**IMPLEMENTATING FOREST CERTIFICATION ON NEWFOUNDLAND AND LABRADOR CROWN LANDS: AN EVALUATION OF GOVERNMENT AND INDUSTRY PERSPECTIVES**

by

© Carolyn Fox

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# ABSTRACT

## IMPLEMENTATING FOREST CERTIFICATION ON NEWFOUNDLAND AND LABRADOR CROWN LANDS: AN EVALUATION OF GOVERNMENT AND INDUSTRY PERSPECTIVES

Carolyn Fox                                              Advisor:
Memorial University – Grenfell Campus, 2013              Dr. Michael van Zyll de Jong

As of December 2012, approximately 148 million hectares of forestland in Canada have been certified to a third-party forest certification standard. In Newfoundland and Labrador, the only Crown forests that have been certified are under the management of the province's only pulp and paper mill. In order to evaluate the possibility and practicality of implementing certification on all provincial Crown lands, this study surveyed forestry stakeholders from the provincial forest service, pulp and paper industry and sawmill/product industry to uncover their views on this topic and determine whether they share complementary forest certification goals. Overall, the majority of respondents agreed that certification should be pursued and favoured a joint government-industry approach to leading and financing this initiative. In keeping with previous studies, no major barriers to implementing certification were uncovered, and therefore it is recommended that government and industry work closely together to develop and implement a provincial certification plan.

**ACKNOWLEDGEMENTS**

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## LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| **AAC** | Annual Allowable Cut |
| **CBPP** | Corner Brook Pulp and Paper |
| **CFS** | Canadian Forest Service |
| **CFSI** | Centre for Forest Science and Innovation |
| **CSA** | Canadian Standards Association |
| **DNR** | Department of Natural Resources |
| **EMS** | Environmental Management System |
| **ENGO** | Environmental Non-Governmental Organization |
| **FPAC** | Forest Products Association of Canada |
| **ISO** | International Organization for Standardization |
| **FSC** | Forest Stewardship Council |
| **NFS** | Newfoundland Forest Service |
| **NL** | Newfoundland & Labrador |
| **NSMD** | Non-State Market-Driven |
| **PEFC** | Programme for the Endorsement of Forest Certification |
| **RPF** | Registered Professional Forester |
| **SFI** | Sustainable Forestry Initiative |
| **SFM** | Sustainable Forest Management |
| **UNCED** | United Nations Conference on Environment and Development |

**CHAPTER 1.0 Introduction**

**1.1 An Introduction to Forest Certification**

The idea to establish a sustainable forest management marketing system can be traced back to the 1980s, when startling statistics about the extent of tropic deforestation first reached public consciousness (Vogt et al., 2000). At the United Nations Conference on Environment and Development (UNCED) in 1992, countries failed to reach a consensus on the establishment of a global forest convention, managing to agree only on a set of non-legally binding Forest Principles (Humphreys, 2005). Frustrated with the perceived inability of governments to protect forest resources, environmental non-governmental organizations (ENGOs) began moving away from demonstrations and boycotting campaigns, and instead focused their attention and resources on creating positive instruments that would incentivize businesses to sustainably manage their forest resources (Nussbaum and Simula, 2005). Although several independent certification schemes were developed in the early 1990s in North America and the UK, the establishment of the Forest Stewardship Council (FSC) in 1993 marked the creation of the first independent global certification network (Tollefson et al., 2008). With the advent of this global network, forest certification broadened to encompass forest ecosystems beyond the tropics and thus gained the attention of the forest industry in North America and Europe. In the interest of protecting national interests and offering consumer choice, several industry leaders developed alternative and competing certification schemes better suited to domestic needs (Tollefson et al., 2008).

According to the Dictionary of Forestry (2003), forest certification can be defined as the following:

*Forest certification is a market-based instrument aimed at promoting sustainable forest management that takes into account environmental, economic and social issues. It involves the independent assessment of forest management according to internationally (or nationally) accepted standards, and the tracking and monitoring of the supply of forest products to the marketplace. If the forest management is in compliance with a set of specified standards, and the timber from this forest has been tracked and accounted for through all stages of the production process, then it can be given a label which is recognized in the market place.*

Simply put, forest certification is the process of verifying that the management and operation of a forest is in keeping with the sustainability requirements mandated by a particular standard (Nussbaum and Simula, 2005). The following key elements are central to the certification process:

**Standards:** a set of baseline requirements that must be achieved in order for a certification designation to be awarded. In general, two main types of standards are used in certification: management-based standards, which focus on evaluating a company's activities and daily procedures and are less concerned with the outcomes of these behaviours; and performance-based standards, which only evaluate whether a particular outcome has been met and do not specify the manner in which it must be achieved (Tollefson et al., 2008);

**Certification:** the process wherein a certifier gathers objective evidence in order to evaluate whether or not management practices conform to the requirements of a particular standard. In order to ensure a credible, objective, and independent auditing process, most globally recognized certification schemes rely on third-party (independent) certifiers to inspect forest management operations (Rametsteiner and Simula, 2003);

**Accreditation:** the process whereby the certifiers themselves are assessed in order to ensure that they are competent, credible, and independent (Nussbaum and Simula, 2005), and;

**Product tracing and claims:** a mechanism whereby final forest products can be awarded a label to indicate that they were sustainably managed throughout each stage of a supply chain. This process is commonly referred to as a 'chain of custody' inspection (Nussbaum and Simula, 2005).

In Canada, the rapid uptake of certification can be largely credited to the acceptance of this tool by the Forest Products Association of Canada (FPAC). In 2002, FPAC, which is comprised of members who manage the vast majority of Canada's commercial forests, issued a requirement that all of its members must attain certification for their forest operations. As of 2012, 148 million hectares of forestland were certified to a recognized standard in Canada, giving the country the distinction of having the largest area of third-party independently certified forests in the world (FPAC, 2012). In addition to ISO 14001, which is the International Organization for Standardization's environmental management system (EMS) and is often used as a starting point for certification, three sustainable forest management (SFM) standards are officially recognized in the country:

- Canadian Standards Association (CAN/CSA-Z809 or Z804);
- Forest Stewardship Council (FSC); and
- Sustainable Forestry Initiative (SFI)

A description and comparison of these certification standards is provided in Appendix A.

**1.2 Problem Statement**

Canada's forest industry is at a crossroads. Emerging from a multi-year cyclical decline, the forest sector is focused on operationalizing a transformative strategy of innovation and market development (NRCan, 2013a). Forest certification provides one such tool to ensure continued competiveness in global markets, particularly as the extent of certified forest grows both nationally and internationally. Therefore, this tool is rapidly becoming a requirement to maintain and expand market access as well as provide visible commitments to environmental sustainability. The province of Newfoundland and Labrador (NL) has not been immune to these pressures to implement a certification standard. Corner Brook Pulp and Paper (CBPP), which is the only remaining pulp and paper mill in the province, has attained several certification designations for its operations over the past decade: the ISO 14001 EMS Standard (July 2001), the CAN/CSA Z809 SFM Standard (August 2004) and most recently, the FSC National Boreal Standard (July 2012) (CBPPL, 2001; FPAC, 2012). These forests are the only certified forestlands in the province. Although the province began evaluating the possibility of implementing an EMS for Crown forests as early as 2001, neither an EMS nor a SFM certification standard has yet been implemented. However, the Department of Natural Resources' (DNR) 2011-2014 Strategic Plan lists the development of an EMS for certification of Crown forestry operations as a departmental priority, thus bringing the certification issue back into public consciousness and allowing for a renewed look at the feasibility of implementing this system.

Certifying Crown forests in NL is no easy task. Although it is not unique for provinces in Canada to have more public than privately owned land, the Crown owns

more land in NL (over 95 percent) than in any other province (Luckert et al., 2011).

Saunders and Duinker (2002) sought to uncover the specific barriers facing the

Newfoundland Forest Service (NFS) should it attempt to obtain the ISO 14001 EMS

Standard for its public forests. Although the authors concluded that no barriers posed an

insurmountable challenge to implementation, over a decade has passed since the

publication of this research and the NFS has not managed to operationalize any forest

certification standard on its Crown lands. Limited research on certification of NL Crown

lands has been undertaken since this period, despite significant changes to the forest

industry in the past decade and the increasing global extent of certification. Furthermore,

as the Saunders and Duinker (2002) study focused solely on the ISO 14001 EMS

Standard, context-specific information applicable to additional standards is absent.

Therefore, in light of the province's renewed commitment to achieving certification, an

updated study is needed in order to take into account a broader array of certification

standards and reflect the current status of forestry in the province. This research will

alleviate a key knowledge gap and will contribute toward the ongoing evaluation of the

possibility and practicality of implementing forest certification on NL Crown lands.

## 1.3 Purpose Statement and Objectives

Given the political, social, and environmental changes that have occurred in the

province in the past decade, the goal of this research is to take a renewed look at the

feasibility of implementing forest certification on Crown lands in NL. As certification

requirements will have significant implications for the management of provincial forest

districts and will necessitate substantial resources and strong channels of communication,

it is important that informed stakeholders affected by the certification process are granted an opportunity to provide their opinions. Furthermore, feedback from forestry professionals with intimate knowledge about the functioning of forest districts or the requirements of certification will provide a solid knowledge base upon which the province can make decisions. Therefore, creating the means to allow various forestry stakeholders to provide their opinions about forest certification will be a mutually beneficial process.

Overall, the purpose of this study is to survey forestry professionals in the province who are likely to have insight into the technical, political, and practical components of this project. More specifically, this survey will target government and industry workers in the forest sector who will be directly affected by the requirements of a certification standard. Survey responses will uncover attitudes toward certification on Crown lands as well as the roles that government and industry should play in the certification process. Both parties will also be asked about potential barriers to achieving certification on Crown lands. As collaboration between multiple forest users is a fundamental component of all certification standards, it is important that any discrepancies in opinion are discovered early in the process in order to encourage dialogue between all groups and work toward a commonly accepted outcome.

Building on Saunders & Duinker's (2002) previous study, and taking into account new research on certification in general and forestry specific to NL, this study will re-open the forest certification question in the province in light of its recent commitment. By soliciting the opinions of forestry professionals in both government and industry, this study will reveal whether the relevant stakeholders share complementary forest

certification goals. Therefore, this research will act as a necessary precursor for future scenario building exercises in terms of highlighting potential problem areas for the province that may influence both the timing and nature of forest certification on Crown lands.

## 1.4 Research Questions

This study seeks to answer the following main question: How is the topic of certifying NL Crown forests viewed and approached by government and industry stakeholders in the province? In order to unpack this question, the following subsidiary questions will help to guide and frame this question within the methodology:

- Is the NFS' goal to implement certification on its Crown lands supported by forestry professionals working in both government and industry?

- Who should be responsible for leading and financing certification, and why?

- What are the main challenges to implementing certification on Crown forests?

## 1.5 Organization of the Research Paper

This research paper is organized into a series of five chapters. Chapter 1 provided a brief overview and history of forest certification, and introduced the problem and purpose statements as well as the research questions. Chapter 2 is divided into two sections; the first of which reviews academic sources related to forest certification in a national context, while the second summarizes information specific to certification and the forest industry in NL. The methodology for the study is outlined in Chapter 3, followed by a presentation and discussion of the results in Chapter 4. Conclusions and recommendations regarding potential next steps are presented in Chapter 5.

**CHAPTER 2 Literature Review**

**2.1 Forest Certification: A National Outlook**

2.1.1 Forest Ownership and Management in Canada

In Canada, the management of forests falls under the jurisdiction of the provincial government. With the exception of New Brunswick, Nova Scotia, and Prince Edward Island, nearly 90 percent of forestland in all provinces is provincially owned (Luckert et al., 2011). However, unlike most other countries with extensive forest resources, Canada does not have a public agency tasked with managing publicly owned resources. Instead, private industries are granted 'Crown forest tenures' which allows them to harvest and process timber resources on public lands. In exchange for these exclusive timber harvesting rights, licensees are required to pay financial returns to the provincial government in the form of royalties, stumpage fees, land rents, and additional levies (Luckert et al., 2011). This tenure system makes the achievement of certification on Crown forests particularly challenging: while the province technically owns the forestlands, it has delegated direct management authority to the private sector. On the one hand, government has the ultimate authority to stipulate the rules for management of its resources, yet on the other hand, licensees have the responsibility to actually implement the requirements mandated by certification standards (Wood, 2009). Therefore, the development of a forest certification implementation plan should ideally incorporate input from both parties.

Forest certification presents one possible avenue for future progress in an industry that has faced a series of significant challenges in the first two decades of the twenty-first century. Domestic problems within the Canadian forest sector that first surfaced in the

mid-1990s, such as the weakened ability of the country's pulp and paper and lumber manufacturing sectors to compete in global markets, declining supplies of economically accessible timber, limited availability of high quality timber supplies, and increasing energy costs, have been exacerbated by new global pressures in the twenty-first century. Of particular note are the rising value of the Canadian dollar, the emergence of new competitive forces such as China on the global wood products market, and a constrained ability to access markets in the United States following three key incidents: a major downswing in the housing market, extenuation of the softwood lumber trade dispute, and the global recession of 2008 (Luckert et al., 2011). As competition for market access continues to intensify, certification is becoming an increasingly necessary baseline requirement for forest products entering global export chains.

2.1.2 Forest Certification: Governance with Government[1]

By deriving policy-making authority from market transactions instead of traditional forms of state power, Cashore (2002) argues that forest certification schemes can be characterized as a form of non-state market-driven (NSMD) governance. More specifically, he notes that NSMD systems rely on consumer preferences and focus on manipulating the market's supply chain in order to incentivize companies to comply with environmentally and socially responsible management practices. This perceived transfer of power away from the state has necessarily caused concern among regulatory authorities, and therefore several studies in the decades following the emergence of certification focused on identifying the implications of this shift in power for government

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[1] Coined by Lister (2009).

bodies. Although governments initially viewed certification with a degree of caution, and for the most part adopted a 'wait and see' approach before taking an official position on this governance structure, generally studies have noted that certification does not supplant or conflict with the role of government in the policy and decision-making sphere, but more often acts as a complement to the existing regulatory structure (Cashore, 2002; Rametsteiner, 2002; Gulbrandsen, 2004; Wood, 2009). Expanding on this conclusion, Lister (2009) argues that NSMD governance is perhaps not the best descriptor of certification, and instead suggests the term 'co-regulatory forest governance system', given that "implementation hinges on policy alignment and regulatory compliance, and governments play a key role in the sovereign capacity to oversee, facilitate, legitimate, and even enforce certification standards" (87).

