans, all operating plans

are binding on lower level plans and operations. In Manitoba (Table 7), operational planning occurs through annual submission of operating plans—which are the responsibility of the license holder—that describe access development, forest renewal activities, where harvesting will take place and what silvicultural methods will be used. The license holder must also submit the proposed activities for the following two years. Operating plans must follow Manitoba’s Submission Guidelines for Forest Management Operating Plans and be approved by the Director of the Forestry and Peatlands Management Branch. The other three tenures again follow the same legislation and must submit basic harvest details with any application for a license, permit or agreement, and must cut timber in a manner acceptable to an officer and following basic performance- and practice-based regulations set out in the Forest Use and Management Regulation. Any timber that is cut by a forest company under these tenures must follow the same guidelines as the FML, except that the operating plans are not required to be submitted for approval. Only the locations of roads require officer approval. The guidelines approach allows for more flexibility in operating plans, however as plan approvals are based on these guidelines, the flexibility and decision-making authority provided will be based on how closely the minister requires guidelines be followed.

Similar to Manitoba’s tenure arrangements, excluding FMLs, CFA holders in British Columbia (Table 8) are subject to compulsory operating plans that comply with applicable regulations, but licensees are not required to submit these plans for approval unless requested by the MFR. Additionally, no plans are required for any commercial harvesting of NTFPs. Applications are necessary for cutting and road permits. In this case, there is high geographical delegation in terms of NTFPs as CFA holders are provided the decision-making authority over

associated operating plans. Operating plans for timber resources maintain the same issue as management plans in that they remain subject to regulations developed by the government.

In Nova Scotia (Table 8), much like the FML in Manitoba, annual operating plans are required to be submitted to NSDNR each year, and Ministerial permission is required for access road construction. All operating plans are subject to compliance with forest management policies, practices and guidelines that are outlined in the license agreement (ex. Forest/Wildlife Guidelines and Standards (1989), Pre-Treatment Assessment, Mainland Moose Recovery Plan etc.), which are subject to change at the sole discretion of NSDNR. While some of these legally binding regulations—which include prescriptive- and performance-based regulations as well as guidelines—do help ensure ecological values are protected, they once again limit the level of devolution in planning operations, and the ability of the community to create their own management plans for the values of concern.

Ontario LFMCs (Table 8) must also submit annual operating plans, these plans are required to describe harvesting, renewal and maintenance activities, the expected future structure and condition of the Crown forest to which the license pertains, and any standards or guidelines used in developing the prescription. While geographical delegation occurs for the creation of the plans, professional delegation is applied for approval, as in following with strategic planning requirements, the operating plans must be certified by a professional forester in accordance with the Forest Management Planning manual prior to Minister approval. As with the other provinces, devolution is also limited by government legislated manuals and guidelines for operating procedures.

4.5.3 *Specific forest practices*

For all four tenures in Manitoba (Table 7), forest renewal is required through payment of renewal charges to the Crown, to a third party who will perform the renewal, or by a license holder themselves with permission from the minister. All reforestation, riparian management, and ecological requirements must follow objectives set out in guidelines books provided by Manitoba Sustainable Development. In terms of renewal there are no set requirements for renewal prescriptions, however renewal plans must be outlined in the compulsory operating plans and will be subject to minister approval. These guidelines do set out prescriptive recommendations for specific operations, such as the buffer width necessary for wildlife and riparian features/areas (Manitoba Sustainable Development 2017). The prescriptive nature of these guidelines improves congruence, however as they depart from simplicity, and remain “guidelines” (i.e. not legally enforceable), there may be a lack of administrative practicality and the implementation and enforcement of this regulations may be difficult. Additional requirements are laid out in the 2015-2010 Timber Quota Policy, which states that the department of Sustainable Development may direct quota holders to harvest timber in salvage areas following a disturbance, prior to harvesting existing timber sale areas (Manitoba Sustainable development 2016). Due to the controversial nature of salvage logging and its ecological impacts³, this stipulation may affect management goals and values of the quota holder.

