2007

An Analysis of Social Aspects of Forest Stewardship Council Forest Certification in Three Ontario Case Studies

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AN ANALYSIS OF SOCIAL ASPECTS OF FOREST STEWARDSHIP COUNCIL FOREST CERTIFICATION IN THREE ONTARIO CASE STUDIES

By

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B.A (Hons.), Laurentian University, 2005

THESIS
Submitted to the Department of Geography and Environmental Studies
in partial fulfilment of the requirements
for the Master of Environmental Studies degree
Wilfrid Laurier University
2007

ABSTRACT

Forest certification is a market-based tool whereby forest management is evaluated against a set of standards that consider environmental, economic and social elements of sustainability. Certification is therefore a means of providing customers with the assurance that forest products are originating from sustainably managed forests. It grew out of the ideal of sustainable forest management (SFM) and pulls from its predecessor the concept of multiple dimensions of sustainability. The focus of this project was the international forest certification scheme Forest Stewardship Council (FSC).

A comparative case study approach was used to examine the social implications of certification in three FSC cases across Ontario. These cases include: Westwind Forest Stewardship Inc., Nipissing Forest Resource Management Inc., and Clergue Forest Management Inc. The purpose of this study is to examine how, and to what extent, social issues are being addressed. Three case studies are used to examine and compare how different forests deal with the social principles in the certification process. FSC addresses four main social issues which are the focus of research: consultation and public participation processes, recognition of Indigenous rights and culture, employee rights and community rights and well-being. Semi-structured interviews, a questionnaire and a document review were used to examine attitudes and opinions of social issues in certification, as well as the details and potential impacts surrounding specific social issues.

This study concludes that FSC certification had only a limited impact on the four social issues in the three case studies. FSC did not make any fundamental changes; although it did improve representation, discussion of social issues, and relationships with stakeholder groups. The Nipissing and Westwind case study participants reported or attributed more changes to FSC certification than did those in the Algoma case study. The results of this study indicate that factors such as the strength of the Ontario forestry regulatory system and the economic downturn of forestry in Canada limited the amount of impact certification had on social issues in the three case studies. The awareness and strength of social principles in FSC policy need to be strengthened in order for certification to make a true impact on forest management in Ontario.

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LIST OF ABBREVIATIONS

C&I	Criteria and indicators
CAR	Corrective action request
CFSA	Crown Forest Sustainability Act
CSA	Canadian Standards Association
FERN	Forests and the European Union Resource Network
FPAC	Forest Products Association of Canada
FMP	Forest management process
FSC	Forest Stewardship Council
HCVF	High conservation value forest
IRM	Integrated resource management
ITTO	International Tropical Timber Organization
LCC	Local citizens committee
MNR	Ministry of natural resources
MSY	Maximum sustained yield
NGO	Non-governmental organization
PEFC	Programme for the Endorsement of Forest Certification schemes
SFI	Sustainable Forestry Initiative
SFL	Sustainable forest license
SFM	Sustainable forest management
UNCED	United Nations Conference on the Environment and Development
WWF	World Wildlife Fund

1. INTRODUCTION

1.1 Introduction

Canada is blessed with enormous forest resources, and these have helped to shape the economic, cultural and social life of the country (Drushka 2003). Since the advent of forestry as an economic activity in Canada in the seventeenth century, management of the resource has been largely dominated by economic motives (Elliott 2000). In today's Canadian economy the forest industry provides for eighty billion dollars worth of revenue, is an important contributor to the gross domestic product and provides direct and indirect jobs for 864,000 people (Natural Resources Canada 2006). The forest industry is likewise important to the economy of Ontario, providing billion of dollars in exports and wages, and employing about 84 thousand people directly (see table 1) (Natural Resources Canada 2006).

Since the expanse of forests seemed immeasurable, Canada has historically exploited its forests without much concern for the sustainability of the resource (Drushka 2003). However, in the past few decades a change in forestry has been occurring. Since the 1980s, with the growth of environmental awareness and concern, forest management has been slowly shifting (Elliott 2000). Society now demands that more than the economic value of forests be considered. As a result, forest management practices and policy in Canada are in a transition from a regime that placed a high value on timber alone to one that considers all values associated with the forest (Beckley et al. 1999). The emergence of sustainable forest management (SFM) involves forest practices

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that are environmentally and silviculturally sound and that meet the demands of society and local communities (Kimmins 1992). The public expectations of forestry have changed in recent decades (Ross 1995). The public now wants forestry to take into consideration issues such as aesthetics, spiritual values, recreation, and cultural values. Sustainable and integrated approaches to forest management are seen as a key to preserving our forest resources indefinitely.

Table 1 – Ontario Forestry Statistics (2005)	
Ownership	
Provincial	91%
Federal	1%
Private	8%
Forest type	
Softwood	58%
Hardwood	16%
Mixedwood	26%
Value of exports	$8.4 billion
Revenue from goods manufactured	$18.6 billion
Direct jobs	84 500
Wages and salaries	$3.1 billion
Forest area certified	21.9 million hectares

(Natural Resources Canada 2006)

Increased public concern, and demands for non-industrial forest uses led to a movement towards a management framework that considered the forest's multiple uses and functions (Elliott 2000). From the maximum sustained yield (MSY) paradigm, forestry continued to evolve into an integrated management approach. The basic premise behind the concept of integrated resource management is that environmental systems, such as forests, must be managed as complete and interactive systems (Margerum 1997). Many different components must be taken into account. Sustainable forest management, the

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newest paradigm in forest management, continues with this trend in environmental management.