Cashore et al. (2004) list a number of ways in which governments, as highly influential and powerful authorities, can actively participate in and shape certification systems:

- Continued enforcement of existing rules and policies extraneous to certification;
- Exertion of influence on certification systems' policy-making processes;
- Implementation of procurement policies to similarly influence the market supply chain;
- Approval or facilitation of certification on government-owned lands;
- Promotion of certification by providing administrative or financial resources to groups pursuing certification; and

- Development of a national certification system or participation in the establishment of regional standards for existing schemes.

The federal government has been involved in many of the above processes, acting as expert, landowner, policy-setter, strategic partner and buyer (Fraser, 2007). Unlike industry associations such as FPAC, which mandated achievement of certification as a condition of membership (FPAC, 2012), the federal government has thus far opted not to implement a national policy on certification, but has instead supported the general concept of voluntary certification and has equally endorsed all three third-party standards recognized in the country (Fraser, 2007; NRCan, 2013a). Provincial governments are similarly supportive of forest certification and the companies that have decided to certify their operations on Crown land. However, provincial involvement in certification varies between jurisdictions, ranging from active involvement (such as provision of technical, administrative and financial support, adaptation of policies to better correspond with certification, and requirement of certification uptake on Crown lands), to more passive involvement (in terms of participation in consultative processes and distribution of voluntary guidebooks and communication strategies) (Lister, 2009; Wood, 2009). Lister (2009) further suggests that government intervention in forest certification exists on a scale from indirect to direct involvement, ranging from observation, to cooperation, to enablement, to endorsement, and finally to mandating certification.

2.1.3 Perceptions of Forest Certification in Canada

As forest certification is still a relatively new phenomenon, several studies have been conducted to systematically uncover how individuals and companies – who are, or

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who will be, directly affected by its requirements – view the process. Given the dual tenure management system in Canada, studies targeting the perceptions of both industry and government forestry employees on forest certification have been undertaken.

In 2001, Wilson et al. conducted a national survey designed to uncover the attitudes of Canadian forest companies toward specific certification standards. More specifically, respondents were asked to specify which certification standard was most conducive to their firm's current and future needs, and subsequently rank the potential advantages and disadvantages associated with the achievement of this standard. Overall, securing public confidence, responding effectively to ENGO pressure, and securing market access were the top three ranked advantages, while increased paperwork, the direct expense of certification, and the insufficient price premium for certified products constituted the most common disadvantages.

In 2012, Tikina et al. surveyed provincial and territorial government employees in Canada in order to gauge opinions on the effectiveness of certification. In particular, respondents were asked to comment on the status of forest certification within their jurisdiction and their overall attitudes toward it, and where applicable, the perceived economic, social, environmental, and management changes resulting from the implementation of forest certification on the ground. Overall, the authors found that the majority of changes resulting from forest certification led to positive outcomes in each category, noting that certification appears to be working alongside, and not displacing, the regulatory role of governments.

In addition to the studies directly targeting stakeholder perceptions on forest certification, other reports have engaged stakeholder opinions under a broader research

umbrella of sustainable forest management (SFM) (Hickey & Innes, 2005; Hickey et al., 2005; Hickey et al., 2007) [2]. In particular, these studies explored variations in stakeholder perceptions relating to monitoring and reporting requirements for SFM within Canada, the USA and Europe, and in several instances directly addressed forest certification or noted direct implications of the findings to this subject area. In Hickey (2004), an online survey was distributed to forestry stakeholders in these countries in order to collect information on areas such as agreement and familiarity with SFM-related issues, the perceived acceptability of the current extent of SFM-related data, and the main barriers to effective SFM monitoring and information reporting. One of his main conclusions indicates that forestry stakeholders in Canada more consistently stated that information on SFM was lacking across various issue areas than was evidenced by the other two countries. The author hypothesizes that since the level of technology, quality of information and access to data is functionally equivalent across all three jurisdictions, this discrepancy may be the result of two factors in Canada: 1) insufficient confidence and understanding of SFM at the practical level, or 2) a more realistic view of the complications arising from the implementation of SFM. He also suggests that despite the apparent availability of economic, social, and environmental forestry-related information, this data may not always trickle down to the practical level (Hickey, 2004). Determining whether this information is actually accessible to decision makers is crucial for forest certification since forest managers and owners must be highly organized, confident, and prepared in order to achieve success.

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[2] Studies incorporated data from Hickey, G.M. (2004). Monitoring and information reporting for sustainable forest management in North America and Europe: requirements, practices, and perceptions. Ph.D Thesis. University of British Columbia, Canada, 505 pp.

Finally, studies have also addressed the ways in which the relationship between government and industry can impact certification. This relationship is particularly important in Canada, where government owns the forest and its resources but largely delegates management responsibility to private industry. This joint approach to management, or "clientelist" regime, means that state and business interests have historically occupied a dominant position in provincial forest policy networks (Lister, 2009; 167). In order to determine the degree to which industry's expectations of government's role in certification actually influences government behaviour, Lister (2009) compared whether government's position for or against mandating certification aligned with that of the forest industry in Quebec, Ontario, New Brunswick and BC. She ultimately concludes that industry was an important influence on a province's approach to certification, "[…] particularly if the industry presented a strong, unified voice and the government had sufficient awareness of certification" (178). Therefore, an evaluation of the industry position on certification constitutes an important component of the certification scoping stage.

2.1.4 Certification of Crown Forests in Canada: A National Review

As of December 2012, approximately 148 million hectares of forestland in Canada were certified to at least one of the three third-party standards recognized in the country, constituting 38 percent of the world's certified forest area (FPAC, 2012)[3]. The prevalence of certified forests in Canada indicates that many of the provinces have demonstrated experience with implementing certification on Crown forests, and therefore a review of

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[3] Forested lands that have achieved multiple certifications are only counted once.

the approaches adopted by these jurisdictions will likely help to identify possible opportunities for certifying Crown forests in NL. As land tenure agreements, the extent of public land, and the economic importance of forestry differs between each province, approaches to certification within these jurisdictions are similarly varied. An inventory of these commitments is provided in Appendix B.

Several interesting trends appear. Given the fact that BC, Ontario and Quebec hold the greatest extent of forest cover within their provincial boundaries and produce the most timber, and the fact that forestry in New Brunswick contributes more significantly to provincial GDP than in any other province (Lister, 2009; NB Forest Products Association, 2011), much of the past attention attributed to Canadian certification has been focused on these areas. Both Ontario and New Brunswick mandated certification on Crown lands, while British Columbia and Quebec declined to take a similarly authoritative position (Lister, 2009). Ontario's Ministry of Natural Resources (MNR) worked closely with industry to determine the likely challenges that companies would face in achieving mandatory certification, and administered certification training programs and information packages to interested parties. MNR also increased staff presence during certification audits to answer relevant questions (Lister, 2009). The Ministère des Ressources naturelles et de la Faune in Quebec underwent a significant change in its attitude toward certification – initially viewing it as a personal business decision for forest companies, but ultimately taking administrative responsibility for its implementation as of April 2013 (MRNF, 2012).  British Columbia and New Brunswick each commissioned outside reviewers to conduct a study on future directions for certification in their province, with these studies incorporating scenario analyses and a discussion of the role that government

should occupy in the process[45]. British Columbia was recommended to take a cooperative approach to certification, in which the government would take an active role as a facilitator but not a regulator or financer, while New Brunswick disagreed with the consulting firm's suggestion that certification could be used to reduce DNR and Licensee overlap, and opted to maintain its authoritative responsibility for forest management (NBDNR, 2004).

It is also important to note that in addition to the provinces with a large forest economy and resource base, other provinces which are less reliant on this industry have still taken an interest in provincial certification. Prince Edward Island identified the certification of selected public forests as a goal under its 2006 Forest Policy, and achieved FSC certification of a 400 acre tract of community forest in 2010 (PEI DAF, 2012). In 2012, Manitoba announced that all Forest Management License Agreements must have a certification regime as a condition of licensing (Manitoba Conservation and Water Stewardship, 2012). In Alberta, the provincial government integrated the CAN/CSA Z809 Standard into its Forest Management Planning Standard (2006) as a minimum requirement for SFM, thus indicating strong faith in certification and facilitating the initial early uptake of this particular standard (Wood, 2009)[6]. Regardless of the relative importance of the forest sector to a province's GDP, the fact that all provinces have

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[4] Daryl Brown Associates Inc. & Greer, D. (2001) *Implementing Forest Certification in British Columbia: Issues and Options*. Prepared for Trade and Sustainable Development Group, Policy and Economics Division, Ministry of Forests, Government of BC.

[5] Jaakko Pöyry Consulting. (2002). *New Brunswick Crown Forests: Assessment of Stewardship and Management.* Report prepared for the New Brunswick Forest Products Association and the New Brunswick Department of Natural Resources and Energy. 60 pp.

[6] As of 2012, the majority of Albertan forestlands are certified to SFI, followed by FSC and then CSA. The decline in the extent of CSA certified land may be the result of a provincial procurement policy (2008) that favours FSC certified materials (Lister, 2009).

initiated some level of commitment to certification indicates that this market-based tool is becoming an important standard in Canada's forest economy.

## 2.2 Forest Certification: the Newfoundland and Labrador Context

2.2.1 The Forest Sector in Newfoundland and Labrador

*Forest Description*

      Of the 11.1 million ha of land in insular Newfoundland, approximately half is forested. These 5.6 million ha are subdivided into productive and non-productive forestland, with 3.5 million ha constituting the former. Productive forest is further classified into Class I and Class III lands, but only Class I and Class III Operable lands are deemed available for harvest[7]. As per the 2011 Timber Resource Analysis conducted by the DNR, approximately 2.4 million ha of land are listed within these categories and therefore constitute the available timber supply (Figure 2.1) (DNR, 2011a; Kelly, 2012). In addition, Labrador is
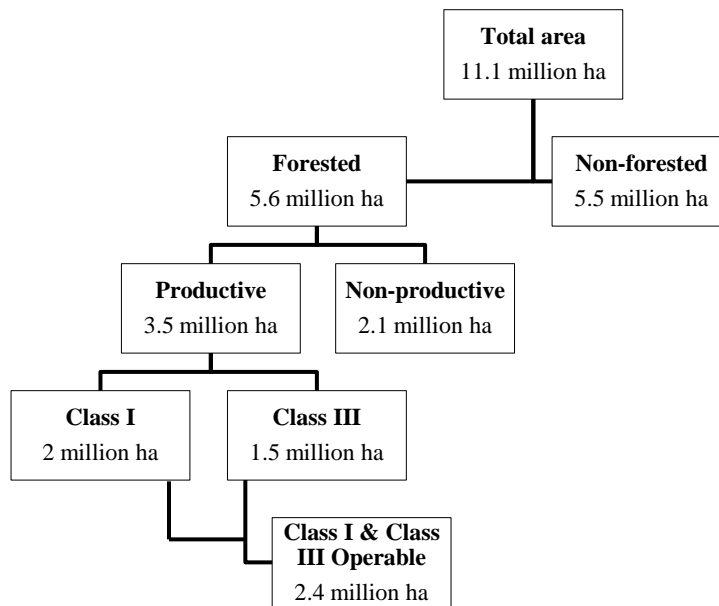


**Figure 2.1:** Breakdown of Newfoundland's available timber supply (in hectares). Adapted from DNR, 2011a & Kelly, 2012.

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[7] Despite some constraints, all Class I lands may be harvested. The other divisions of Class III lands are Class III Regulatory (legally prohibited from harvest) and Class III 5000 (impossible to harvest). (DNR, 2011a; Kelly, 2012).

comprised of approximately 29.3 million ha of land, of which 18 million ha are forested. Approximately 5.4 million ha are classified as productive forest; however, at present there is no commercial forest industry in Labrador (DNR, 2003; Greene, 2011).

*Tenure Arrangements*

Tenure arrangements can have significant implications for forest certification. In Canada, where the vast majority of forests are publicly owned and under time-limited and non-exclusive tenures, most stakeholders involved in the development of regional certification standards were not optimistic that certification of Crown forests could be achieved without the direct support and involvement of official government landowners (Wood, 2009). In practice, Wood (2009) determined that tenure attributes such as duration, comprehensiveness and exclusivity do have a significant influence on the ease of uptake of FSC certification on Canadian Crown forests, but noted that even in provinces where these attributes are weak, certification can still be attained.

In keeping with the tenure arrangements found in other provinces in Canada, forests in NL are provincially owned but largely managed by the private sector.  In NL, over 95 percent of the province's landmass – the highest amount in Canada – is under Crown ownership (Baehre, 2011). According to Section 14(1) of the province's *Forestry Act* (RSNL 1990 c F-23):

*Crown timber shall not be cut or removed from Crown lands or public lands except under*

  a) *a Crown timber licence;*

  b) *a timber sale agreement; or*

  c) *a cutting permit*

Long-term timber licences, such as the 99-year leases originally granted under the *Crown Lands Act*[8], were arranged with two pulp and paper companies: the Anglo-Newfoundland Development Company in Grand Falls in 1909, and the Newfoundland Power and Paper Company in Corner Brook in 1925 (Kelly, 2012). Ownership of the Grand Falls mill was transferred between several different parties over the past century, and belonged to Abitibi-Bowater at the time of its closure in 2009. Abitibi-Bowater also purchased an additional mill in Stephenville which ceased operations in 2005. The mill in Corner Brook was purchased by Kruger in 1984 (Kelly 2012). CBPP is the only pulp and paper mill currently in operation in the province; however, the mill is not immune to the problems plaguing the industry and was forced to shut down two of its four paper machines in 2007 and 2009 (Greene, 2011). The economic hardships facing the pulp and paper industry have in turn increased the extent of Crown land under the direct control of the province: following the closure of the Abitibi-Bowater mill in Grand Falls-Windsor, the company's forestry, water, and energy assets were expropriated by the Crown, and faced with a reduction in mill capacity and financial resources, CBPP opted to sell 447,427 ha of its leased lands in 2010 (McLaren and Pollard, 2009; Kelly, 2012).

As of 2010, approximately 71 percent of land tenure arrangements on insular Newfoundland belonged to the Crown, while CBPP retained tenure to the remaining 29 percent (Kelly, 2012). Although CBPP is technically operating on Crown lands, the leases historically granted to pulp and paper companies in the province were functionally equivalent to private ownership. As such, the decision by CBPP to certify its operations to three different standards – ISO 14001 EMS, CAN/CSA Z809, and FSC National Boreal –

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[8] These licences are no longer issued in the province (Luckert et al., 2011).

was for the most part undertaken autonomously (Kelly, 2012). Although there will be some measure of overlap between the certification process undertaken by CBPP and a broader provincial certification strategy, the limited involvement of the province in the former has meant that the NFS has little experience in implementing certification, and therefore the means by which to achieve this goal remains unclear.