In British Columbia, CFA holders are required to establish, in accordance with the forest stewardship plan (Table 8), the prescribed requirements and standards, a free growing stand on

³ For more details about the controversial impact of salvage logging and their ecological impacts, see Lindenmayer et al. (2008)

the portion of land that is to be reforested. The province has guidelines available to help guide restocking operations, however reforestation remains a compulsory regulation with no specific prescriptive- or performance-based regulations. License holders are encouraged to use stocking standards established by the province, but may propose other silviculture stocking standards with clear rationale. While no specific regulations set out for riparian buffers, the Lieutenant Governor in Council may make regulations respecting protection of riparian zones. Requirements for ecological values are addressed within the Forest Stewardship plan that requires operations with ecological considerations be consistent with government objectives for those values. The extensive use of guidelines for specific forest practices allows for more decision-making authority to be granted to license holder, with the limitation of the requirement for minister approval for specific harvesting operations that must be laid out in the operating plans.

Potentially due to its recent establishment, the MCFC license does not have any specified criteria for specific standards (Table 8), however, professional delegation to the minister occurs as the minister has the authority to integrate protective measures in forest-management planning for Crown lands through results-based prescriptions to ensure the respect of the integrity of “...water-supply watersheds, wildlife habitats, special places, and ecological reserves and significant outdoor-recreation opportunities” (*Crown Lands Act, 1989*). The MCFC is also required to operate under best management practices in its planning and undertaking of the management of non-timber forest botanicals and NTFPs consistent with the management objectives and principles that are set out in the MCFC licence agreement. The use of guidelines and standards allow for flexibility in planning to a certain degree, however the extensive list of objectives that must be considered, as laid out in the license agreement, has the potential to complicate and limit the forest approaches utilized.

There are no specific regulations that are set out for forest practices under the Ontario LFMC (Table 8), however, all silvicultural prescriptions are required to comply with the forest operations and silviculture manual. The manual provides non-binding recommendations for riparian protection, recommending that “care be taken when forestry equipment is operated in or near riparian areas” (MNR 2000). The forest management planning manual also includes result-based prescriptions for preservation of ecological processes as well as prescriptive requirements that silvicultural practices should emulate natural disturbances and minimize effect on water and other ecological values. Although prescriptive rules increase congruence by considering all possible variations, the fact that these rules are set out within a guidelines manual makes them more difficult to enforce, and there may be difficulties associated with implementation.

4.5.4 Compliance and enforcement

All provinces have a system in place for inspections and utilize administrative and criminal penalties for non-compliance. Under all tenure regulations evaluated for Manitoba (Table 7), there is a heavy reliance on industry self-inspection, and the officer is authorized to inspect all records required to be kept under the Act or timber cutting right, as well as may inspect, without warrant, any vehicle transporting timber and require proof of identification from the transporter. Penalties may be issued through fines, imprisonment, and/or cancellation of a license, permit or agreement. Tenure holders must receive notification of intent to cancel and are provided with a hearing where they may appeal the cancelation to a judge.

In British Columbia, CFA holders are responsible for annual audits and reports that must be made public to the community (Table 8). The MFR is responsible for monitoring the compliance with forestry legislation and for enforcing any contraventions. There are currently no regulations developed by the MFR for botanical NTFPs, and CFA holder’s authority to develop

and enforce rules for NTFP's within the agreement area remains unclear, as Aboriginal rights to the customary use of the products are protected by the constitution and NTFPs are also treated as open access resources on public land (Ambus and Hoberg 2011), limiting CFA rights and ability to exclude other users. The CFA holder is authorized to challenge specific decisions made by the MFR related to timber through the Forest Appeals Commission, but any intercommunity conflicts are the responsibility of the CFA holder.