According to Higman *et al.* (1999) there are four common principles to most SFM initiatives (see figure 1). These include environmental protection, sustained production of forest products, well-being of people and a legal and policy framework. Clearly these four principles illustrate the use of economic, environmental and social components of sustainability.

Figure 1 – Principles of Sustainable Forest Management
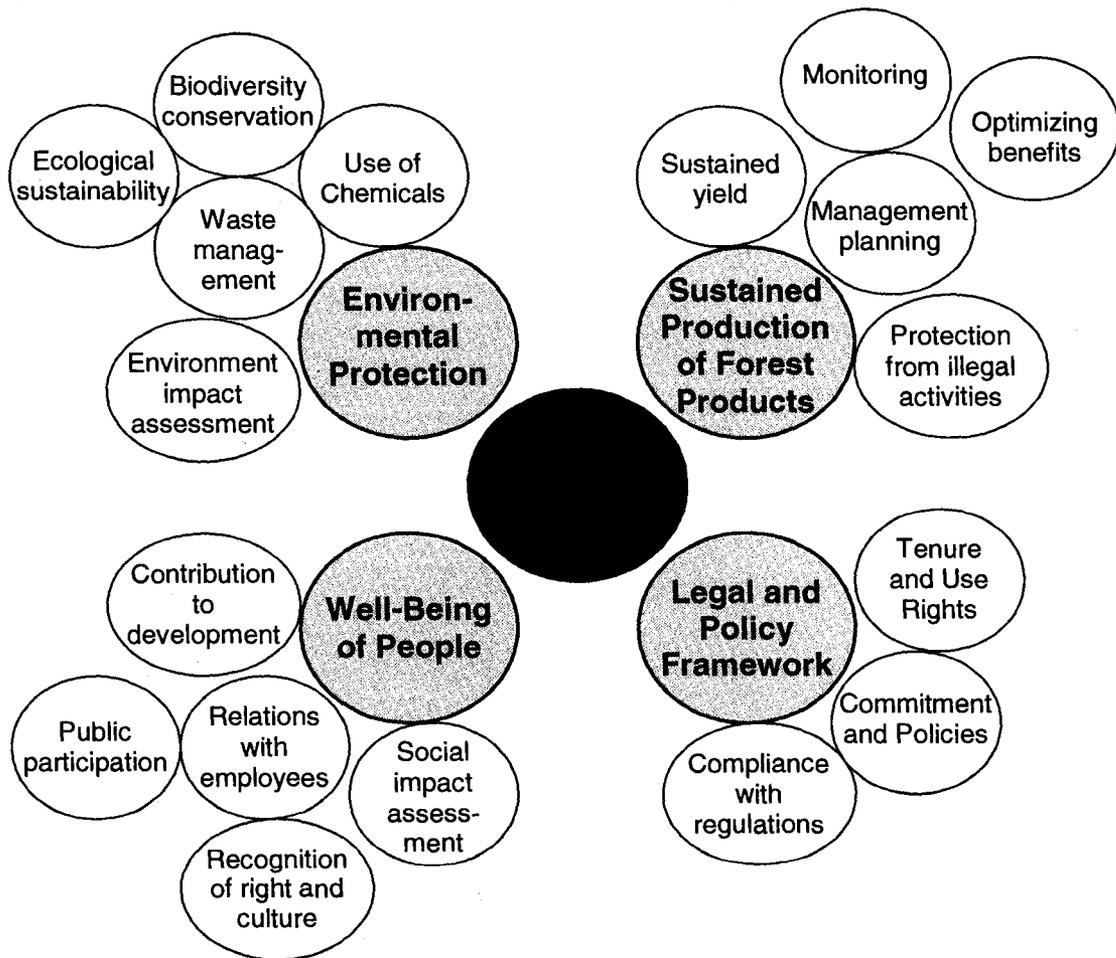
(Higman *et al.* 1999)

Forest certification was developed in the early 1990s as a tool to provide customers with a "guarantee" that forest products came from sustainably managed forests. Forest certification is a voluntary, market-based tool whereby forest management is evaluated against a set of standards and rules that consider environmental, economic and social sustainability (Bass and Simula 1999, Molnar 2003). Following an audit by an independent certifier, a logo is placed on certified forest products thereby informing customers that the product was produced in an environmentally and socially responsible manner.

While certification in many regards is still in its infancy, having only been implemented for a little over a decade, it has been hailed as a success, and as one of the most important recent advances in forestry (Bass *et al.* 2001). Within Canada, forest certification has made strong progress and continues to gain acceptance. As of December 2006, over 120 million hectares of land had been certified under one of the three different certification schemes used in Canada (Canadian Sustainable Forestry Certification Coalition 2006).

Worldwide, there are between six and twenty credible certification schemes, reflecting the diversity of forest types and ecosystems (FERN 2004). Different organizations and researchers rate credibility of certification schemes differently. For example the environmental NGO, Forests and the European Union Resource Network (FERN) (2004) in its comparison of certification schemes listed eight major certification programs that it deems credible. The key attributes of these schemes are discussed in chapter two.