As the pulp and paper industry in the province declined, the forest industry began a transformation toward the solid wood products and wood energy sectors. In 2011, over 500 sawmills were operating in the province, although nearly 90 percent of lumber production can be attributed to 8 main mills (Greene, 2011). Sawmills are able to obtain timber by entering into short-term exchange agreements with CBPP and the province (Kelly, 2012). In addition, domestic firewood and value-added wood products constitute a small portion of the forest products industry (Greene, 2011).

*Forest Management*

Forest management and planning falls under the jurisdiction of the provincial DNR. Within this department, the Forestry and Agrifoods Agency, and more specifically, the Forestry Services Branch, is tasked with managing and regulating the forest resources of the province. Under the umbrella of a 20-Year Forest Development Plan, the province is required to prepare a wood supply analysis every five years in order to reassess the annual allowable cut (AAC) for each district. The AAC is decided following consultation sessions with provincial planning teams, the forest industry, and the general public, and incorporates both timber and non-timber values (DNR, 2011a). Although the AAC is applicable to all forest operations on Crown land across the province, forest management

is further subdivided into a series of 24 districts across NL. Using the provincial strategy as a guide, each district is responsible for preparing a Management Plan Report, a Five-Year Operating Plan, and an Annual Work Schedule (DNR, 2012).

*Forest Policies*

Despite the fact that certification programs operate outside the realm of the state, it is important to note that the requirements outlined in these standards do not supplant prevailing laws in a region (Tikina et al., 2012). In Canada, all applicable standards require compliance with existing legal requirements, and in some cases, stringent provincial laws and regulations may actually aid in facilitating the implementation of certification (Bourgeois et al., 2007). In addition, Lister (2009) notes that there is often a "dynamic synergy" (90) between the requirements of certification standards and existing government policies, as both programs are mutually influential. Therefore, conducting an inventory of the policies influencing forestry in NL constitutes an important pre-assessment stage in the certification process.

The NL *Forestry Act* (RSNL 1990 c F-23), which governs the management, harvesting, and protection of the forests of the province, also requires the renewal of a Provincial Sustainable Forest Management Strategy every ten years (DNR, 2012). The most recent version, which was released in 2003 and is in the process of being updated following public consultation sessions, listed four strategic directions for achieving SFM: ecologically-based forest management, economic considerations, social considerations, and Labrador.  In addition, the *Environmental Protection Act* (RSNL 2002 c E-14.2) and the *Forest Protection Act* (RSNL 1990 c F-22) also directly impact forest policy and

planning in the province. For an inventory of additional provincial policies, federal

policies, and federal commitments and strategies that indirectly impact forestry in the

province, please refer to Kelly (2012; 26-32).

*Future Outlook*

The forest industry in NL is in a state of transition. In a paper focused on

opportunities and challenges to reinventing forestry in Newfoundland, Kelly (2012)

concludes: "The downturn in the forest industry is not likely cyclical. To borrow a

metaphor from ecology, we have surpassed a threshold and are looking at a new state; a

new set of circumstances and parameters for management" (69). Kruger Inc.[9], by acting

as a signatory to the Canadian Boreal Forest Agreement and achieving multiple voluntary

certification designations, has made important strides in its quest to remain relevant and

viable in a rapidly changing economic environment. As the forest sector undergoes a

transformation, the NFS must similarly evolve its practices and tools to align with new

environmental expectations and political goals (Kelly, 2012). Certification, as illustrated

in the following section, is one such tool which holds promise for the province.

2.2.3 Certifying Crown Forests: A Provincial Goal

Certification is not a new phenomenon for NL. By 2001, the NFS was already

evaluating the practicality and feasibility of certifying its Crown forests, and had

commissioned a study to uncover the specific barriers to implementing the ISO 14001

EMS Standard. This study, published by Saunders and Duinker in 2002, involved a gap

analysis conducted between the NFS' current practices and the requirements of the ISO

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[9] CBPP is owned and operated by Kruger Inc.

14001 EMS, and an analysis of possible barriers to registering their forest management systems to this standard. After interviewing a sample of individuals with prior background knowledge of the NFS and/or ISO 14001, the authors identified a series of partial and keystone barriers, but ultimately concluded that "no potential barriers pose insurmountable hurdles, and that the NFS should proceed expeditiously with ISO 14001 registration of the forests it manages" (Saunders and Duinker, 2002; 858). Despite these assurances, the provincial government has not implemented any forest certification systems on NL Crown lands in the past decade.

However in the Strategic Plan for 2011-2014, the DNR listed the implementation of an EMS on Crown lands as a departmental priority. Under *Strategic Issue 1: Forestry, Agriculture and Agrifoods Resource Sustainability*, the DNR outlined the following goal: "By March 31, 2014, the Forestry and Agrifoods Agency will have implemented measures to advance forestry, agriculture and agrifoods industry sustainability in the province". In particular, the implementation of an EMS for forest certification was listed as an indicator of progress toward achieving this end (DNR, 2011b). The Centre for Forest Science and Innovation (CFSI), which operates within the DNR, further elaborated on the achievement of this goal in its Forest Research Strategy (2010). Under the strategic research direction outlining economic considerations, moving toward a green economy was identified as a broad priority. In particular, certification of forestlands was specifically mentioned as a key tool for achieving the following goals: expanding market possibilities and accessing pricing premiums, assisting in the substitution of petroleum-based building products with wood from sustainably managed forests, and generating local employment through the enhancement of timber markets (DNR, 2010).

**CHAPTER 3 Methodology**

This study utilized semi-structured surveys to assess and compare the opinions of

forestry stakeholders in government and industry on the topic of implementing forest

certification on NL Crown lands. According to Ritchie et al. (2003), surveys are

particularly well-suited to gathering specific information related to small or rare

populations, and thus can support purposive sampling techniques. Given the fact that this

research study was targeted toward a select group of participants with specialized

knowledge, a survey was selected as the optimal tool to collect the necessary data. This

survey was broadly divided into four sections: background information on respondents

and their views on provincial certification, questions pertaining to possible barriers to

achieving certification, questions enquiring about responsibility for facilitating

certification, and future directions for the province.

Previous research on implementing forest certification on NL Crown lands

focused largely on conducting a gap analysis and uncovering the barriers to achieving the

ISO 14001 EMS Standard (Saunders and Duinker, 2001). Despite the fact that no

potential barriers were deemed "insurmountable hurdles", it was necessary to revisit

many of these barriers in the current study in order to determine their relevance to the

present setting. This approach is required given the fact that major changes have occurred

within the forest sector and the broader economy in the province (see Section 2.2), and

therefore views on certification may have also changed over the past decade.

Furthermore, the fact that neither an EMS nor a SFM certification standard has been

implemented on Crown lands suggests that serious barriers do indeed exist.

Previous literature on forest certification in Canada was used to both develop survey questions and organize and analyze the survey responses. A copy of the survey and a list of citations to these studies are provided in Appendices C and D, respectively.

## 3.1 Stakeholder Inclusion

Although there is no universally accepted characterization of a stakeholder, the definition proposed by Freeman (1984), which describes these individuals as "[those] who can affect or [are] affected by the achievement of the organization's objectives" (46), is commonly quoted (Bryson, 2004; Reed, 2008; Reed et al., 2009). Stakeholder inclusion has been growing in a variety of fields, including natural resources management, where there are often conflicting interests around a common resource (Reed et al., 2009). Many studies have focused on the concept of 'stakeholder analysis', which can be broadly understood as "a holistic approach or procedure for gaining an understanding of a system, and assessing the impact of changes to that system, by means of identifying the key actors or stakeholders and assessing their respective interests in the system" (Grimble and Wellard, 1997; 175). The purpose of this process is to gain a better understanding of problems and interactions by comparing relevant perspectives and identifying possible outcomes, with the ultimate goal of developing policies that are most socially beneficial (Grimble and Wellard, 1997).

Collecting stakeholder opinions on the issue of forest certification in NL is important for a variety of reasons. Firstly, the involvement of stakeholders in the development of an initiative may help to create policies and projects that are more efficient, effective, and mutually acceptable to all parties. In addition, as forest

certification was established in part to promote a more inclusive approach toward SFM, discussions relating to its implementation should similarly seek to foster greater stakeholder engagement. According to Lister (2009), certification authority can be viewed as a 'virtuous cycle' comprised of stakeholder engagement and learning, cooperation and trust, collaborative decision making regarding SFM, and therefore legitimate private authority. Lister (2009) further notes that since non-state processes such as certification derive their legitimacy from market and public acceptance, ensuring transparency and inclusiveness are necessary precursors to the long-term viability and success of these initiatives. Finally, all certification standards insist on some level of collaboration and participation from forestry stakeholders as a requirement for achievement. Therefore, engaging stakeholders early in the certification process will likely help to develop relationships around this issue and ultimately help to facilitate effective public participation when this stage is reached.

## 3.2 Participant Selection

Using Freeman (1984)'s definition of a stakeholder, respondents from the following three sectors were invited to participate in the survey: provincial government, pulp and paper industry, and sawmill/product industry. Although Crown forests are a public resource, and therefore many individuals and organizations can be defined as stakeholders in the management of the forest, this survey was inclusive of only the aforementioned groups[10]. As its purpose was to uncover the opinions of individuals

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[10] Although the federal government broadly oversees forest practices in Canada, management of natural resources falls under the jurisdiction of the provincial government. Therefore, only provincial government employees were invited to participate in the study.

employed in the NL forest industry and thus directly affected by a certification decision, individuals in these sectors were hypothesized to provide the most informed and useful responses for future decision making on this issue. Therefore, a purposive sample was justified in the interest of soliciting targeted and relevant opinions.

A brainstorming session with individuals from the NFS, the Canadian Forest Service (CFS), and the private sector identified lists of possible respondents from each sector. Within the NFS, a stratified sample of respondents was chosen to capture a diverse range of opinions, ranging from top management personnel to technical officers operating in the field. A breakdown of the specific positions selected for participation is provided in Table 3.1. For the pulp and paper industry, respondents were chosen based on their understanding of certification or direct involvement in CBPP's certification process. For the sawmill/product industry, a central contact list for the major companies was provided by the provincial government.

**Table 3.1: Employment profile of survey respondents in the Newfoundland Forest Service**

| Employment Descriptor | # of individuals sent survey |
|---|---|
| Executive/Director | 4 |
| Supervisor | 9 |
| Ecosystem Manager | 1 |
| District Manager | 8 |
| Regional Employee (Director, Planner, Ecologist, Compliance Officer)[11]: | |
| West | 3 |
| Central/East | 4 |
| Labrador | 3 |
| Conservation Officer (IV) | 9 |

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[11] Not all positions filled; some overlap.

In total, 61 individuals were asked to participate in the study. A breakdown of their employment categories is provided in Table 3.2. Due to the relatively small size of industrial forest sector in the province, employees of the provincial government necessarily dominated the sample.

**Table 3.2: Breakdown of survey respondents by employment sector**

| Sector | # of individuals sent survey |
|---|---|
| Provincial Government | 41 |
| Pulp & Paper Industry | 11 |
| Sawmill & Product Industry | 9 |
| Total | 61 |

**3.3 Data Collection**

3.3.1 Survey Design

Surveys were designed using Dillman's *Mail and Internet Surveys: The Tailored Design Method* (2nd eds.) (2007), and were administered through a web survey company (*SurveyMonkey*). A survey pre-test was completed in early May 2013, and feedback was incorporated to improve the clarity and design of the survey. The survey was emailed to participants on May 13, 2013, and responses were collected until June 21, 2013. Two reminder emails were sent to all participants to encourage response rates.

3.3.2 Limitations of the Survey

Because the survey was administered and completed online, the study was subject to a self-reporting bias. Therefore, reliability and validity of responses cannot be verified. Similarly, because the researcher was not present during the completion of a survey, respondents may have been unclear about the requirements or content of the survey. However, this limitation was diminished due to the inclusion of a survey pre-test.

**CHAPTER 4 Results & Discussion**

**4.1 Respondent Profiles**

A total of 31 surveys were completed, providing a response rate of 50 percent. The response breakdown by sector is as follows: 24 respondents from the provincial government (58% response rate), 4 respondents from the pulp & paper industry (36% response rate), and 3 respondents from the sawmill/product industry (33% response rate) (Figure 4.1). Across all sectors, the majority of respondents (68%) have worked in the forest sector for over twenty years, and no respondents had worked in the forest sector for less than one year (Figure 4.2). Therefore, it can be assumed that the responses obtained are from informed forest practitioners.

**Figure 4.1:** Number of respondents by employment sector.
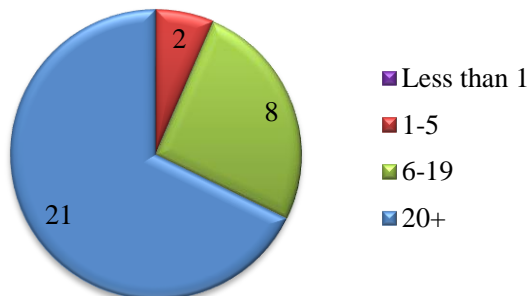
**Figure 4.2:** Years worked in the forest sector.

**4.2 Overall Perceptions of Certification and Provincial Forestry**

Ninety percent of respondents stated that they were aware of the province's goal to certify its Crown forests, and a further ninety percent of respondents agreed or strongly agreed that they are familiar with forest certification standards. A smaller majority (74%) indicated their agreement with the statement that Crown forests in NL are currently

managed in a sustainable way, with six respondents (19%) neither agreeing nor disagreeing with this statement. Only one respondent strongly disagreed with all three statements (Figure 4.3).
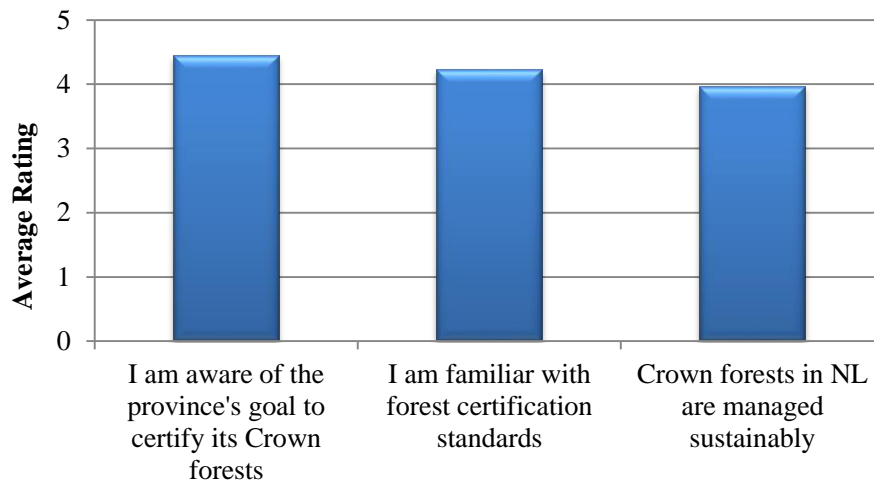


**Figure 4.3:** Perceptions of certification and provincial forestry.
Rating categories: 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree.