In Nova Scotia, inspection requirements are more regulated and directors of the MCFC are required to produce annual report to NSDNR including: requirements resulting from the MCFC bylaws, statements of revenues, costs, and income for the pilot project (Table 8). MCFC is required to periodically provide to NSDNR, information as required for the measurement of performance indicators listed in the license agreement. In the event of non-compliance, the NSDNR may terminate the agreement with MCFC. In the event of early termination, any costs for infrastructure investments not recovered by the MCFC are subject to compensation negotiations with NSDNR. In the event of a dispute or difference arising as to any matter connected with the license agreement or its interpretation, the dispute resolution will be determined at the sole discretion of NSDNR, but with consideration of the intent and purpose of the license agreement.

In Ontario, the board of each Ontario LFMC is required to submit an annual report on its affairs to the Minister within 120 days after the end of each fiscal year, unless otherwise specified by the minister (Table 8). This report will include the audited financial statements of the LFMC. The minister conducts reviews of the LFMC every 5-7 years to ensure compliance and may cancel the agreement if compliance is not met, with approval of the Lieutenant Governor in Council. Prior to any cancellation, the licence holder must receive written notice of

the intent to cancel and the reason why, and they are granted the opportunity to make representation to the minister on the reasons why the license should not be cancelled. License holders may also appeal any amendments made by the minister to the management plan. This appeal process is unique in that none of the other provinces have appeal processes for management plan changes included in their enabling legislation.

Table 7. Operational requirements and controls for MB tenures

Characteristic	FMLs	TSA: Community Allocation	TSA: Quotas	TPs
Strategic planning	Geographically delegated, compulsory long-term management plan; subject to guidelines provided by Sustainable Development	Subject to review every 5 years; geographically delegated management planning; timber harvesting must follow Sustainable Development guidelines	Geographically delegated management planning; timber harvesting must follow Sustainable Development guidelines	Geographically delegated management planning; timber harvesting must follow Sustainable Development guidelines
Operational planning	Geographically delegated, compulsory management planning; annual operating plan; plans subject to Manitoba's Submission Guidelines and approval by government official; prescriptive and practice-based regulations	Geographically delegated, compulsory management planning; subject to Manitoba's Submission guidelines; prescriptive and practice-based regulations	Geographically delegated, compulsory management planning; subject to Manitoba's Submission guidelines; prescriptive and practice-based regulations	Geographically delegated, compulsory management planning; subject to Manitoba's Submission guidelines; prescriptive and practice-based regulations
Specific forest practices	Forest renewal required through payment of renewal charges	Forest renewal required through payment of renewal charges	May be required to harvest timber in salvage areas prior to harvesting of existing timber; forest renewal required through payment of renewal charges	Forest renewal required through payment of renewal charges
Enforcement and compliance	Surety bond may be requested; late payment penalty	Late payment penalty	Late payment penalty	Late payment penalty

Table 8. Operational requirements and controls for BC, ON, and NS tenures

Characteristic	CFA	LFMC	MCFC
Strategic planning	Geographically delegated, compulsory management plan; subject to public and First Nation review; plans subject to government approval	Geographically delegated, compulsory management plan; plans subject to government as well as professional forester approval; must have regard for ecological values	Geographically delegated, compulsory management plan; plans subject to government approval; Governor in Council may include any requirements or regulations
Operational planning	Geographically delegated, compulsory management plan; no plans required for commercial harvest of NTFPs; subject to government legislated manuals and guidelines for operating procedures	Geographically delegated, compulsory management plan; subject to professional forester and minister approval; subject to government legislated manuals and guidelines for operating procedures	Geographically delegated, compulsory management plan; prescriptive and practice-based regulations; subject to government legislated manuals and guidelines for operating procedures
Specific forest practices	Must establish free growing stand on reforestation land; geographically-delegated stocking standards; regulations may apply for protecting riparian zones	Non-binding recommendations for riparian protections; results-based prescriptions for preservation of ecological processes	Minister may integrate results-based prescriptions for protecting ecological values
Enforcement and compliance	Annual audits and reports must be made public; MFR responsible for monitoring and enforcement; no regulations for monitoring botanical NTFPs; licensee may challenge MFR timber-related decisions	Annual reports to minister; minister review every 5 to 7 years; agreement may be terminated for non-compliance; licensee entitled to written notice of cancelation; licensee may appeal any amendments made	Annual reports to NSDNR; license may be terminated for non-compliance; dispute resolution is sole at sole discretion of NSDNR