The Forest Stewardship Council certification scheme is an international non-governmental organization whose goal is to set standards and accredit other organizations in order to promote responsible management of the world's forests. It is the focus of this research project. The standard covers a diverse variety of issues, including indigenous peoples' rights, employee rights, chemical use, genetically modified organisms, areas for conservation, and rules for high conservation value forests, many of which are issues not covered by other certification systems. Many consider the FSC to be the most independent, rigorous and credible certification system (e.g. Taylor 2005, FERN 2004, Meidinger 2003, Meridian Institute 2001, Gale and Bruda 1997)

The FSC principles and criteria apply to all forests worldwide, despite bio-geographical location or size (FSC 2004). There are ten universal principles (table 2) each containing between three and ten sub-criteria (see appendix A). In total, there are the ten principles and fifty-six criteria and indicators, which a forest must meet in order to become certified (FSC 2004). In order to be more applicable to local conditions, the FSC also has regional standards. In Canada there are four regional standards: the Acadian, the Boreal, British Columbia and, finally, the Great Lakes–St. Lawrence regional standards which are still under development (FSC 2004).

Table 2 – Forest Stewardship Council Principles	
#1	Compliance with laws and FSC principles
#2	Tenure and use rights and responsibilities
#3	Indigenous people's rights
#4	Community relations and worker's rights
#5	Benefits from the forest
#6	Environmental impacts
#7	Management plan
#8	Monitoring and assessment
#9	Maintenance of high conservation value forests
#10	Plantations

(FSC 2004)

1.2 Statement of Research

The emergence of sustainable forest management includes an increased focus on the social dimensions of forest management. Forest management practices are increasingly expected to meet a broader matrix of social goals (Wang 2004). Previously, the forest had been viewed only for its economic potential. However, since the development of sustainable forest management in the 1990s, forests have also been considered for their recreational opportunities, the potential impact on communities and First Nations groups, as a provisional area for non-timber products such as medicines, maple syrup and many other products, as providing employment, and also as sites of cultural and spiritual importance.

The development of certification programs was promoted as a tool to address the social issues that many governments and industry had failed to manage (Abusow 2004, Shindler *et al.* 2003). The FSC claims that its certification protocols cover all aspects of sustainability, including social concerns. Within its ten principles, five directly incorporate social issues: principles two, three, four, five and eight (see table 1). Issues such as tenure and

use rights of the forest, worker's rights, community relations, First Nation's rights, monitoring of social impact and the distribution of benefits from the forest are directly addressed. FSC guidelines also address the participation and consultation of stakeholders and interest groups in the certification process.

Certification has the potential to impact and improve forest management practices in many areas. However, less attention has been devoted to the study of certification's potential impact on the social dimensions of forest management. Social issues are often left to the wayside, ignored or not fully examined when research is done on forest management or forest certification (Bowling 2000, Naka *et al.* 2000)

Since social issues and the concept of social sustainability have not received proper exposure in forest certification literature, it is unknown if these are being properly addressed in practice.

1.3 Purpose and Objectives

The purpose of this study is to examine how, and to what extent, social issues are addressed in three Ontario FSC certified forests. Three case studies are used to examine and compare how different forest management units deal with the social principles in the certification process.

The social issues considered for this research were those that were built into the principles of the FSC certification standard, and include:

1) **Consultation and public participation processes**
   - Includes the involvement of stakeholder groups in forest management decisions

2) Recognition of Indigenous rights and culture

- Considers the legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources.

3) Employee rights

- Rights that include the health and safety, economic and social well-being of employees in the forest industry

4) Community rights and well-being

- Relates to the long-term social and economic well-being of local communities

Since social issues within forestry and forest certification literature are often overlooked, it is difficult to understand how these impact forest management practices. Therefore, the primary objectives of this research are four-fold:

1. Examine how, and to what extent, social issues are addressed in both the academic literature and within the case studies;

2. Identify opinions and attitudes regarding certification in general and social issues within certification;

3. Examine the details surrounding several social issues, including: Indigenous rights, community rights and well-being, employee rights, and public participation;

4. Understand and describe the impacts of social issues in certification on forest management practices in Ontario.

1.4 Research Design

This research on social issues of FSC certification in Ontario used a comparative case study approach in order to accomplish the objectives outlined above. The case studies used represent some of the earliest certified forests in Ontario and all hold cooperative sustainable forest licenses (SFL) obtained by

the Ontario Ministry of Natural Resources under the 1994 Crown Forest Sustainability Act. These cases include: Westwind Forest Stewardship Inc. located in the Parry Sound area; Nipissing Forest Resource Management Inc. centered around the North Bay area; and the Algoma case study located in and around Sault-Ste Marie (see figure 2).