4.2.1 Reasons For and Against Achieving Provincial Forest Certification

Slightly more than half of the respondents (54%) agreed with the statement that forest certification should be implemented on NL Crown lands (Figure 4.4). These respondents were then asked to indicate their agreement with a list of possible reasons for achieving forest certification (Figure 4.5). Predictably, all respondents agreed that improving public image was a key motivator in their desire for
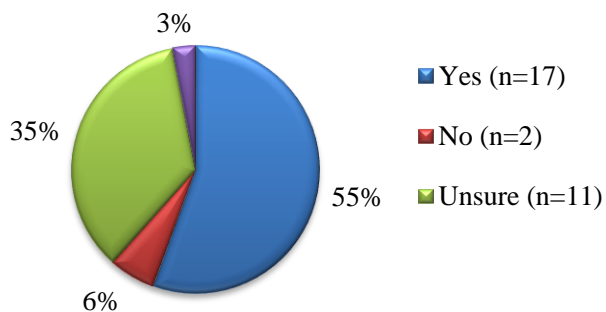


**Figure 4.4:** Should forest certification be implemented on NL Crown lands? n = number of respondents.

certification. Listed in order of importance, improving sustainability in forest practices, securing market access, and improving market competitiveness were the following most popular choices. A smaller proportion (12 respondents) noted that the ability of certification to help streamline management operations was a key benefit. Only five respondents agreed that certification was a key precursor for obtaining price premiums for forest products. This lower level of agreement is not surprising, as previous studies have noted that certification has largely failed to deliver on this front (Hickey, 2004; Lister, 2009). Two respondents additionally noted that certification improves forest management protocols, and seeks to make both government and industry more accountable for their actions. Another respondent also pointed to the ability of certification to support CBPP's chain of supply.
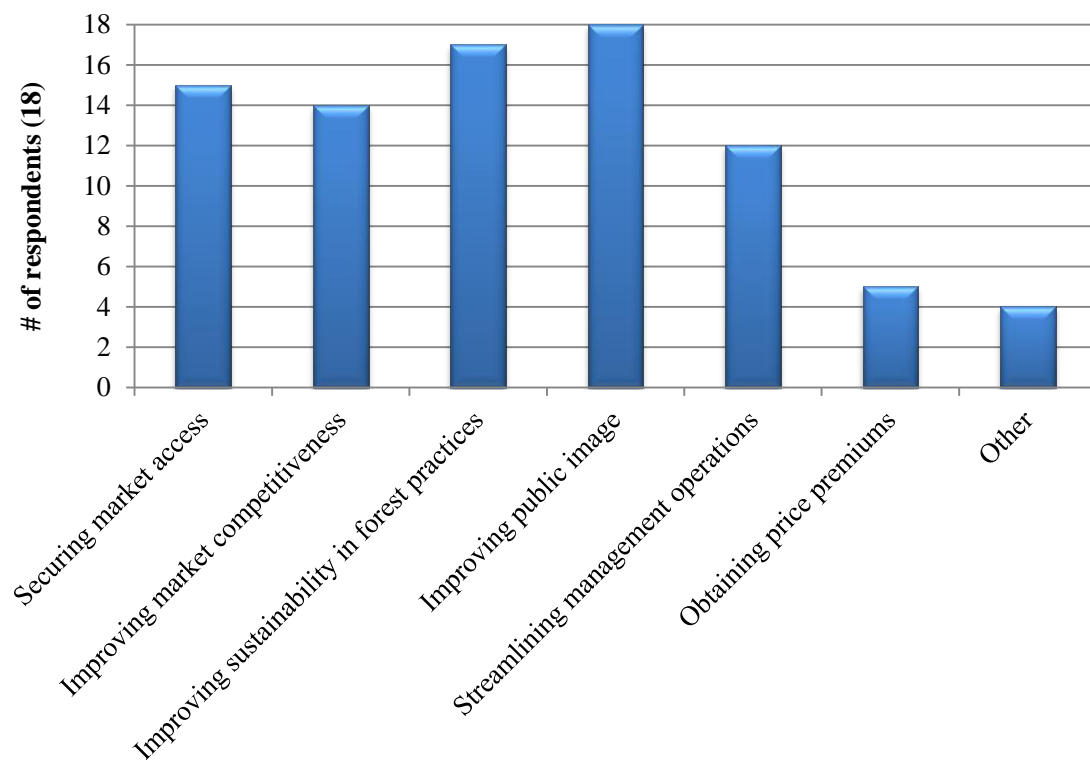


**Figure 4.5:** Reasons for implementing forest certification.

Eleven respondents were unsure as to whether forest certification should be implemented on NL Crown Lands, and one respondent had no opinion on this topic. Only two respondents were opposed to the idea of pursuing certification. When prompted to list the reasons behind this viewpoint, the respondents noted financial cost, the unlikeliness of certification to enable price premiums, and the fact that certification is unnecessary in the context of maintaining current business opportunities. One of the respondents also cited loss of control over forest management as an issue (Figure 4.6). No further survey responses were collected from these respondents.
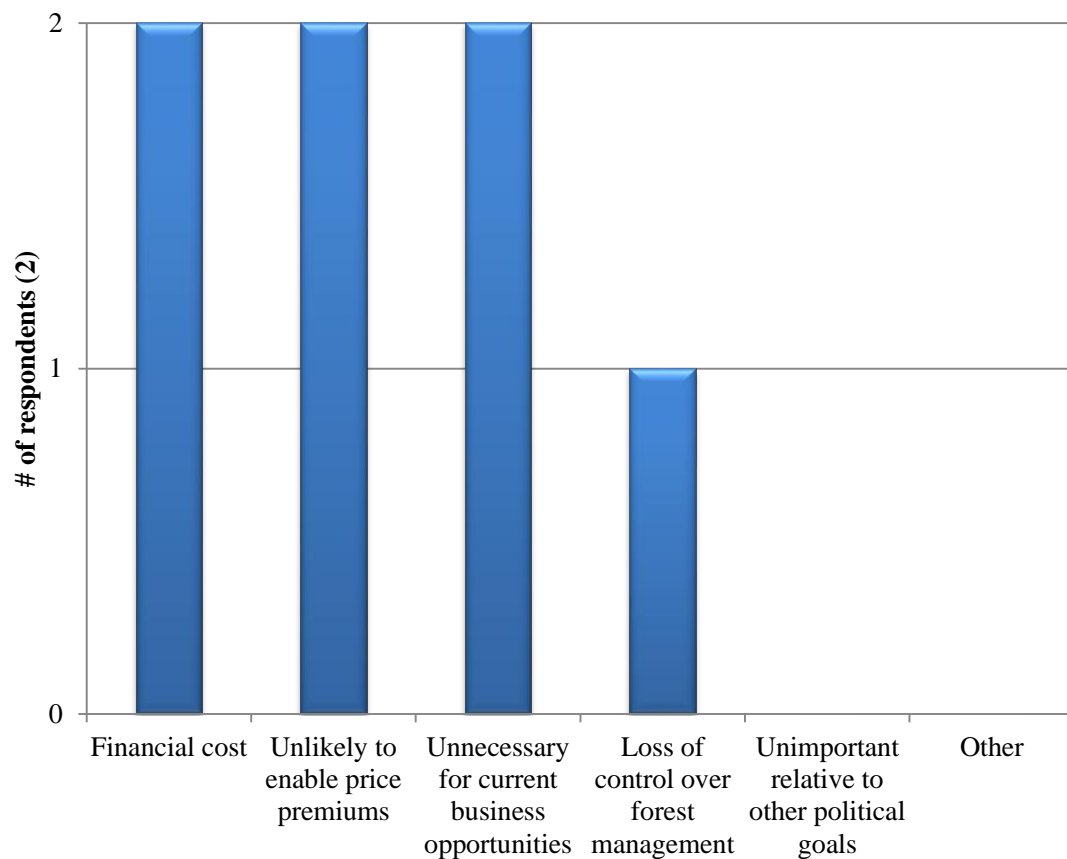


**Figure 4.6:** Reasons for not implementing forest certification.

4.2.2 Certification and Business Opportunities

All respondents were asked to indicate whether the province's uncertified timber was experiencing difficulty entering markets, with the recognition that this question would apply more to individuals working in private industry than those employed by the provincial government. The majority of respondents (13)
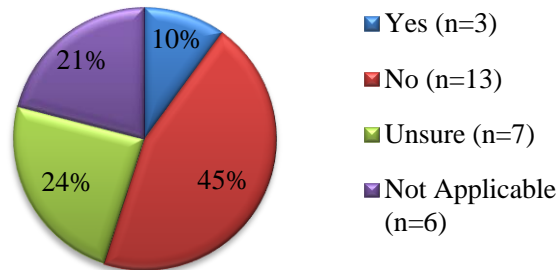


**Figure 4.7:** Has the lack of certification on Crown forests posed a problem for you in terms of business opportunities? n = number of respondents.

stated that the lack of certification had not posed a problem in terms of accessing business opportunities, while seven individuals were unsure (Figure 4.7). A respondent noted that because CBPP is currently using the FSC Mixed Sources logo[12] for its forest products, it is still able to use uncertified Crown wood. This respondent further stated that it is not uncommon for businesses to use the mixed wood designation for forest products, and CBPP's inability to use a FSC 100% logo has thus far not had a negative impact on accessing market opportunities. However three respondents stated that the lack of certification was acting as a barrier to accessing possible business prospects.

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[12] Depending on the nature and origin of their wood and paper products, FSC-certified companies may use one of three different logos: FSC 100%, FSC Mix and FSC Recycled. FSC Mix labels apply to products with a combination of FSC virgin fibre and/or recycled materials with controlled (the minimum requirements that non-certified forests and fibre must meet in order to be mixed) virgin fibre (FSC, 2013b).

**4.3 Challenges to Achieving Forest Certification: Relevance to Newfoundland and Labrador Crown Lands**

Respondents were then asked to rate a list of challenges to achieving forest certification that had been uncovered in previous studies (Figure 4.8). Overall, respondents did not uniformly identify any one potential barrier as being especially problematic, and responses were largely divided between the categories of not a barrier, slight barrier, and major barrier. In keeping with the approach taken by Saunders and Duinker (2002), it was decided that in order for an issue to be deemed a major barrier, at least half of the respondents must have categorized it as such. Using this methodology, no major barriers were uncovered. Conversely, only one issue (poor relationship between government and industry) was identified by more than half of the respondents as 'not a barrier'. Therefore, a poor relationship between these parties was not felt by the majority of respondents to be a barrier to implementing certification on Crown forests.
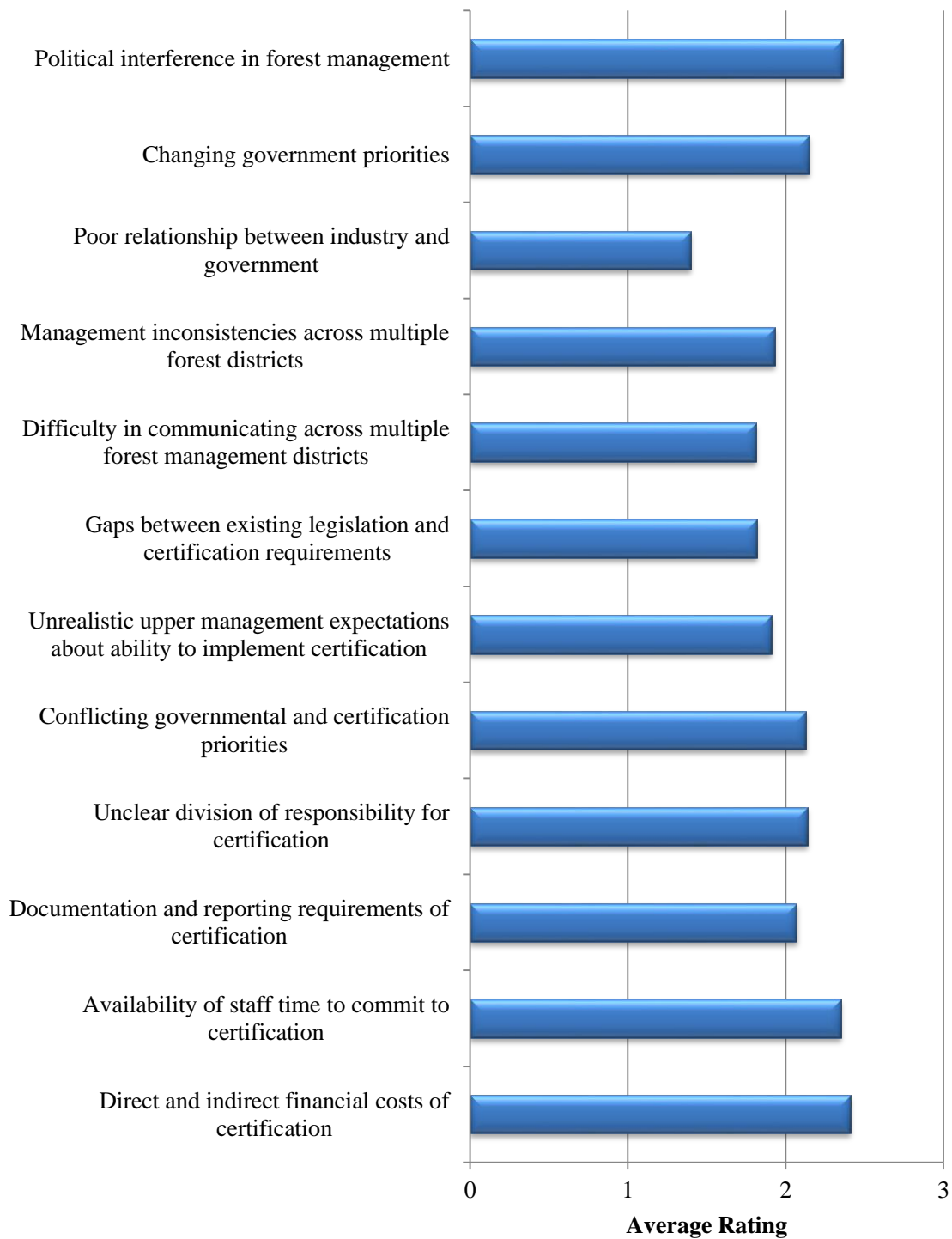
**Figure 4.8:** Potential challenges to achieving certification: Relevance to NL Crown forests. Rating categories: 1 = not a barrier; 2 = slight barrier; 3 = major barrier.