CHAPTER 5 - DISCUSSION

This project was a qualitative content analysis on the community forest tenure legislation present in four provinces, in an attempt to identify successful policy options for Manitoba, and contribute to the discussion on forest tenure reform in the province. The results have been presented based on how best they fit into the criteria for tenures for sustainable forest management as outlined by the Luckert et al. (2011) framework. There are strengths and weaknesses associated with each province and each characteristic, and thus there are many valuable lessons from which Manitoba can learn. This chapter outlines the most important lessons learned through the analysis in order to foster discussion on recommendations for tenure reform. Thus, the following discussion provides suggestions for the creation of a community forest tenure in Manitoba.

- Creation of an area-based tenure awarded based on multiple attributes. Manitoba has a much narrower set of criteria for evaluation than the other provinces. To facilitate SFM and the complex values and goals of a community, broader criteria is needed in order for tenures to provide for economic, social, and environmental values beyond financial returns. Including Indigenous, local community, and other stakeholder involvement in the development of tenure allocation criteria, may help ensure the public feels their values are protected, and that communities feel the criteria is realistic and does not exclude communities based on the financial restraints that come with competitive bidding processes. To ensure sustainable development, an area-based tenure is also considered essential.
- Providing comprehensive rights to multiple forest resources and their benefits streams. While it is likely not possible, or desirable, to have fully comprehensive and exclusive

tenure rights, experience in other settings indicate that it is extremely beneficial to provide as much access to resources and associated benefit streams as possible in order to ensure sustainable development and a successful community forest. Tenures should include exclusive rights to harvest all timber within the specified area, as well as to future timber in the license area. Separating rights to various tree types and having multiple rights holders within a single area reduces investment in the future structure of the forest, and does not facilitate integrated sustainable forest management plans. A range of resource rights is also considered essential to allowing communities to manage for multiple values. Lessons can be taken from NS and BC, which both allow communities to apply for rights to resources other than timber and NTFPs. However, it can also be argued that the fact communities must argue with the province for these rights shows that the communities' interests are not the primary driver for management direction (Ambus and Hoberg 2011). Therefore, it will likely be important to discuss the appropriate allocation of rights early on in policy making discussions with First Nations, local communities, and other stakeholders. In terms of the AAC, there should not be a required maximum to be harvested, as this creates conflict when the goals and values of industry and communities differ.

- Develop long-term renewable forest tenures. The duration of a tenure is of vital importance. Area-based community forest tenures must be for sufficient lengths so as to encourage commitment and investment in the health and structure of the forest. Long-term tenures, such as the 25-99 year licences provided by the CFA, are ideal. Where tenure terms must be shorter, they must also be renewable, and provide security to the tenure holder.

- Fiscal obligations for tenures will need to be adapted from the large-scale obligations in order to facilitate success for these smaller tenures. Lessons can be taken from the recent adjustment to stumpage fees in British Columbia for CFA holders. Government funding and support is also essential, especially in the beginning stages of a new tenure. For example, communities could be let to retain stumpage revenues in the first three to five years of their operation in order to help with start-up costs and create stability.
- Geographical delegation of compulsory management plans and strategic planning allow for more community values and goals to be met. Within all tenures there remains a need for more delegation of strategic and operational planning guides to be devolved to the community, rather than the community following specific guides set out by the government. If it is deemed necessary to keep mandatory guidelines for operational and strategic planning in order to ensure the public is confident their values are being protected, guideline manuals should be developed with community involvement. Communities should also be provided the rights to make and revise rules governing operational-, and some strategic-level decisions in order to be able to successfully respond to changing local conditions.
- Specific forest practices that ensure ecological and social values are met, are also valuable. This requires finding a balance between setting specific standards that ensure practices like reforestation and water protection are undertaken, while also devolving enough decision-making power to the community in how and what forest practices are applied. The devolution of power will be one of the most important factors to the success of the forest tenure and its continued community support.