Figure 2 – Case Study Locations
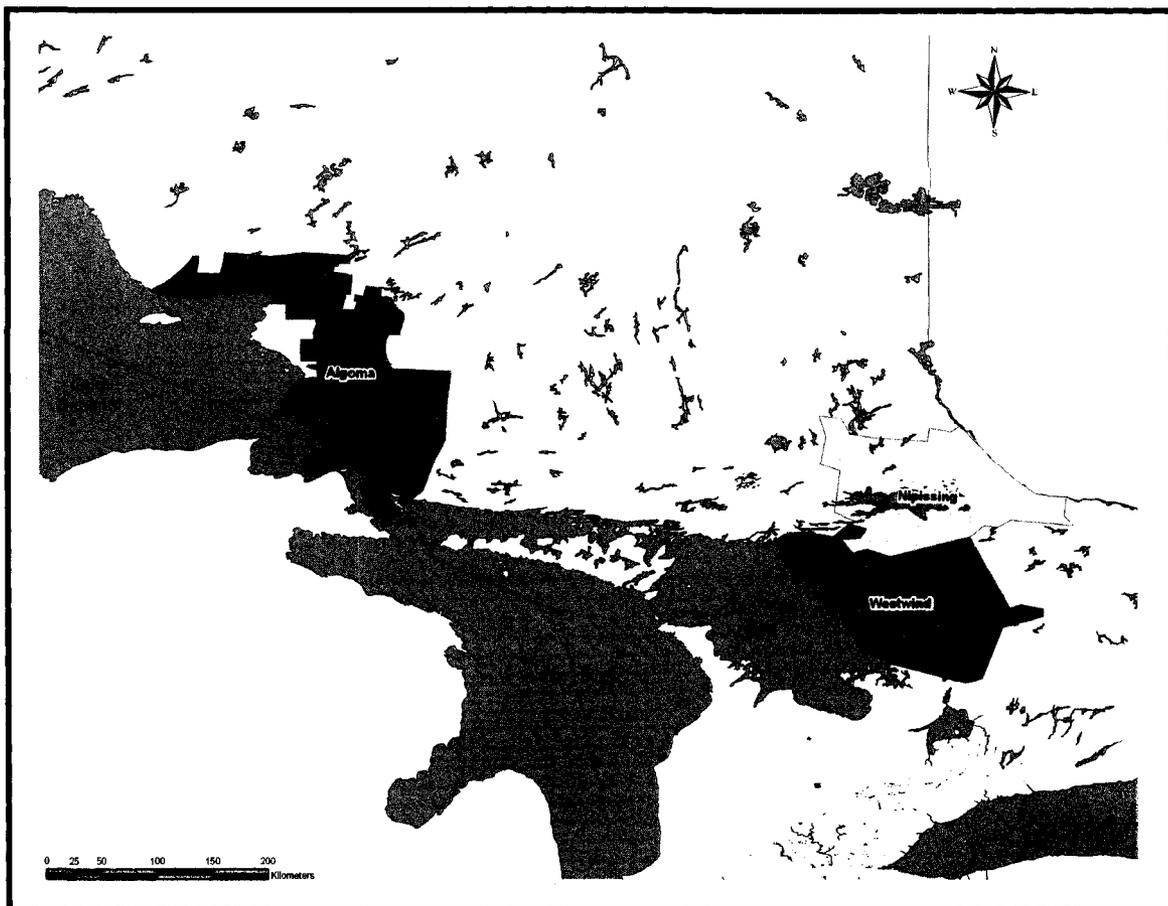
The case study approach was selected as a practical framework for examining the research questions. It allowed for a comparative study that examined differences in attitude, opinion and application of social issues in certification. The case study approach was a good fit because the research

questions investigated a contemporary phenomenon within a real-life context (Yin 2003). Multiple methods and sources of information were used in order to increase the reliability of the results through a triangulation approach. A literature review helped to identify how and to what extent social issues are addressed in forestry and forest certification literature. Semi-structured interviews and a short questionnaire examined the attitudes and opinions of social issues in certification, as well as the details and potential impacts surrounding specific social issues such as public participation processes, First Nations rights and culture, employee rights and community rights and well-being. A document review of certification assessment reports was also undertaken to identify specific on-the-ground changes that each case study had to make prior to certification being awarded.

1.5 Potential Significance of Research

Many studies have focused on certification frameworks and concepts (Nussbaum *et al.* 2005, FERN 2004, FERN 2001, Elliott 2000). However, few studies have focused on social issues. Many acknowledge that little research is done on social issues in forest certification (Nash 2002, Naka *et al.* 2000, Sheppard *et al.* 2004), but few efforts are made to address this gap in the literature.

This research will attempt to identify how social issues are dealt with in practice and what impacts they are having on FSC certified forest management units in Ontario. This is significant since a limited amount of research has been conducted on social issues in certification. These results will provide perspective

on how the social aspects of FSC certification are dealt with in a developed country. This research also will be forwarded to FSC and could help to strengthen or modify the standard as it relates to social issues. Certification bodies and the forestry industry find it difficult to fully incorporate and integrate social issues into certification decisions and management (Poschen 2001, Sheppard 2003). Therefore a clearer understanding of how social issues are dealt with in forest management units will elucidate recommendations to improve this situation. Finally, with certification growing at an accelerated rate in Canada, it is important to understand if social issues are being properly dealt with and if certification standards are challenging enough to implement change.

1.6 Thesis Organization

This thesis is organized into eight chapters. The first chapter has provided an introduction to the research topic and objectives. Chapter two provides a review of forest certification literature and key concepts are explained. Within this review of literature, the importance of integrated resource management and sustainable forest management, as well as the framework, historical development, process, benefits and limitations of certification are discussed. As well an in-depth description of what social issues are, why they are significant and how the social issues dealt with by FSC certification will be discussed.

In chapter three, the research methods used are outlined. In addition, the case studies are briefly described. Ethical considerations, the protocols followed during the research, rationales for the methods chosen and a description of methods used to analyze the data are also described.

In chapter four to six, the results from the Nipissing, Algoma and Westwind case studies are summarized. These chapters are structured into eight key themes extracted from the questionnaire, interview and document review results.

Chapter seven provides discussion and synthesis of important themes, including the impact of certification on the four key social issues. This chapter also outlines potential factors that may hinder the impact of certification on social change.