4.3.1 Greatest Barriers

Although none of the potential barriers met the required criteria to be labelled a major barrier (e.g. identified as such by more than 50% of respondents), three issues were listed as major barriers by 13 of the 29 respondents: 1) direct and indirect costs of certification; 2) availability of staff time to commit to certification; and 3) political interference in forest management.

*1) Direct and indirect financial costs of certification*

Forest certification necessitates significant financial inputs, and respondents were well aware of these costs. Both Tikina et al. (2012) and Hickey (2004) also found that the costs associated with certification were a top concern for respondents in their respective surveys. In the present survey, individuals were given an opportunity to provide additional comments on barriers to certification, and many of those who responded elaborated on the financial aspects of certification. Six of the twelve individuals who responded referred specifically to the many small contractors operating on Crown land and highlighted the difficulties that they would face in absorbing the cost of certification. Respondents noted that the benefits associated with certification would be largely accrued by large industry, while small operators would undergo significant financial difficulties to bring their operations up to required standards. Two respondents further noted that these financial constraints would likely have repercussions, with one predicting that "Government can expect lots of issues as these small operators start to see rising costs" and another stating "I can see a lot of backlash from this".

*2) Availability of staff time to commit to certification*

In addition to the financial costs associated with implementing certification, it is important to recognize that significant time commitments are also involved. Two respondents commented specifically on this issue, although on different scales. One respondent expressed concern that by the time the province has established the necessary groundwork to achieve certification, current market opportunities might no longer be available. The second respondent was more concerned with government employees finding time in their current schedules to devote to certification requirements. Noting that it would be highly unlikely that the provincial government would hire additional staff for this initiative[13], this respondent was skeptical that current employees would find a heavier workload "doable", or even that certification would be prioritized.

*3) Political interference in forest management*

Three respondents commented on the difficulty of monitoring and ensuring compliance to the requirements of a certification standard on a province-wide basis. One respondent noted that non-compliance issues would have to be dealt with through legal avenues or by withholding/cancelling permits, likely resulting in political interference "which will be difficult to defend to third-party auditors". This statement was also echoed by another respondent who noted that political interference would likely "complicate the certification process". As stated by Saunders and Duinker (2002), political interference is a barrier that has the potential to influence other barriers. Noting the absence of this barrier in previous literature on certification, these authors defined political interference

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[13] A provincial hiring freeze was implemented in the province from February 18, 2013 – April 29, 2013.

as any situation "[…] when the public uses politicians as middlemen capable of leveraging beneficial decisions from department employees in exchange for a better chance for votes" (863). They further stated that political interference is especially prevalent in Newfoundland, where political leaders are prone to prioritize issues of social and economic importance in a province largely dependent on seasonal and subsistence-based industries. Furthermore, the fact that many citizens in NL are uniquely afforded great accessibility and proximity to legislators means that it can be difficult to ensure independence in political decisions (Saunders and Duinker, 2002).

4.3.2 Non-Barriers

On the opposite end of the spectrum, seventeen respondents indicated that a poor relationship between industry and government would not pose a barrier to achieving certification. This response generated the greatest source of agreement in this section. Correspondingly, respondents did not collectively find that the challenges inherent in communicating across multiple forest management districts would act as a key barrier to certification, as this category received the second lowest rating. Given the unique situation in Canada wherein private industry operates on publicly-owned land, these findings are particularly important and have the potential to impact many other facets of the certification process.

In particular, the close collaboration between industry and government partners has been a key factor in facilitating certification uptake in several provinces. In Ontario and New Brunswick, where forest certification was mandated for companies operating on Crown land, government worked closely with industry partners and sustained a

productive dialogue with these individuals in order to keep abreast of challenges and needs. New Brunswick's decision to certify its Crown forests was actually initiated by the forest industry in the province, and government and industry jointly commissioned a consulting firm to assess stewardship and management on Crown forests before beginning the implementation process (Lister, 2009). A close alignment of priorities between government and industry was also important for the uptake of certification on BC Crown lands, with Lister (2009) noting; "Fundamentally, certification succeeded in B.C. because both the forest industry and the government faced the same challenge" (120). Therefore, the fact that the majority of both government and industry respondents are not only in favour of certification, but also refute the existence of a poor relationship between both parties, suggests that two key precursors to achieving certification success have already been met.

## 4.4 Requirements for Achieving Forest Certification

Respondents were provided with a list of issues that could hinder the uptake of certification, and were asked to compare the ability of private industry and provincial government to successfully address them (Figure 4.9). Given the fact that much of the literature on certification has focused on the degree to which governments should be involved in this process, the purpose of these questions was to cause respondents to think about the relative capacities of both government and industry to handle the requirements of certification. Therefore, respondents would be better equipped to answer subsequent questions on responsibility for certification.
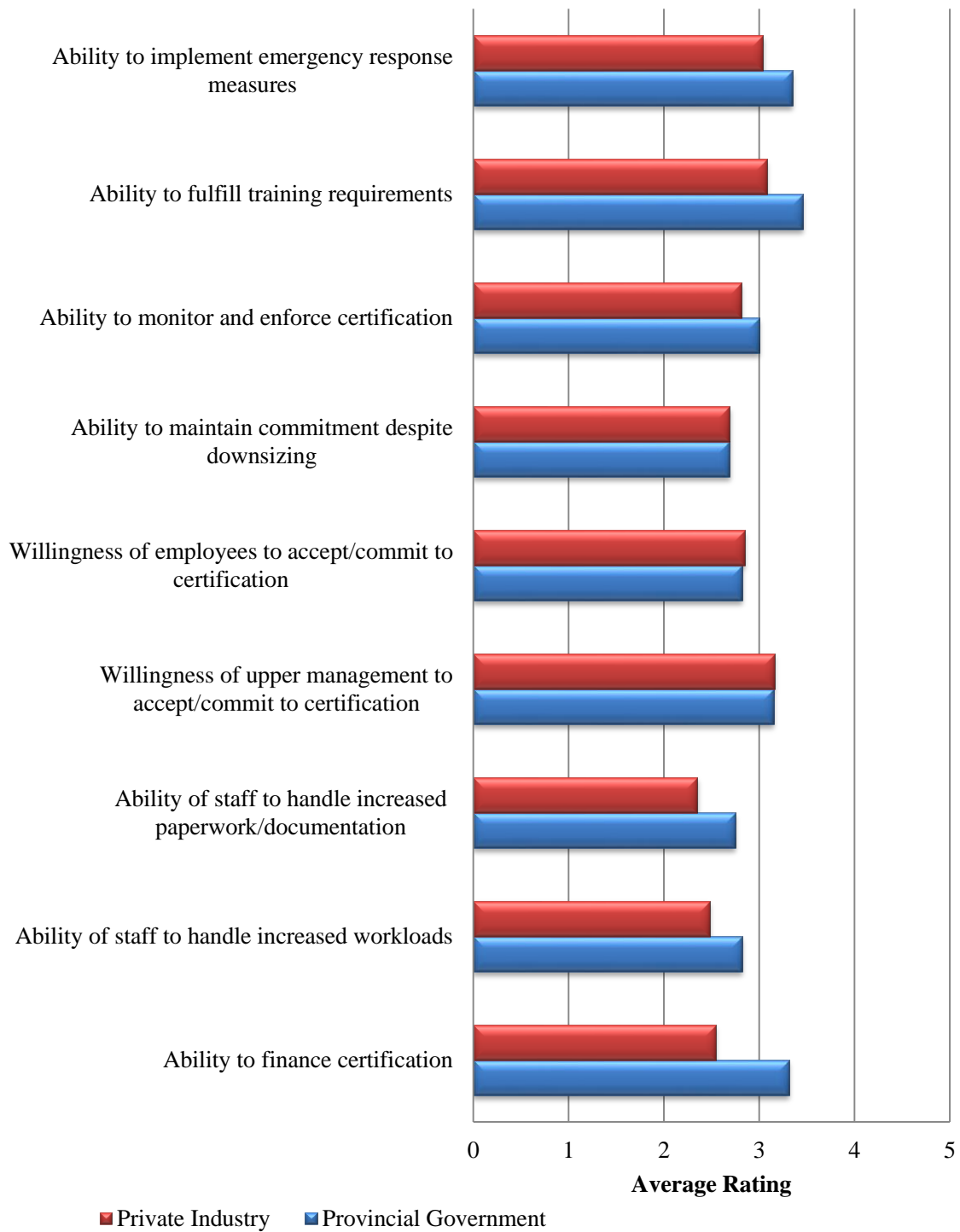
**Figure 4.9:** Requirements for achieving forest certification: A comparison of government and industry capacities. Rating categories: 1 = very weak; 2 = weak; 3 = neutral; 4 = strong; 5 = very strong.

4.4.1 A Comparison of Government and Industry Capacities

The provincial government was more consistently ranked ahead of private industry; however, the margins between the two groups were often quite small. When the collective rankings for each group were averaged, the provincial government earned an average of 3.03 (neutral) and the private industry earned an average of 2.77 (weak). These findings suggest that respondents are not particularly confident in the ability of either party to manage the requirements of certification.

Both groups garnered almost identical overall ratings in the following categories: willingness of upper management to accept and commit to certification, willingness of employees to accept and commit to certification, and ability to maintain commitment to certification despite business or government downsizing. The greatest discrepancy between the two groups was evidenced in the question on ability to finance certification, with the provincial government garnering a higher rating. This response is not surprising given that a number of respondents had previously articulated that small operators would likely face financial difficulties in certifying their operations. Collectively, respondents had the lowest confidence in the ability of both provincial government and private industry to manage the increased paperwork and documentation requirements required for certification, followed by the ability of staff to handle increased workloads.

Although the comparative questions did not uncover striking differences in capabilities between the two groups, they did provide an interesting comparison to the barriers rated in the previous section. As many respondents identified employees' already packed workdays as problematic for achieving certification, it is not surprising that government and industry collectively received their lowest scores on their ability to

manage a heavier workload and complete the substantial paperwork and documentation required for certification. On a somewhat contradictory note, despite the fact that the direct and indirect costs of certification were identified as one of the greatest barriers to achieving certification, individuals did not seem particularly concerned about the provincial government's ability to fund this initiative.

## 4.4.2 Additional Comments

Respondents were given the opportunity to list additional strengths and weaknesses of the provincial government and private industry that may be relevant for achieving certification.

*Provincial Government: Strengths and Weaknesses*

Overall, respondents expressed confidence in the dedication and skill level of government staff. One individual drew attention to the fact that most levels of management were staffed by individuals who had achieved a RPF (Registered Professional Forester) designation, but noted that these individuals were already constrained by heavy workloads and may lack the necessary buy-in for certification. Other relevant government strengths mentioned included government's willingness to work with industry and utilize their expertise, and the fact that public participation is already entrenched in government's Five-Year Forest Management Plans. Given the fact that public participation is a central aspect of all certification standards, its current inclusion in government decision-making processes bodes well for facilitating future certification requirements.

In terms of weaknesses of the provincial government, the most common response related to respondents' low confidence that the government would establish certification as a priority. These responses are not surprising given that certification has been discussed within the NFS for over ten years, yet progress on this initiative has been stalled. Interestingly, when asked to rate the willingness of upper management to accept and commit to certification, respondents did not attribute low scores to either party. This finding appears to suggest that difficulties in ensuring management buy-in may exist at political levels above the NFS. Another weakness mentioned was the organizational challenges that government would face in catering to the needs of many different players operating in one area, with one respondent likening government's role to that of a custodian who must manage a wide diversity of experience and education distributed over an extremely large land base.

*Industry: Strengths and Weaknesses*

Although it cannot be described as a direct strength, industry's need for certification, in terms of an incentive for market access and financial gain, was identified as the most important driver for pursuing this initiative. As noted by one respondent; "Industry (small to mid-sized companies) has the most to gain from certification, so once they realized the benefits/need, they may be its biggest advocates". Other responses referred to the skilled and capable industry staff in the province. Interestingly, two respondents noted that the organizational structure of a private business is especially conducive to achieving certification. In particular, industry is able to receive the financial

return from certification directly, and has a greater ability to deal with non-compliance through disincentives, penalties, disciplinary action and dismissal.

When asked to list weaknesses of private industry that would be relevant to achieving certification, a diversity of responses was provided. Not surprisingly, several individuals again expressed concern regarding private industry's ability to manage the costs associated with certification, noting in particular the challenges faced by small operators. Other responses pertained to the fact that industry is heavily reliant on market conditions, which were described as poor, uncertain, and unstable. The geographical dispersion of the forest industry over a large land base was also identified as a possible area of concern, with individuals specifically characterizing the industry as fragmented and divided into silos.

## 4.5 Implementation of Provincial Certification

4.5.1 Views on Responsibility for Leading Certification

Respondents were then asked to indicate which sector or organization they believed would be best equipped to lead the implementation of forest certification on provincial Crown lands (Figure 4.10). Given the fact that private industry and provincial government were closely matched in rankings in the previous block of questions, it is not surprising



Provincial Government (n=12)

Private Industry (n=1)

Provincial Government & Private Industry (n=16)

Non-Governmental Organizations (n=0)

Other (n=0)
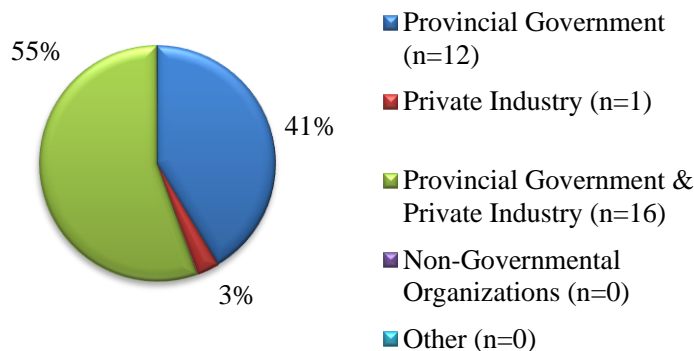
**Figure 4.10:** Who should lead the implementation of certification in the province? n = number of respondents.

that a partnership between these units was identified by the majority (55%) as the ideal

leadership option. However, the provincial government on its own was ranked as a close

second, garnering 41% of the vote. As stated by one of these respondents; "If not done by

Government – will not happen on Crown land". Only one individual stated that

certification should be led by the private industry and no respondents identified NGOs as

the ideal leaders. Two individuals declined to respond to this question.

4.5.2 Views on Responsibility for Financing Certification

In a follow-up question asking respondents to indicate which sector or

organization they believed should be responsible for financing the implementation of

forest certification on provincial Crown lands, the majority of respondents again selected

the joint partnership of government and industry (18 individuals) (Figure 4.11).