- Systems for compliance and enforcement are essential not only to ensure sustainable forestry, but also to ensure that communities have the legal right to challenge any amendments to their licence. While all provinces have in place methods for compliance, most of which rely on self-reporting, few have procedures outlined within the enabling legislation that allow for the licence holder to appeal the changes that officials are entitled to make at any time, thus potentially reducing the security tenures holders feel they are provided. This is especially important for community forests, as when security of tenure is absent, community forest management has been found more likely to fail (Pagdee et al. 2007).

The above recommendations are not an exhaustive list of success factors for community forest tenures, but outline some of the strengths and weaknesses in the current legislative tenures in the country, and provide a starting point for the discussion on tenure reform in Manitoba.

5.1 Framework and limitations

As previously acknowledged, this study was not intended to reach in-depth into the goals and issues of the distinct rural and Indigenous communities of Manitoba. This being the case, the analysis did not target specific issues that may be relevant to the success of a tenure targeting those communities.

The qualitative property rights framework I used also comes with a number of limitations. As it was designed for larger tenures, some of the characteristics, such as fiscal obligation, were required to be adjusted, and overall there was a lack of attention given to the important concept of devolution. The framework is meant to be applied to tenures across the country, but as community-based tenures are arguably more variable between provinces and municipalities than are large industry tenures, there is no inclusion of important, often more

subjective, evaluations for topics like security and local values. Overall the framework worked as intended, in providing an overview of current practices operating in Canada for community involvement and their fundamental strengths and weaknesses.

CHAPTER 6 - CONCLUSION

This study shows how current community forest policies are unfolding in the country. It also demonstrates that community forestry can be, and is, successfully functioning within the forestry system, but that there are also many aspects that still need work. The critical issues outlined in this study call for more community involvement in creation of tenures so that they meet the needs and goals of current and future license holders. The analysis shows that developing a tenure that can successfully operate and have meaningful devolution of decision-making power is a learning process that evolves through lessons learned from previous and current attempts. This is a great time for Manitoba to invest in tenure reform as other provinces have already paved the way, providing important examples and lessons from which Manitoba can greatly benefit. Community forest tenures continue to face challenges with implementation and design, however it is a concept and practice that has a great deal of potential for expanding community involvement in forestry within the Province of Manitoba.

REFERENCES

- Ambus, L. 2016. Community Forestry in British Columbia: From a Movement to an Institution. In S. Teitelbaum (Ed.), *Community Forestry in Canada: lessons from policy and practice*. Vancouver: UBC Press.
- Agrawal, A., Chhatre, A. and R. Hardin. 2008. "Changing governance of the world's forests". *Science* (New York, N.Y.). 320 (5882): 1460-2.
- Beckley, T. 2016. Community Forestry in the Maritimes: Long-Standing Debates and Recent Developments. In S. Teitelbaum (Ed.), *Community Forestry in Canada: lessons from policy and practice*. Vancouver: UBC Press.
- Benner, J., Lertzman, K., and E. Pinkerton .2014. Social contracts and community forestry: how can we design forest policies and tenure arrangements to generate local benefits? *Canadian Journal of Forest Research*. 44. pp. 903–913
- British Columbia MFLNR. 2015. CFA Management Plan Template. Available online at https://www.for.gov.bc.ca/ftp/HTH/external/!publish/web/timber-tenures/community/cfa_mp_template_companion_document.pdf; last accessed May 24th, 2017.
- British Columbia MFR. 2009. Frequently Asked Questions: Forest Stewardship Plans. Available online at https://www.for.gov.bc.ca/dck/Topics/FSP/FAQs_FSPs.pdf; last accessed May 24th, 2017.
- Bullock, R., and K. Hanna. 2012. Community forestry: local values, conflict and forest governance. Cambridge: Cambridge University Press.