The final chapter reviews conclusions, suggestions for further research and the implications that this research may have for forest management and forest certification within Ontario.

2. LITERATURE REVIEW

Thinking about forest management has evolved considerably in the past two decades. A key development of the new, sustainable forest management, paradigm includes the concept of forest certification. Forest certification schemes are a new and potentially powerful tool in forestry policy that helps to translate the goals of SFM into measurable elements, such as principles, criteria, indicators and norms (Vallejo and Hauselmann 2000).

Sustainable forest management, and likewise forest certification, both incorporate multiple dimensions of sustainability into forest management practices, including principles of economic, environmental and social sustainability. The concept of social sustainability and social issues within certification are increasing in importance (Robson *et al.* 2000, Berry and Vogt 2000) and these topics are the focus of this thesis.

The review of literature examines the concepts and development of integrated resource management (IRM) and sustainable forest management. Included in this review is an analysis of the development, definitions and framework of a certification scheme, the process of certification and its benefits and limitations. Finally, the social issues within certification will be examined with special attention to the specific social issues covered by the FSC standard.

2.1 Integrated Resource Management and Sustainable Forest Management

IRM and SFM have developed in the past twenty years as a reaction to the previous forest management paradigm that focused exclusively on the economic values of forests. By the late 1970s, the environmental and economic

shortcomings of the sustained yield policies were becoming apparent (Drushka 2003). In addition, increasing public concern about the environment and a shift in society's values in the 1980s led to challenges to the dominant paradigm of the time (Elliott 2000). In Canada, the early 1990s were plagued by a wood supply crisis, increasing demand for recreation and tourism in forest regions, and conflict over old growth forest including the barricades and protests experienced in Clayoquot Sound, B.C and Temagami, Ontario (Lawson *et al.* 2001). In response to these issues, attempts were made to move towards a more environmentally sensitive form of forestry, and one that considered the multiple use of the forest. In 1992, at the United Nations Conference on the Environment and Development (UNCED), many of the world's governments came to a consensus on the goal of SFM (Haener and Luckert 1998). Since the conference, there has been an increased emphasis and political pressure to adopt principles of sustainable forest management. Forest certification is framed within the concepts of integrated resource management and sustainable forest management, and adopts attributes of both these management approaches (Figure 3).

Integrated resource management can be broadly defined as a comprehensive planning and management approach (Born and Sonzogni 1995). There are many conceptual frameworks for IRM, however, the most prominent focus on the following integral elements: comprehensive/inclusive, interconnective, strategic and goal-oriented (Margerum 1997, Margerum and Born 1995).

Figure 3 – Nesting of Forest Certification within Other Management Approaches
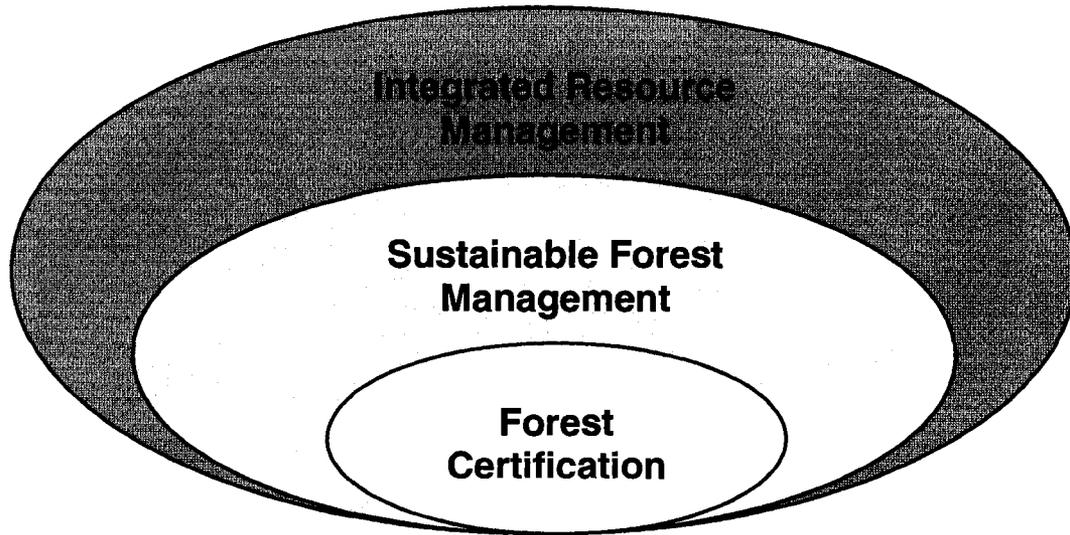
Comprehensive, the first major element, involves including the broadest possible range of physical, social, economic, chemical and human parts of a system, all uses and objectives, and all present and potential stakeholders (Margerum 1997). The resulting outcome is a greater degree of inclusivity.

Integrated resource management is also about the interconnections, interrelationships and linkages "among physical, chemical and biological processes and components; among multiple, crosscutting and often conflicting resource uses; [and] among the many entities that collectively comprise the community of interest" (Born and Sonzogni 1995, p. 170). Recognizing and addressing interconnective nature of environmental issues helps move things forward towards a more integrative approach.

The two previous elements discuss being holistic and broad-scaled. But the third element, strategic, implies that IRM should also be reductive. In that, the

number of variable, factors and interconnections should be scaled down to only what is necessary (Margerum 1997). This dimension of IRM can be compared to a filtering process. A strategic and reduced approach aims to make management more realistic, anticipatory and adaptive (Born and Sonzogni 1995).