Following respondents' concerns about the significant financial costs associated

with certification, this method of cost-sharing may help to lessen the financial burden this

initiative places on both parties. Although the provincial government once again received the second highest number of votes, the margin between both options was greater than in the
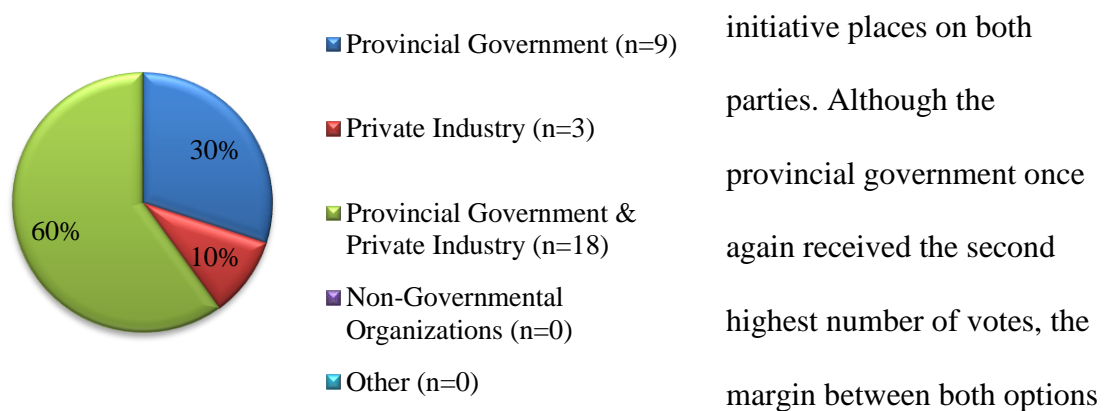


**Figure 4.11:** Who should finance certification in the province? n = number of respondents.

previous question, as twice as many respondents chose the joint team of industry and

government over government on its own. Three individuals selected private industry as

the most ideal financial backers for certification, and not surprisingly, no respondents

identified NGOs as having the capital to finance this project. One respondent neglected to

answer the question.

**4.6 Optimal Certification Standard for Newfoundland and Labrador Crown Lands**

When asked to indicate which of the forest certification standards recognized in

Canada would be best suited to certifying provincial Crown lands, most respondents (10

individuals) were either unsure or had no opinion. The FSC Boreal Standard garnered the second highest number of responses (8 individuals), with ISO 14001[14] close behind with seven



ISO 14001 EMS (n=7)

CAN/CSA Z809-08 (n=5)

FSC Boreal Standard (n=8)

SFI 2010-2014 (n=0)

Unsure/No Opinion (n=10)
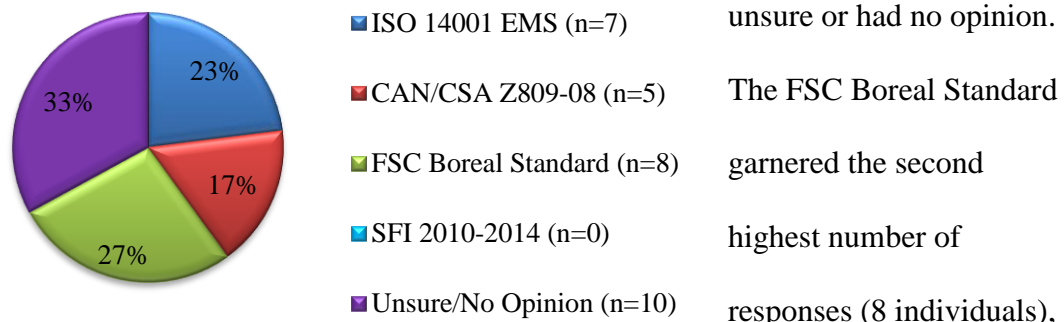
**Figure 4.12:** Perceived optimal certification standard for NL Crown lands. n = number of respondents.

responses. Five individuals selected CSA Z809 as the optimal standard (Figure 4.12).

The favourable response to these three schemes is not surprising given that CBPP

is certified to all of them, and therefore respondents may view these standards as more

amenable to provincial Crown lands. FSC may have received a greater percentage of

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[14] Several of the comments at the end of the survey cautioned that ISO 14001 is an environmental management system and not a certification system. Although the researcher was aware of this fact, and should have perhaps reworded the question in the interest of clarification, it was important that ISO 14001 be included with the other standards since this EMS is often a starting point for businesses/companies seeking certification and thus was hypothesized to be a popular choice among respondents. The implementation of ISO 14001 was also the focus of Saunders & Duinker's study in 2002.

responses due to the fact that this organization and its logo are widely recognized and FSC is often marketed as the most sustainable standard. As noted by one respondent;

> *Achieving FSC certification is probably the best one for Government to work towards simply because it is perceived to be the best standard. For the most part the general public knows very little about certification standards but they have a perception that FSC is better because of strong marketing done by the FSC people over the years.*

Two respondents further noted that provincial attainment of this standard would "make sense" in the interest of provincial consistency, and another stated that FSC is the preferred standard from a market access standpoint. It was also noted that while achieving FSC certification will provide many benefits, it is also a very difficult and intensive standard that may lead to challenges with respect to forest management objectives in the province. One respondent predicted that if FSC certification is pursued, "[…] there will be plenty of frustration for government along the way".

As the provincial DNR has already stated its goal to implement an EMS, respondents may have been inclined to rank ISO 14001 as a top choice. In a subsequent open-ended comments box, five respondents independently stated that implementing an EMS standard such as ISO 14001 would provide an excellent introduction to certification for the province. Three of these respondents noted that an EMS can act as an excellent base for companies at the beginning of a certification process, mentioning that CBPP also started with ISO 14001 in its certification process. In particular, one individual stated;

> *ISO certification is probably a good first step for government. ISO will bring consistency to forest management practices, monitoring, and enforcement across the Island. That consistency will bring about improvements that will be necessary as everyone moves to the much more complicated FSC processes.*

No respondents chose the SFI standard, which is interesting given that this standard is the most prevalent in Canada. However, the fact that CBPP has not attempted to pursue SFI certification for its operations has likely contributed to the lower overall profile of this standard in the province.

**4.7 Overall Comments**

4.7.1 Comparisons to Previous Research

Although this study expanded upon some of the findings presented in Saunders and Duinker's (2002) research, it was not designed to provide a direct comparison to these authors' findings. However, it is interesting to note that some of the challenges to implementing an EMS that were deemed partial barriers in 2002 were again labelled as such in the context of implementing an EMS or SFM standard on Crown lands. Saunders and Duinker (2002) found that the following issues were 'partial barriers' to implementing certification: availability of staff time, availability of monetary resources, communication and consistency between forest districts & divisions, management changes, abiding by legislation, and ensuring emergency preparedness and response measures. In addition, political interference and the failure to obtain upper-management commitment were identified as partial barriers that could influence other barriers. Similarly, the present study did not uncover any major barriers, and identified the following three issues as the greatest barriers facing the NFS: 1) direct and indirect costs of certification, availability of staff time to commit to certification, and political interference in certification.

Some of the issues identified by Saunders and Duinker (2002) as partial barriers were revisited in the context of comparing government and industry capacities. Although for the most part respondents were not overly confident in the abilities of either sector, it is interesting to note that the highest combined scores were received in the following categories: ability to fulfill training requirements, ability to implement emergency response measures, and willingness of upper management to accept and commit to certification. The latter two categories had been identified as partial barriers by Saunders and Duinker (2002). Therefore, NL may now be in a better position to implement certification, particularly if upper management is truly more committed to this initiative.

4.7.2 Relationship between Government and Industry

Given the disproportionate number of survey respondents from the provincial government and the small sample size from industry, it is not possible to draw comparisons between the perceptions of both groups. However, it is clear that despite the fact that private industry had a smaller voice in the survey, employees of the provincial government appear very conscious of the important role that industry will play in a certification decision. Although there is a possibility that government employees may have been inclined to attribute higher rankings to the capacities of their own organization, the fact that both groups scored relatively equally in most categories suggests that the uneven respondent categories may not have posed a major source of bias. In addition, the fact that a collaborative approach to leading and financing certification was favoured suggests that a comparison of opinions would be less useful than an evaluation of common synergies and opportunities for moving forward.

**CHAPTER 5 Conclusion**

**5.1 Study Limitations and Future Research**

Although the scope of this study was limited to provincial government and private industry employees, it is important to note that the viewpoints of other stakeholders will need to be included if certification is implemented in the future. As mentioned previously, public participation forms a core component of all certification standards, and thus a more inclusive approach must be taken during the actual implementation of a standard. In particular, NGO and Aboriginal support for certification should be gauged in order to determine the best way to move forward.

A second limitation relates to the fact that the survey did not account for the economic and political differences between both Newfoundland and Labrador. Although government employees working in Labrador were surveyed, no distinctions were made between the circumstances of these individuals and those working on the island of Newfoundland. In particular, it is important to reiterate that Labrador currently does not support any forest harvesting operations, although it has in the past and may again in the future. Furthermore, Labrador is home to two major Innu communities comprising approximately 2300 people (Statistics Canada, 2013). In 2002, when commercial harvesting was occurring in Labrador, Saunders and Duinker noted the advanced state of forest management in this area and suggested that strong Innu involvement may have been a primary factor in this outcome. At this time, the Innu had been pressing for the province to pursue FSC certification. Future research should be conducted to determine future directions for forestry in Labrador and possible implications for certification.

The purpose of this study was ultimately to uncover perceptions of government and industry employees on the subject of implementing certification on Crown forests. The results from this study will help to provide these parties with information on whether and how to proceed with this initiative, in terms of the level of interest from key stakeholders, their perceived areas of concern, and views on overall capacity. However, it is important to reiterate that this study provides only an initial segue into the certification process, and should the province decide to move forward with this initiative, it faces a number of administrative and organizational challenges. Next steps will include a thorough gap analysis, a detailed implementation plan, and choice of certifier. This information was beyond the scope of the current study, and thus will constitute necessary further research.

## 5.2 Summary and Recommendations

### 5.2.1 Key Findings

The goal of this study was to determine how the topic of certifying NL Crown forests is viewed and approached by government and industry stakeholders in the province. This goal was accomplished by gathering information on three relevant sub-questions which sought to uncover attitudes toward certification, perceived challenges, and relevant capacities of key players. The findings related to each question are summarized below.

*Is the Newfoundland Forest Service's goal to implement certification on its Crown lands supported by forestry professionals working in both government and industry?*

The majority of respondents stated that NL Crown lands should be certified, with all of these respondents citing an improved public image as a major benefit of the process. Improving sustainability in forest practices was listed as the second most common motivator. Only two respondents opposed the idea of implementing forest certification. Although the majority of respondents (54%) were in favour of pursuing certification, a substantial minority (35%) were either unsure or had no opinion about this process. However, this degree of uncertainty did not appear to be a result of unfamiliarity with certification standards, but may instead be related to the prevailing concerns about the financial cost of this initiative that were expressed throughout the study. In particular, the relatively small size of individual operators in the sawmill and product industry, and the financial burden that these operators would likely face in implementing certification, were both repeatedly mentioned as areas of concern.

*What are the main perceived challenges to implementing forest certification on Newfoundland and Labrador Crown lands?*

In keeping with Saunders and Duinker's research, none of the issues listed in the present survey were deemed major barriers to implementing forest certification. Respondents did not uniformly identify any one potential barrier as being especially problematic, and there were no instances where more than half of the respondents labelled an issue as a major barrier. However, the three greatest issues of concern for respondents

pertained to the direct and indirect costs associated with certification, the availability of staff time to commit to certification, and political interference in forest management. It is important to note that the majority of respondents indicated that the relationship between industry and government does not pose a barrier to achieving certification.

*Who should be responsible for leading and financing certification, and why?*

The majority of respondents were in favour of the provincial government and private industry sharing responsibility for both leading and financing certification. For those respondents not in favour of a joint approach, the second most popular choice for both categories was to indicate that the provincial government should move forward on its own. However, more respondents were in favour of the provincial government leading certification on its own than financing it solely. This response is not surprising given respondents' preoccupation with the financial burden of certification.

Respondents' preference for a joint approach to certification may stem from the fact that they believe both parties share similar abilities. When asked to compare the capabilities of the provincial government and private industry on a series of issues relevant to achieving certification, no striking differences between the two groups were found. However, the average ratings for both groups were not particularly high. These findings suggest that reservations about certification may stem from a lack of confidence in the collective abilities of both groups. More importantly, however, both parties appear to have a positive working relationship and display a willingness to work together, and the importance of this relationship to achieving certification should not be understated.

Several other provinces that have cooperatively undertaken certification have noted the benefits of a strong government-industry relationship to this process.

5.2.2 Conclusion & Next Steps

The majority of respondents view the achievement of provincial certification in a positive light, but with some reservations. As many of these reservations pertain to the anticipated financial burden of certification, especially in terms of the hardships likely to be faced by small operators, any future certification plan must clearly outline the measures that will be taken to ensure that these operators remain viable. Respondents appear to be receptive to the idea of co-funding certification, but the logistics behind any cost-sharing plan will require substantial further discussion. Planning and preparedness are fundamental to success in this initiative, as well as an inclusive approach which ensures consistency and facilitates strong partnerships between stakeholders. This collaborative, unified and organized approach to certification is in the best interest of the province, as ensuring success during the auditing process is extremely important. As noted by one respondent, a haphazard approach to monitoring and compliance could lead to an unfortunate outcome: "It may turn out that we have set ourselves up for a fall at audit time which is a worse situation to be in than having no certification".

The province's goal to implement an EMS on Crown lands is largely supported by forestry stakeholders, and many individuals are keen for the province to subsequently pursue certification to one of the SFM standards. It is important for the province to appropriately prioritize this initiative, as previous studies that have advocated for certification have not been able to mobilize major changes on the ground. As Canada has

more third-party certified forestlands than any other country in the world, and all other provinces have demonstrated some level of commitment to certification, NL is lagging behind in this arena and must take measures to ensure its competitiveness in domestic and international forest markets.

In keeping with the suggestions in the DNR's 2011-2014 Strategic Plan, NL should proceed with the necessary steps to begin implementing an EMS standard on Crown lands. As noted by several respondents, this process will help to bring consistency to forest management processes and will serve as a good base should the province decide to pursue a SFM standard in the future. NL should also rely on the expertise of CBPP as it embarks on this implementation process, as the mill has achieved one EMS and two SFM standards over the past ten years and thus is highly familiar with their requirements in the context of the province. Stakeholders will likely be receptive to working closely with CBPP, as respondents were more likely to favour pursuing a certification standard that has already been achieved by the mill. As the provincial and private forest industries appear to share a solid working relationship, and Crown certification will ultimately benefit the pulp and paper industry in the province, close collaboration between these groups in the pursuit of a provincial strategy is strongly advised.