- Bullock, R. and J. Lawler. 2015. Community forestry research in Canada: A bibliometric perspective. *Forest Policy and Econ.* 59:47-55.
- Canadian Forest Service. 2009. "The state of Canada's forests: Annual report." Ottawa, ON: Natural Resources Canada
- Cashore, B., and G. Auld. 2003. British Columbia's environmental forestry policy record in perspective. *Journal of Forestry*, 101(8), 42-44.
- Crown Forest Sustainability Act, Statutes of Ontario (1994 c. 25). Retrieved from Government of Ontario website: <https://www.ontario.ca/laws/statute/94c25>
- Crown Lands Act, Revised Statutes of Nova Scotia (1989 c. 114). Retrieved from the Nova Scotia legislature website: <http://nslegislature.ca/legc/statutes/crownlan.htm>
- Davis, E. 2008. "New promises, new possibilities? Comparing community forestry in Canada and Mexico." *BC Journal of Ecosystems and Management* 9 (2): 11-25
- Diver, C. 1983. The Optimal Precision of Administrative Rules. *The Yale Law Journal*, 93(1), 65-109.
- Duinker, P.N., Matakala, P.W., Chege, F., & Bouthillier, L. (1994). Community forests in Canada: An overview. *Forestry Chronicle*, 70(6), 711-720.
- Duinker, P., and K. MacLellan. 2016. Whither Community Forests in Canada? Scenarios of Forest Governance, Adaptive Policy Development, and the Example of Nova Scotia. In S. Teitelbaum (Ed.), *Community forestry in Canada: lessons from policy and practice*. Vancouver: UBC Press.

- Dunster, J. 1993. Managing forests for forest communities: Community forestry is an idea that promises to change the way we do forestry. *Earthkeeper*, 3(3), 15-18.
- Fisher River Cree Nation. 2016. Fisher River Progress Report. Available online at <https://www.fisherriver.ca/reports-publications>; last accessed May 24th, 2017.
- Forest Act, Revised Statutes of British Columbia (1996 c. 157). Retrieved from Government of British Columbia website: [http://www.bclaws.ca/civix/document/LOC/complete/statreg/-%20F%20--/Forest%20Act%20\[RSBC%201996\]%20c.%20157/00_Act/96157_01.xml](http://www.bclaws.ca/civix/document/LOC/complete/statreg/-%20F%20--/Forest%20Act%20[RSBC%201996]%20c.%20157/00_Act/96157_01.xml)
- The Forest Act, Revised Statutes of Manitoba (1987 c. F150). Retrieved from the Manitoba Laws website: <http://web2.gov.mb.ca/laws/statutes/ccsm/f150e.php>
- Forest and Range Practices Act, Statutes of British Columbia (2002 c. 69). Retrieved from Government of British Columbia website: http://www.bclaws.ca/civix/document/id/complete/statreg/02069_01
- Fortier, J., Wyatt, S., Natcher, D., Smith, M., and M. Hébert. 2013. An inventory of collaborative arrangements between Aboriginal peoples and the Canadian forest sector: Linking policies to diversification in forms of engagement. *J. Environ. Manage.* 119:47-55.
- Griffith, J., Diduck, A., and J. Tardif. 2015. Manitoba's forest policy regime: Incremental change, concepts, actors, and relationships. *Forest. Chron.* 91(1):71- 83.
- Gunter, J. 2000. *Creating the conditions for sustainable community forestry in B.C.: A case study of the Kaslo and district community forest*. M.NRM thesis, Simon Fraser University, Burnaby, B.C., Canada. 175 p.