The final element of an IRM management approach is the need to identify common goals among stakeholders (Margerum 1997). Consensus on the objectives leads to better cooperation among stakeholders. Oftentimes, the goal of integrated resource management is sustainability.

These four elements describe the essential components embodied in an integrated approach. The notion behind IRM is that there are no short-term or single perspective solutions to complex management or problems of forests or other natural resources. Current resource use and management problems are the result of interactions between people and their environment; IRM management approaches are promoted as the management of change through "continuing integration of community action and statutory, policy, and institutional adjustments" (Bellamy et al. 1999: 342). SFM and IRM have similar goals of sustainability of forest systems. Both concepts strive to find a balance between resource use and preservation, and economic, environmental and social factors.

While the general concept of SFM emphasizes the integration of the biological, economic, and social environments, a consensus on a definition has not been established. There are many definitions of sustainable forest management in the literature (see table 3). As Elliott (2000) explains, sustainable forestry should be ecologically sound, economically viable and socially desirable.

Sustainability in forestry is also about balance and integration. The three dimensions of SFM need equal attention and must also be considered together in order for the resource to be truly sustained.

Table 3 – Definitions of Sustainable Forest Management
Sustainable forest management is "a set of adaptive social processes that recognizes and accommodates diverse and dynamic perspectives of what a forest should be" (Sample 1993: 250)
Sustainable forestry encompasses "a host of management regimes designed to maintain and enhance the long-term health and integrity of forest ecosystems and forest-dependent communities, while providing ecological, social and cultural opportunities for the benefit of present and future generations". (Wilson and Wang (1999) from Stennes *et al.* 2005: 2)
The Canadian Forest Service states that SFM is widely accepted to be: "Management that maintains and enhances the long-term health of forest ecosystems for the benefit of all living things while providing environmental, economic, social and cultural opportunities for present and future generations" (Natural Resources Canada 2006: 77)
The United Nations Forum of Forests (UNFF) defines SFM as: "The stewardship and use of forests and forest land in a way, and at a rate, that maintains the biodiversity, productivity, regeneration capacity, vitality and their potential to fulfill, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems". (Charron 2005: 1)

Sustainable forest management refers to more than the integration of different values in the management of the resource. Rather, SFM also concerns involving multiple actors and stakeholder groups. SFM principles affirm that a diversity of interest groups should be allowed to participate on a more equal footing (Côté and Bouthiller 1999). This has altered the public participation and

consultation processes associated with forest management. An influx of stakeholders interested in being involved in forest management has shifted SFM and public participation in Canada "from an industrial consultative process to a community-driven management plan development process" (Parsons and Prest 2003: 779).

In addition to economic dynamics, SFM also influences other concerns in forest management, such as social and environmental issues. In fact, it is because of the introduction of SFM that these types of issues are more fully considered. SFM has the potential to lessen poverty, reduce deforestation and the loss of biological diversity, decrease forest degradation and, therefore, also improve soil quality and drinking water supplies (Thang 2003). Elliott (2000: 43) describes SFM as "one of the most important objectives of a future global forest regime". By maintaining the productive capacity and ecological integrity of forests the impacts of SFM can be far reaching and can improve the lives of those living near or involved in the management of the forest. Compared with the previous timber management paradigm, SFM can be characterized as being: trans-disciplinary, more socially accountable and reflexive, involving a wider set of stakeholder, engaging in a diversified mode of activity and being less hierarchical (Wang 2004).

However, SFM is a moving target; it is permanently evolving to adapt to different values and it is a process of continual improvement (Yamasaki *et al.* 2002). Sustainability in forestry is about integration between economic, environment and social issues. With different uses of the forest, multiple

stakeholders and opinions, SFM becomes complex, and often controversial (FERN 2004). While in theory applying SFM seems simple enough, evidence shows that the application of SFM has been difficult (e.g. Adamowicz and Burton 2003, Charron 2005).

Similarly, for IRM, translation from theoretical approach to practical application has proven difficult (Bellamy *et al.* 1999, Margerum and Born 1995). As Bellamy *et al.* (1999) explains, IRM is a continuously changing concept which lacks clearly defined guiding principles capable of applied application. It is arguable to what extent integration and sustainability has been translated into practice; the experiences are certainly variable. However, forest certification can play a complementary role together with Canadian forestry regulation to help meet the ultimate goal of IRM and SFM (Bass and Simula 1999, Rametsteiner 2002).

2.1.1. Forest Management Legislation and Planning in Ontario

Canada has been innovative in its treatment of SFM in forest management legislation and policy. Following the 1992 UNCED conference, the first Canada Forest Accord and the new National Forest Strategy were released advocating SFM (Charron 2005). In Ontario, sustainable forest management has been actively pursued since December 1994 when the Ontario Crown Forest Sustainability Act replaced the Ontario Crown Timber Act as the primary forestry regulation. According to this new Act, forest management plans could no longer focus solely on timber extraction; they must also include conservation, social and

economic objectives, forest values and silvicultural objectives (Levy and Lompart 1996).

Canadian forest management falls largely under the jurisdiction of provincial governments. In Ontario, forestry rights on Crown lands are provided through forest licenses. The most common form of license, or tenure, is an area-based agreement called a sustainable forest license (SFL) (Nash 2002). SFL's give the license holder the right to cut wood in a specific area, but also holds them accountable for certain management duties, including planning, inventories, monitoring compliance and all reforestation activities.