In the long-run, there is a possibility that forest certification could complement or even reduce some areas of government involvement in forest management. Currently, the province's Five-Year Operating Plans are subject to an environmental assessment before approval. If Crown forests achieve independent certification, this designation may prove sufficient to indicate sustainability, and could therefore supplant the environmental assessment process. Certification may also provide other, currently unknown

opportunities for streamlining management procedures that could deliver cost and time-saving advantages.

This study has reopened a discussion on certification in the province, and has demonstrated a high level of engagement on this topic. The mutual interest of both government and industry regarding certification, and their willingness to collaborate toward its achievement, suggests that the necessary precursors are in place to move beyond a discussion of merits and into an actual implementation plan. The findings from this study may be comparable to those uncovered by Saunders and Duinker (2002), but the outcome must be different: NL must ensure that certification is prioritized, and seek to mobilize the resources necessary to implement this important tool. The boreal forest is not only a vital natural resource for the province, but is also an inherent symbol of its culture. In addition to maintaining the long-term sustainability of this valuable resource, certification will help to ensure that NL's forest industry remains a relevant and integrated component of Canada's rapidly changing and diversifying forest economy.

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APPENDIX A: Descriptions of Environmental Management and Sustainable Forest Management systems recognized in Canada

| Standard | Description | Key characteristics | Applicability in Canada | Status in Canada (ha certified 2012) | Type of certifier[1] | Type of standard[2] | Eco-label?[3] |
|---|---|---|---|---|---|---|---|
| ISO 14001 EMS | An internationally accepted standard that outlines how to develop an effective environmental management system for an organization | Does not specify requirements for environmental performance<br><br>Can be used to help an organization develop a personalized framework to achieve environmental goals and objectives | Not specific to the forest industry; EMS can be individually and uniquely targeted toward any business or organization seeking to incorporate environmental management into activities | N/A | First-party | Management-based | No |
| CAN/ CSA - Z809 or Z804 | A Canadian national standard for SFM approved by the Standards Council of Canada and endorsed by the PEFC[4]<br><br>Describes the requirements for SFM for a defined forest area (DFA) to which the requirements of a standard apply | Requirements are based on the 6 SFM criteria developed by the Canadian Council of Forest Ministers<br><br>Includes requirements for public participation, performance, management systems, review of actions, monitoring of effectiveness, and continual improvement | One national standard; no regional standards | 44,921,371 | Third-party | Management & Performance-based | Yes |
| FSC | An international organization providing a system for voluntary | Based on 10 principles and 56 criteria which are interpreted into national or regional standards at the local level by | 4 Canadian Standards[5]:<br><br>• National Boreal<br>• BC | 54,080,929 | Third-party | Performance-based | Yes |

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| | accreditation for forest management<br><br>Aims to promote environmentally appropriate, socially beneficial and economically viable forest practices | national working groups | • Great Lakes St. Lawrence (draft)<br>• Maritimes | | | | |
| **SFI (2010-2014)** | An independent North American standard endorsed by PEFC to promote SFM by addressing environmental, social and economic forest values | Based on 14 core principles, 20 objectives, 38 performance measures and 115 indicators | One standard for North America; no regional standards | 57,577,838 | Third-party | Performance-based | Yes |

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[1] First-party schemes allow forest companies to conduct internal evaluations of their forest management practices in order to determine whether they are consistent with a given standard. Conversely, third-party schemes require that the body conducting a certification audit is independent from the company seeking certification (Tollefson et al., 2008).

[2] Management-based standards outline the systems that must be in place to ensure appropriate management procedures but do not specify the outcomes of these behaviours. Performance-based standards evaluate whether or not a particular outcome has been met but do not specify the manner in which it must be achieved.

[3] Eco-labels communicate to consumers that a product is environmentally appropriate according to one or more criteria. In terms of forest certification, an eco-label acts as a visual indicator to signify that a certified product was tracked and accounted for throughout all stages of the production process (Tollefson et al., 2008).

[4] Programme for the Endorsement of Forest Certification (PEFC) is an international umbrella program which endorses many national standards. Along with the FSC, the PEFC constitutes one half of the two major certification schemes operating globally. Both CSA and SFI were endorsed under the PEFC in 2007 (Lister, 2009).

[5] FSC Canada's Standards Revision Process is currently underway to align regional Forest Management Standards with revised Principles and Criteria (V-5), approved in February 2012, and international generic indicators currently being drafted. FSC Canada will draft one national standard that includes national common indicators and region specific indicators which, where warranted, will replace existing regional standards. The FM Standards Revision Process is expected to be completed and approved by December 31, 2014 (FSC Canada, 2013).

APPENDIX B: A comparison of forest certification commitments and implementation practices by province

| Province<br><br># of hectares with a SFM certification (2012)[6] | Description and Status of Certification on Crown Forests |
|---|---|
| **Alberta**<br><br>20,040976 | As stated in Alberta's Forest Management Planning Standard (2006):<br>"Alberta has adopted the CAN/CSA-Z809-02 Sustainable Forest Management: Requirements and Guidance Document as the forest management planning system. All standards in CSA Z809-02 apply to forest management planning in Alberta except where specifically excluded in the Alberta standard. Certification is recommended but not mandatory in Alberta, and CSA Z809-02 is designed to enable certification by third party auditors."[7]<br>Government support for CSA's Z809 forestry standards led to their initial dominance in the province.[8] |
| **British Columbia**<br><br>51,877,536 | The Government of BC views forest certification as a complement, and not a supplement, to the existing regulatory structure in the province. According to BC's Ministry of Forests, Lands and Natural Resource Operations: "Forest certification is seen as one component of the overall provincial commitment to the goal of sustainable forest management". In 2000, the government commissioned external reviewers to undertake a study on possible roles for government involvement on the issue of provincial certification, with the overall recommendations stating that the government should take a cooperative approach but not radically alter its regulatory framework. Following this advice, the BC government adopted measures to highlight its acceptance of certification (i.e. hiring a certification implementation coordinator and dedicating a unit to address and monitor certification issues), but stopped short of mandating certification. However, the province did pursue and enforce certification for the B.C. Timber Sales program, which is a stand-alone organization within the MFLNRO that is focused specifically on small forestry businesses. As of 2012, BC has the most certified forestland in Canada, the majority of which is certified to the CSA and SFI standards. |
| **Manitoba**<br><br>10,620,309 | As stated in *Tomorrow Now: Manitoba's Green Plan* (2012):<br>"Manitoba will ensure that all forest harvesting on public lands in the province meets or exceeds recognized third party sustainable forest management certification systems. Manitoba will move to requiring long term Forest Management Plans for all forestry operations. In addition, all new Forest Management Licence Agreements in Manitoba will require a certification regime as a condition of licensing."[9] |
| **New Brunswick**<br><br>3,884,389 | The Government of New Brunswick was the first jurisdiction in North America to mandate forest certification. This decision was implemented as a forest policy and not a regulation, and involved two phases: 1) all forest operations on Crown land must achieve ISO 14001 certification by December 31, 2002, and 2) these operations must subsequently achieve third-party certification (FSC, SFI or CSA) by December 31, 2003.[10]<br>New Brunswick's Department of Natural Resources (DNR) suggested that industry adopt one common certification standard for the purpose of uniformity, and thus the SFI standard has dominated in the province. Although the DNR assisted licensees in achieving certification through the provision of technical |

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| | assistance and clarification of provincial policy during certification audits, the government did not directly intervene in certification of private woodlots and allowed forest companies and private forest owners the freedom to implement this initiative.[11] |
| **Nova Scotia**<br><br>1,316,087 | Bowater Mersey Paper Company Limited, which was acquired by the Government of Nova Scotia in December 2012, had achieved forest certification under the SFI standard for all land under its management as well as an additional FSC certificate for one district. Nova Scotia's Department of Natural Resources has indicated its intent to maintain these certificates and has requested their transfer.[12] No further initiatives to certify Crown forests in the province have been released. |
| **Ontario**<br><br>21,153,505 | In 2004, the Ontario Ministry of Natural Resources (OMNR) announced that all Sustainable Forest License tenure holders in the province were required to achieve certification by a third-party standard (FSC, CSA, SFI) before the end of 2007. In order to identify and alleviate the likely challenges that licensees would face in implementing this initiative, the OMNR worked closely with industry partners who had either already achieved certification or were highly familiar with on-the-ground requirements.[13]<br>Although this requirement was never included in a regulatory document, by the end of 2006 the amount of certified forestland in the province had increased by 36%.[14] Currently, Ontario's official position on forest certification is that "Forest companies in Ontario are encouraged to seek certification by independent third party organizations", and "The Minister of Natural Resources supports the forest industry in their efforts to pursue forest certification".[15] |
| **Prince Edward Island**<br><br>446 | Under its 2006 Forest Policy, the government of PEI committed to certify selected public forest lands under a recognized standard in Canada and communicate to land managers and the public the requirements of these systems.[16] Actual certification efforts were first initiated in 2010 on a 170 hectare block of four public properties. The Forest Stewardship Council: Small and Low Intensity Managed Forests (SLIMF) Program within the FSC Maritime Standard was chosen and achieved in 2010. The president of Ngaya Forest Restoration, which acts as a certifying agent for the FSC, indicated that it is the first parcel of public lands in Canada to achieve FSC certification as a direct result of provincial government initiative. Former Minister Richard Brown indicated in 2011 that the formerly named Department of Environment, Energy and Forestry would continue the process of certifying public forest land with a property on the western portion of the island.[17][18] |
| **Quebec** | Before 2004, the Quebec government largely viewed forest certification as a market-based issue of relevance to forest companies and their customers, and thus saw it as external to its regulatory role. However the release of the Coulombe Commission Report in 2004, which broadly evaluated the state of Quebec's forests and included amongst its recommendations that the Quebec government mandate forest certification, altered the provincial position on certification. In 2007, *Bill 39: An Act to Amend the Forest Act and Other Legislative Provisions*, granted the Minister "the power to require that agreement holders obtain forest |

| | |
|---|---|
| 30,426,353 | certification from an independent agency with SFM standards applicable to Quebec's forests."[19]<br><br>As of April 1, 2013, the Ministère des Ressources naturelles et de la Faune (MRNF) will be designated responsibility for planning activities in public forests, including certification of public forests, as specified under the new *Sustainable Forest Development Act*. The MRNF has indicated commitment to maintain certification designations for areas which have already achieved certification to a third-party standard. Additionally, it has chosen to comply with ISO14001 standard when implementing an environmental management system for provincial forest management. Currently, the MRNF has stated that "there is no evidence to suggest that Quebec needs to certify all its public forests in order to satisfy market requirements", and thus does not presently intend to certify all Crown forest lands. However, the Ministry is conducting research into the possibility of achieving 100% certification of public forests by 2018.[20] |
| **Saskatchewan**<br><br>4,115,849 | As of January 2004, Saskatchewan's government forestry program had achieved ISO 14001 for its Environmental Management System. The EMS for Saskatchewan Environment's forestry program was the first government-wide forestry program in the country to achieve ISO 14001 certification.[21] |

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[6] Note: Figures represent all certification designations, including those obtained on private land. Companies that have achieved multiple certifications are only counted once. Source: Certification Canada, retrieved from: http://www.certificationcanada.org/english/status_intentions/provincial.php.

[7] Alberta Sustainable Resource Management (2002). Alberta Forest Management Planning Standard Version 4.1. Retrieved from: http://srd.alberta.ca/LandsForests/ForestManagement/ForestManagementPlanning/documents/Alberta_Forest_Management_Planning_Standard_Version_4_1_April_2006_Final_2.pdf.

[8] Wood, 2009.

[9] Manitoba Conservation and Water Stewardship (2012). Tomorrow Now: Manitoba's Green Plan. Retrieved from: http://gov.mb.ca/conservation/tomorrownowgreenplan/pdf/tomorrowNowBook.pdf.

[10] Communications New Brunswick (2002). Forest Certification to be implemented on Crown Land by 2003. Retrieved from: http://www.gnb.ca/cnb/news/nr/2002e0341nr.htm.

[11] Lister, 2009.

[12] Nova Scotia Department of Natural Resources (2013). Forest Certification. Retrieved from: http://novascotia.ca/natr/forestry/certification/.

[13] Lister, 2009; Wood, 2009.

[14] Lister, 2009.

[15] Ontario Ministry of Natural Resources. (2012). Forest Certification. Retrieved from: http://www.mnr.gov.on.ca/en/Business/Forests/2ColumnSubPage/STEL02_167417.html.

[16] Prince Edward Island Department of Agriculture and Forestry (2012). Forest Certification on PEI. Retrieved from: http://www.gov.pe.ca/forestry/forestcertification.

[17] Prince Edward Island Department of Agriculture and Forestry (2013). Forest Certification on Public Lands: Forest Stewardship Council. Retrieved from: http://www.gov.pe.ca/forestry/index.php3?number=1042891.

[18] Farm Focus of Atlantic Canada (2011). PEI leading the way with forest certification. Retrieved from http://www.atlanticfarmfocus.ca/Forestry/2011-04-28/article-2462469/PEI-leading-the-way-with-forest-certification/1.

[19] Lister, 2009; Wood, 2009.

[20] Ressources naturelles et Faune de Quebec (2012). Forest Certification. Retrieved from: http://142.150.176.36/task43/images/membersonly/Quebeceventoct2012/Information%20on%20Canada/Forest%20Certification/fiche-certification-en.pdf.

[21] Government of Saskatchewan News Release (2004). Government Forestry Program Internationally Certified. Retrieved from: http://www.gov.sk.ca/news?newsId=fde4746b-772c-4dc2-a222-c1932d9f39ab.

APPENDIX C: Copy of online survey
*(Note – skip logic patterns not accurately represented on printed version)*

# Implementation of Forest Certification on Newfoundland and Labrador

Principal Investigator: Carrie Fox
Candidate: Master of Arts in Environmental Policy
Memorial University of Newfoundland, Grenfell Campus
Email: cfox@grenfell.mun.ca

You are invited to take part in a research project entitled "Implementation of Forest Certification on Newfoundland and Labrador Crown Lands: A Comparison of Stakeholder Perspectives". As part of the requirements for completing a Master of Arts in Environmental Policy, the principal investigator is conducting research for a Major Research Paper under the supervision of Dr. Michael van Zyll de Jong. The purpose of this survey is to elicit opinions from forestry stakeholders on the provincial government's goal to implement forest certification on Newfoundland and Labrador Crown lands. Individuals who are likely to have insight into the technical, political, and practical components of this project have been invited to participate in an online survey, and recommendations will be provided to the province following a compilation and analysis of the feedback obtained. The results from the surveys will be compiled and will form the basis for internal comparisons, such as the differences in responses between individuals from different sectors in the province, as well as external comparisons, in terms of how the results obtained from the province compare to similar studies undertaken both nationally and internationally.