- Haley, D., and H. Nelson. 2007. Has the time come to rethink Canada's Crown forest tenure systems? *Forestry Chronicle*, 83(5), 630-641.
- Hammond, H. 1991. *Seeing the forest among the trees: The case for wholistic forest use*. Vancouver: Polestar Press.
- Harvey, S., and B. Hillier. 1994. Community forestry in Ontario. *Forestry Chronicle*, 70(6), 725-730.
- Lawler, J., and R. Bullock. 2017. A Case for Indigenous Community F. *Journal of Forestry*, 115(2), 117-125.
- Lindenmayer, D., Burton, P., and Franklin, J. 2008. *Salvage logging and its ecological consequences*. Washington: Island Press.
- Luckert, M., and D., Haley. 1995. The allowable cut effect as a policy instrument in Canadian forestry. *Canadian Journal of Forest Research*, 25(11), 1821-1829.
- Luckert, M., Haley, D., and G. Hoberg. 2011. Policies for sustainably managing Canada's forests: tenure, stumpage fees, and forest practices. Vancouver: UBC Press.
- Lynn, F. and G. Busenberg. 1995. Citizen advisory committees and environmental policy: What we know, what's left to discover. *Risk Anal.* 15(2):147-162
- MacLellan, L., and P. Duinker. 2012. Community forests: A discussion paper for Nova Scotians. Stewiacke/Halifax, NS: Nova Forest Alliance/School for Resource and Environmental Studies, Dalhousie University.

- McCarthy, J. 2006. Neoliberalism and the Politics of Alternatives: Community Forestry in British Columbia and the United States. *Annals of the Association of American Geographers*, 96(1), 84-104.
- McGimpsey, G. 2013. Allocation and Permitting of Crown Timber in Manitoba. Northern Aboriginal Forestry & Housing Conference. Available online at <http://www.frontiersmb.ca/wp-content/uploads/2012/06/Allocation-and-Permitting-Gwen-McGimpsey-2013.pdf>; last accessed May 24th, 2017.
- McGurk, B., A.J. Sinclair and A.P. Diduck. 2006. An assessment of forest management stakeholder advisory committees: case studies from Manitoba, Canada. *Society & natural Resources: An International Journal* 19(9): 809-826
- Manitoba Conservation n.d. *About the Aboriginal relations branch*. Available online at <http://www.gov.mb.ca/conservation/arb/about/index.html>; last accessed May. 20, 2017.
- Manitoba Conservation. 2006. Five-year report on the status of forestry April 2001–March 2006. Manitoba Conservation Forestry Branch, Winnipeg, MB
- Manitoba Forestry Branch n.d. Timber Cutting Rights on Crown land. Available online at https://www.gov.mb.ca/conservation/forestry/manage/cutting_right.html; last accessed May 24, 2017.
- Manitoba Sustainable Development. 2016. 2015-2020 Timber Quota Policy. Available online at http://www.gov.mb.ca/sd/forestry/pdf/manage/2016_timber_quota_policy.pdf; last accessed May 24th, 2017.

Manitoba Sustainable Development. 2017. Forest Management Guidelines for Terrestrial Buffers. Available online at

http://www.gov.mb.ca/sd/forestry/pdf/practices/terrestrial_final_jan2017.pdf; last accessed May 24th, 2017.

Medway Community Forest Co-operative. 2016. Annual Report. Available online at

<http://www.medwaycommunityforest.com/board-meeting-minutes-february-2016/annual-report-2016-2/>; last accessed May 24th, 2017.

Medway Operating Agreement. 2015. Retrieved from Medway Community Forest Co-operative

website: <http://www.medwaycommunityforest.com/wp-content/uploads/2015/02/Medway-Operating-Agreement-DNR-FINAL-2015-01-30.pdf>

Miller, & Nadeau. 2016. Perceptions of public land governance from two Canadian provinces:

How is the social agenda being met through sustainable forest management? *Land Use Policy*, Land Use Policy.