Forest management on SFLs in Ontario is governed by the Crown Forest Sustainability Act (CFSA) and the Environmental Assessment Act (MNR 2007). The role of each of these is described in table 4.

Table 4 – Key Forestry Acts in Ontario	
Environmental Assessment Act (1994)	"The Forest Management Class EA approval covers a wide range of recurring forest management activities. Those activities include building forest access roads, harvesting trees, conducting forest maintenance and renewing the forest, including tree planting. It also provides guidance on the preparation, review, and approval of forest management plans"
Crown Forest Sustainability Act (1994)	"The CFSA requires that each forest management plan have regard for plant life, animal life, water, soil, air and social and economic values, including recreational values. To achieve this, each plan contains a broad management strategy which balances objectives related to forest diversity, socio-economics, forest cover and silviculture. The CFSA provides for the regulation of forest planning, public involvement, information management, operations, licensing, trust funds for reforestation and mills"

(MNR 2007)

Another important component of forest management in Ontario is the forest management plan. Forest management plans are prepared every ten years in accordance with the forest management planning manual and provide the "authority to carry out forest management activities including road access, timber harvest, and forest renewal, tending and protection treatments" (Clergue Forest Management Inc. 2007). The planning process takes between 24 and 27 months and includes formal opportunities for public participation available at key stages in the development of the plan (MNR 2007). The overall purpose of the management plan, and its associated legislations, are to ensure the long-term health of Ontario's forests and the forest industry (MNR 2007).

The theoretical application of SFM remains at the heart of forest policies and legislation in Canada, but its practical application remains elusive (Charron 2005). Despite their limitations, SFM has been an essential development in forestry that continues to impact the way the resource is managed and it is also an important contributor to the goals and ideals of forest certification.

2.2 Forest Certification

2.2.1 Development of Forest Certification

Many factors and forces influenced the development of forest certification. The evolution of the forestry paradigm towards SFM was a necessary development in the conception of forest certification. The progress of certification was also triggered by the forestry disputes of the 1980s and the Rio Earth Summit of 1992. Many disappointments led forestry-related groups to back away

from government initiated approaches, and start a market-based instrument to measure good forest management. In 1993, many forces converged and the first certification scheme was initiated.

The 1980s were a decade when the world realized the vast devastation that was occurring in tropical rainforests. Boycotts and campaigns against tropical lumber initiated by environmental non-governmental organizations (NGOs) were meant to curb the alarming rates of deforestation in tropical rainforests. However, these initiatives were met with mixed success. The consumer bans and boycotts threatened to destroy the international trade in tropical timber, and were quickly shut down by retailers and national governments of both tropical timber producing and consuming nations (Gale and Bruda 1997). NGOs then turned their attention towards other market-based instruments that would guarantee sustainably produced lumber; thus, the ideas behind market-based certification were conceived.

In 1987, the World Commission on Environment and Development influenced forest certification by bringing the concept of sustainable development to the forefront of forest management discussions (WCEP 1987). The Brundtland report focused on the "interdependence of economic, environmental and social sustainability and set the stage for a global debate on how best to integrate those three elements in resource management" (Brown and Greer 2001: 1). Forest certification to this day retains core ideas from the Brundtland report, as multiple dimensions of sustainability are incorporated into certification standards.

While the 1980s laid the foundation for forest certification, the 1992 United Nations Conference on the Environment, held in Rio de Janeiro, was a watershed event. Forest issues were at the top of the agenda for the conference and it also marked the first attempt to reach a global consensus on forest management practices (Fanzeres and Vogt 2000).

During the conference, the much-anticipated agreement on sustainable forest management was not reached. The result from the conference was the 'Forest Principles' – a "non-legally binding authoritative statement on principles for a global consensus on the management, conservation and sustainable development of all types of forests" (Higman *et al.* 1999: 263). It was not the agreement that many had been expecting, but a political document affirming general forest values.

Despite the disappointment over the lack of a forest management agreement, the UNCED conference was a catalyst for many events in the development of forest certification. Since the conference, an increased emphasis on promoting SFM has emerged (Haener and Luckert 1998). The Forest Principles also instituted and supported the use of criteria and indictors for SFM (Elliott 2000). Following the conference, forestry issues remained high on the international agenda.

However, NGO's were again disillusioned with government, and intergovernmental processes and decided that influencing the private sector would be a more effective way to achieve sustainable forestry (Bernstein and

Cashore 2001). By the early 1990s, these multiple forces converged to create an environment suitable for the creation of a market-based certification scheme.

An exploratory meeting about the feasibility of certification was held in California in 1990. Two years later, in 1992, the initial meeting for the Forest Stewardship Council took place in Washington D.C. (Maser and Smith 2001). For the FSC founding assembly, held in Toronto in 1993, over one hundred and thirty forestry representatives from around the world came together (Nussbaum and Simula 2005). The first forest certification scheme had been born.

Starting in 1994, forest certification programs began to proliferate. A number of national, industry-led schemes began to emerge, mostly in opposition to the international and NGO-based FSC (Nussbaum and Simula 2005). However, up until the end of the 1990s the FSC held the monopoly in forest certification, and was deeply criticized because of it. In 1999, the Pan-European Forest Council (PEFC) (later to be renamed Programme for the Endorsement of Forest Certification) was initiated. The PEFC is an umbrella scheme that represents thirty-two national forest certification schemes worldwide and currently has the most lands certified globally (PEFC 2006).