This form is part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. It also describes your right to withdraw from the study at any time. In order to decide whether or not you wish to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. It is important that you take time to read this document carefully and to understand the information given to you. Please contact the researcher, Carrie Fox, if you have any questions about the study or require additional information before you consent.

In this survey you will be asked open and closed-ended questions about your opinions relating to forest certification in the province, with the aim of uncovering future opportunities for facilitating a certification network on Crown forests. Your participation will help to contribute toward the creation of a certification implementation plan for the province. There are no obvious risks associated with completion of the survey. Your participation in this survey is entirely voluntary and there will be no negative consequences should you refuse to participate in it, withdraw from it, or refrain from answering certain questions. Please note that any data collected from you up to the point of your withdrawal will be destroyed.

Please note that your responses will be completely ANONYMOUS, and should you wish to decline to participate, only the principal researcher will have access to this information. Direct quotes from open-ended questions may be incorporated into the final research paper; however they will not be linked to a participant's identity and may be generalized to further protect anonymity. Data from completed surveys will be stored on the principal researcher's password protected computer. This information will be kept in strict confidence and will only be reviewed by the principal researcher, Carrie Fox.

This survey should take approximately 15 MINUTES to complete.

# Implementation of Forest Certification on Newfoundland and Labrador

Results from the surveys will be incorporated into a final research paper which will be submitted to the Environmental Policy Institute at Memorial University's Grenfell Campus by August 31, 2013. Given the applicability of the project to the provincial government, and in recognition of the financial support granted by the Centre for Forest Science and Innovation and the Institute for Biodiversity, Ecosystem Science and Sustainability, a poster presentation and/or policy brief may be disseminated to these parties.

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the Research Ethics Board through the Grenfell Research Office (dwstrickland@grenfell.mun.ca) or by calling (709) 639-2399.

If you would like more information about this study, please contact Carrie Fox, Principal Researcher, at cfox@grenfell.mun.ca.

Note: The on-line survey company SurveyMonkey is hosting this survey, and as this domain is located in the United States it is subject to U.S. laws. The US Patriot Act allows authorities access to the records of internet service providers. Complete anonymity and confidentiality, therefore, cannot be guaranteed. If you choose to participate in this survey, you understand that your responses to the survey questions will be stored and accessed in the USA. The security and privacy policy for the web survey company can be found at the following link: (e.g. http://www.SurveyMonkey.com/monkey_privcy.aspx).

By clicking on the box below, you confirm that:

- Your participation in the research study is strictly voluntary
- You understand what the study is about and what you will be doing
- You understand that you are free to withdraw from the study at any time, without having to give a reason, and that doing so will not affect you now or in the future
- You understand that any data collected from you up to the point of your withdrawal will be destroyed

If you click below, you do not give up your legal rights and do not release the researchers from their professional responsibilities.

## 1. Please indicate whether or not you agree to the above terms:

○ Yes, I agree to the above terms

○ No, I do not agree to the above terms

## 2. Which of the following categories best describes your current place of employment?

○ Provincial Government

○ Pulp and Paper Industry

○ Sawmill or Product Industry

## 3. How many years have you worked in the forest sector?

○ Less than 1

○ 1-5

○ 6-19

○ 20+

The government of Newfoundland and Labrador has recently indicated that certifying its Crown forests is a priority for the province. In particular, the Department of Natural Resources' Strategic Plan (2011-2014) stated; "By March 31, 2014, the Forestry and Agrifoods Agency will have implemented measures to advance forestry, agriculture, and agrifoods industry sustainability in the province", with one such indicator of progress being the implementation of an Environmental Management System for forest certification.

## 4. Please indicate your level of agreement with the following statements:

| | Strongly Disagree | Disagree | Neither Agree nor Disagree | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I am aware of the province's goal to certify its Crown forests | ○ | ○ | ○ | ○ | ○ |
| I am familiar with forest certification standards | ○ | ○ | ○ | ○ | ○ |
| Crown forests in Newfoundland and Labrador are currently managed in a sustainable way | ○ | ○ | ○ | ○ | ○ |

## 5. Forest certification should be implemented on Newfoundland and Labrador Crown lands.

○ Yes

○ No

○ Unsure

○ No Opinion

## 6. Below is a list of possible reasons for deciding not to achieve forest certification. Please check all that apply.

☐ Financial cost

☐ Unlikely to enable price premiums

☐ Unnecessary for current business opportunities

☐ Loss of control over forest management

☐ Unimportant relative to other political goals

☐ Other (please specify)

**7. Below is a list of possible reasons for achieving forest certification. Please check all that apply.**

- ☐ Securing market access
- ☐ Improving market competitiveness
- ☐ Improving sustainability in forest practices
- ☐ Improving public image
- ☐ Streamlining management operations
- ☐ Obtaining price premiums for products
- ☐ Other (please specify)

<br>

**8. Has the lack of certification on Crown forests posed a problem for you or your organization in terms of business opportunities?**

- ○ Yes
- ○ No
- ○ Unsure
- ○ Not Applicable

**9. Below is a list of potential challenges to achieving certification that were identified in previous studies.**

**Please indicate the extent to which each of these challenges may act as a barrier to achieving forest certification on Newfoundland and Labrador Crown lands:**

| | Not a barrier | Slight barrier | Major barrier | Unsure |
|---|---|---|---|---|
| Direct and indirect financial costs of certification | ○ | ○ | ○ | ○ |
| Availability of staff time to commit to certification | ○ | ○ | ○ | ○ |
| Documentation and reporting requirements of certification | ○ | ○ | ○ | ○ |
| Unclear division of responsibility for certification | ○ | ○ | ○ | ○ |
| Conflicting governmental and certification priorities | ○ | ○ | ○ | ○ |
| Unrealistic upper management expectations about ability to implement certification | ○ | ○ | ○ | ○ |
| Gaps between existing legislation and certification requirements | ○ | ○ | ○ | ○ |
| Difficulty in communicating across multiple forest management districts | ○ | ○ | ○ | ○ |
| Management inconsistencies across multiple forest districts | ○ | ○ | ○ | ○ |
| Poor relationship between industry and government | ○ | ○ | ○ | ○ |
| Changing government priorities | ○ | ○ | ○ | ○ |
| Political interference in forest management | ○ | ○ | ○ | ○ |

**10. Are there any additional barriers that were not mentioned that you feel will be relevant for achieving certification of Crown forests? Please list and describe below.**

The following criteria have been previously identified as potential barriers to achieving forest certification.

In order to determine whether or not these barriers will be relevant for the implementation of forest certification on Crown land, please rate BOTH the provincial government and private industry with regards to the following issues:

## 11. Ability to finance certification

|  | Very Weak | Weak | Neutral | Strong | Very Strong | N/A |
|---|---|---|---|---|---|---|
| Provincial Government | ○ | ○ | ○ | ○ | ○ | ○ |
| Private Industry | ○ | ○ | ○ | ○ | ○ | ○ |

## 12. Ability of staff to handle increased workloads

|  | Very weak | Weak | Neutral | Strong | Very strong | N/A |
|---|---|---|---|---|---|---|
| Provincial Government | ○ | ○ | ○ | ○ | ○ | ○ |
| Private Industry | ○ | ○ | ○ | ○ | ○ | ○ |

## 13. Ability of staff to manage increased paperwork and documentation requirements

|  | Very weak | Weak | Neutral | Strong | Very strong | N/A |
|---|---|---|---|---|---|---|
| Provincial Government | ○ | ○ | ○ | ○ | ○ | ○ |
| Private Industry | ○ | ○ | ○ | ○ | ○ | ○ |

## 14. Willingness of upper management to accept and commit to certification

|  | Very weak | Weak | Neutral | Strong | Very strong | N/A |
|---|---|---|---|---|---|---|
| Provincial Government | ○ | ○ | ○ | ○ | ○ | ○ |
| Private Industry | ○ | ○ | ○ | ○ | ○ | ○ |

## 15. Willingness of employees to accept and commit to certification

|  | Very weak | Weak | Neutral | Strong | Very Strong | N/A |
|---|---|---|---|---|---|---|
| Provincial Government | ○ | ○ | ○ | ○ | ○ | ○ |
| Private Industry | ○ | ○ | ○ | ○ | ○ | ○ |

## 16. Ability to maintain commitment to certification despite business or government downsizing

|  | Very weak | Weak | Neutral | Strong | Very Strong | N/A |
|---|---|---|---|---|---|---|
| Provincial Government | ○ | ○ | ○ | ○ | ○ | ○ |
| Private Industry | ○ | ○ | ○ | ○ | ○ | ○ |

## 17. Ability to monitor and enforce certification requirements

|  | Very weak | Weak | Neutral | Strong | Very Strong | N/A |
|---|---|---|---|---|---|---|
| Provincial Government | ○ | ○ | ○ | ○ | ○ | ○ |
| Private Industry | ○ | ○ | ○ | ○ | ○ | ○ |

## 18. Ability to fulfill training requirements

|  | Very weak | Weak | Neutral | Strong | Very strong | N/A |
|---|---|---|---|---|---|---|
| Provincial Government | ○ | ○ | ○ | ○ | ○ | ○ |
| Private Industry | ○ | ○ | ○ | ○ | ○ | ○ |

## 19. Ability to implement emergency preparedness and response measures

|  | Very weak | Weak | Neutral | Strong | Very strong | N/A |
|---|---|---|---|---|---|---|
| Provincial Government | ○ | ○ | ○ | ○ | ○ | ○ |
| Private Industry | ○ | ○ | ○ | ○ | ○ | ○ |

## 20. If there are any additional strengths and weaknesses of the provincial government and private industry that may be relevant to implementing forest certification, please list and describe them below.

Provincial Government: Strengths

Provincial Government: Weaknesses

Industry: Strengths

Industry: Weaknesses

## 21. Please indicate who you think should be responsible for leading the implementation of forest certification on Newfoundland and Labrador Crown lands:

○ Provincial Government

○ Private Industry

○ Provincial Government and Private Industry

○ Non-Governmental Organizations

○ Other (please specify)

**22. Please indicate who you think should be responsible for financing the implementation of forest certification on Newfoundland and Labrador Crown lands:**

○ Provincial Government

○ Private Industry

○ Provincial Government and Private Industry

○ Non-Governmental Organizations

○ Other (please specify)

[                                                                      ]

**23. Below is a list of the certification standards currently recognized in Canada.**

**Please indicate which of the following standards you believe to be BEST suited to certifying Crown forests in Newfoundland and Labrador:**

○ ISO 14001 Environmental Management System Standard

○ CSA Z809-08

○ FSC (Boreal Standard)

○ SFI 2010-2014 Standard

○ Unsure / No Opinion

**24. If you have any further comments about the implementation of forest certification on Newfoundland and Labrador Crown lands, please provide them below:**

[                                                                      ]

Thank you for completing the survey! Your participation is greatly appreciated.

APPENDIX D: Reference material used in the design of the online survey

**Table 1.**

| Benefits associated with certification | Reference material |
|---|---|
| Securing market access | Wilson et al., 2001; Lister, 2009; Tikina et al., 2012 |
| Improving market competitiveness | Tikina et al., 2012 |
| Improving sustainability in forest practices | Wilson et al., 2001; Tikina et al., 2012 |
| Improving public image | Wilson et al., 2001; Lister, 2009; Tikina et al., 2012 |
| Streamlining management operations | Tikina et al., 2012 |
| Obtaining price premiums | Wilson et al., 2001 |

**Table 2.**

| Costs associated with certification | Reference material |
|---|---|
| Financial cost | Wilson et al., 2001; Saunders and Duinker, 2002; Hickey, 2004; Lister, 2009, Tikina et al., 2012 |
| Unlikely to enable price premiums | Wilson et al., 2001; Hickey, 2004 |
| Unnecessary for current business opportunities | Wilson et al., 2001; Tikina et al., 2012 |
| Loss of control over forest management | Wilson et al., 2001 |

**Table 3.**

| Challenges to achieving certification | Reference material |
|---|---|
| Direct and indirect financial costs of certification | Wilson et al., 2001; Saunders and Duinker, 2002; Hickey, 2004; Lister, 2009; Tikina et al., 2012 |
| Availability of staff time to commit to certification | Saunders and Duinker, 2002; Tikina et al., 2012 |
| Documentation and reporting requirements of certification | Wilson et al., 2001; Daryl Brown Associates Inc. and Greer, 2001; Saunders and Duinker, 2002; Lister, 2009 |
| Unclear division of responsibility for certification | Hickey, 2004 |
| Conflicting governmental and certification priorities | Wilson et al., 2001; Lister, 2009; Tikina et al., 2012 |
| Unrealistic upper management expectations about ability to implement certification | Hickey, 2004; Tikina et al., 2012 |

| Gaps between existing legislation and certification requirements | Daryl Brown Associates Inc. and Greer, 2001; Saunders and Duinker, 2002; Lister, 2009 |
| --- | --- |
| Difficulty in communicating across multiple forest management districts | Saunders and Duinker, 2002; Hickey, 2004 |
| Management inconsistencies across multiple forest districts | Saunders and Duinker, 2002; Hickey, 2004 |
| Poor relationship between industry and government | Hickey, 2004 |
| Changing government priorities | Saunders and Duinker, 2002 |
| Political interference in forest management | Saunders and Duinker, 2002 |

**Table 4.**

| Comparison of Government – Industry capacities | Reference material |
| --- | --- |
| Ability to finance certification | Wilson et al., 2001; Saunders and Duinker, 2002; Lister, 2009; Tikina et al., 2012 |
| Ability of staff to handle increased workloads | Saunders and Duinker, 2002; Tikina et al., 2012 |
| Ability of staff to handle increased paperwork/documentation | Wilson et al., 2001; Daryl Brown Associates Inc. and Greer, 2001; Saunders and Duinker, 2002; Lister, 2009 |
| Willingness of upper management to accept/commit to certification | Saunders and Duinker, 2002 |
| Willingness of employees to accept/commit to certification | Saunders and Duinker, 2002; Lister, 2009 |
| Ability to maintain commitment despite downsizing | Saunders and Duinker, 2002 |
| Ability to monitor and enforce certification | Daryl Brown Associates Inc. and Greer, 2001; Saunders and Duinker, 2002; Hickey, 2004 |
| Ability to fulfill training requirements | Saunders and Duinker, 2002 |
| Ability to implement emergency response measures | Saunders and Duinker, 2002 |