Nathan, H. 1993. Aboriginal Forestry: The role of the First Nations. In K. Drushka, B. Nixon,

and R. Travers (Eds.) *Touch wood: BC forests at the crossroads*. Madeira Park, BC: Harbour. 137-70

Nova Scotia. DNR. 2011. *The Path We Share: A natural resources strategy for Nova scotia*,

2011-2020. Nova Scotia Department of natural resources.

Ontario MFR. 2000. Forest Operations and Silvicultural Manual. Ontario: Queen's Printer for

Ontario.

- Ontario NDMF. 2011. Strengthening forestry's future: Forest tenure modernization in Ontario. Toronto: Ministry of Northern Development, Mines, and Forestry,
- Ontario Forest Tenure Modernization Act, Statutes of Ontario (2011 c. 10). Retrieved from Government of Ontario website: <https://www.ontario.ca/laws/statute/11o10>
- Pagdee, A., Kim, Y., and P. Daugherty. 2006. What Makes Community Forest Management Successful: A Meta-Study from Community Forests Throughout the World. *Society & Natural Resources*, 19(1), 33-52.
- Palmer, L., Smith, M., and C. Shahi. 2016. Community Forestry on Crown Land in Northern Ontario: Emerging Paradigm or Localized Anomaly? In S. Teitelbaum (Ed.), *Community forestry in Canada: lessons from policy and practice*. Vancouver: UBC Press.
- Parkins, J., Bullock, R., Noble, B., and M. Reed. 2016. Forests and Communities on the Fringe: An Overview of Community Forestry in Alberta, Saskatchewan, and Manitoba. In S. Teitelbaum (Ed.), *Community forestry in Canada: lessons from policy and practice*. Vancouver: UBC Press.
- Robson, M., and T. Davis. 2015. Evaluating the transition to sustainable forest management in Ontario's Crown Forest Sustainability Act and forest management planning manuals from 1994 to 2009. *Canadian Journal of Forest Research*, 45(4), 436-443.
- Schlager, E., and E. Ostrom. 1992. Property-rights regimes and natural resources: A conceptual analysis. *Land Economics*, (3), 249-262.
- Subcommittee of the Whole on Supply. 2015. Resolution E17. Available online at http://nslegislature.ca/index.php/committees/committee_hansard/C13/subsupply_23; last accessed May 24th, 2017.

- Teitelbaum S., and R. Bullock. 2012. "Are community forestry principles at work in Ontario's county, municipal, and conservation authority forests?" *Forestry Chronicle*. 88 (6): 697-707.
- Teitelbaum, S. 2016. *Community forestry in Canada: lessons from policy and practice*. Vancouver: UBC Press.
- Tolko Industries Ltd. November 10 2016. Canadian Kraft Paper Industries Limited buys Tolko's Manitoba Operation and Assets. Available online <http://tolko.com/news/canadian-kraft-paper-industries-limited-buys-tolko-s-manitoba-operation-and-assets>; last accessed May 24th, 2017.
- UNSM Forestry Workshop. 2016. Medway Community Forest Co-operative Ltd. "Utilizing the Community Forest Model as a Means to Promote Rural Economic Development". Available online at https://www.unsm.ca/doc_view/1794-medway-community-forest.html; last accessed May 24th, 2017.
- Williams Lake Community Forest LP. 2015. Final Management Plan. Available online at https://williamslakecommunityforest.files.wordpress.com/2014/10/20130820_approved_managementplan.pdf; last accessed May 24th, 2017
- Wilson, J. 1998. *Talk and Log Wilderness Politics in British Columbia*. Vancouver: UBC Press.
- Zurba, M., Sinclair, J., and D. Shrubsole. 2016. *Building Common Ground: Learning and Reconciliation for the Shared Governance of Forest Land in Northwestern Ontario*.