Presently, there are as many as twenty credible certification schemes, depending on how certification is defined. However, schemes tend to converge around two alliances; one is centered on the NGO-oriented Forest Stewardship Council and the other centers on the industry-oriented PEFC (Meidinger et al. 2003). Worldwide there are four main schemes (FERN 2001) (Table 5). For more

information about these schemes see FERN (2001, 2004) or Forest Certification

Resource Center (2007).

Table 5 – Forest Certification Scheme Basics				
Scheme	Canadian Standards Association (CSA)	Forest Stewardship Council (FSC)	Sustainable Forestry Initiative (SFI)	Programme for the Endorsement of Forest Certification (PEFC)
Scope	Focus on all forest types in Canada.	Focus on all forest types throughout the world.	Primarily focused on large-scale forests in the United States and Canada.	PEFC is a mutual recognition body that endorses national systems throughout the world.
Year Initiated	1996	1993	1994	1999
System- or Performance-based Standard	System standard, with some performance requirements	Performance standard	System standard	System or Performance depending on the scheme
Total Land Area Certified	73 million hectares in Canada.	95 million hectares globally, 32 million hectares in North America.	53 million hectares in Canada and the U.S.	133 million hectares globally.

(FERN 2004, Forest Certification Resource Center 2007)

2.2.2 Definitions and Framework

Forest certification is a market-driven tool that provides evidence that a forest is sustainably managed. Different definitions and descriptions abound. Naka *et al.* (2000: 475) describe forest certification as:

"An assessment of forest management practices and/or forest management systems in relation to performance indicators of specified social, ecological and/or economic standards".

In contrast, Elliott and Hackman (1996: 9) define it as a:

"Voluntary process, which results in a written certificate being produced by an independent third party attesting to the location and management status of the forest where the forest product originated".

However forest certification may be described, it always has similar characteristics. All certification schemes are composed of the same four elements (Figure 4):

1. **Standards:** A certification standard is the document that sets out the forest management requirements against which certification assessments are to be made. The standard must be met in order for a certification certificate to be awarded. A certification standard contains principles, criteria and indicators and can either be performance-based, or system-based.

   o **Performance-based standards** specify the level of performance or results that must be achieved and focus on forest operations and their impacts
   o **System-based standards** do not specify any minimum level of performance that must be achieved. Instead, they require forest organizations to set down their own performance targets and then use the management system to ensure that they reach them. These standards focus on forest policies, management systems and processes.

2. **Certification:** This is the process of establishing whether or not the standard has been met, usually carried out by an independent third-party.

3. **Accreditation:** This is the mechanism for ensuring that the organizations, which undertake the certification process on forest management units, are competent and produce credible and consistent results. Accreditation is sometimes described as "certifying the certifiers".

(Nussbaum et al. 2005, Nussbaum and Simula 2005, FERN 2004)

These elements cover the certification of forest management. If the forest organization wishes to make a product claim and certify the timber product, then a system of tracing and labeling is necessary. This is the last element of a certification scheme.

4. **Tracing and Labeling**: To be able to guarantee to the consumer that a particular product comes from a well managed forest, the supply chain, or chain-of-custody, needs to be certified as well. This involves certifying the log transport, processing, and shipping of the forest product. If all these steps meet the standards then the forest owner obtains the right to label the products with the label and/or logo of the certification scheme.

(Nussbaum *et al.* 2005, FERN 2004)

Figure 4 – Components of a Certification Scheme
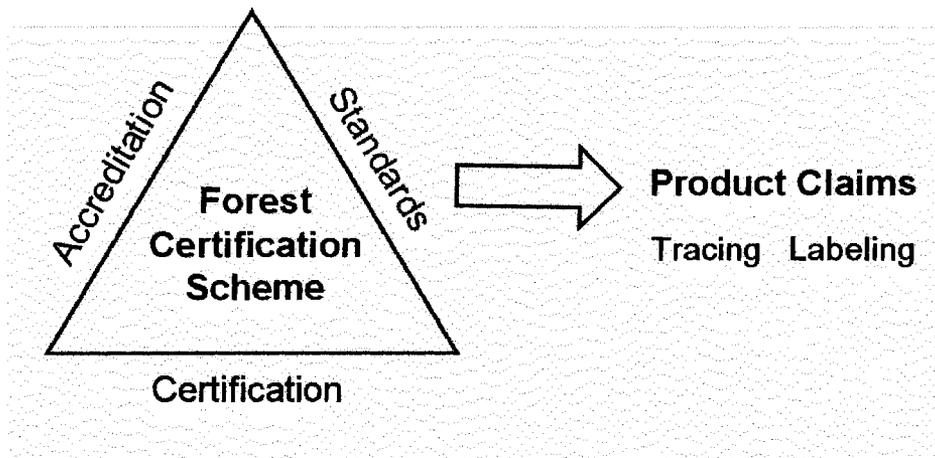
Source: Nussbaum *et al.* 2005

2.2.3 Certification Process

Certification is the process of assessing whether or not the forest management unit complies with the standards of the scheme in question. It is both a lengthy and costly process, and both of these factors are often deterrents to certification. A realistic time frame for certification to occur is somewhere

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between twelve and eighteen months (Higman *et al.* 1999). There are multiple steps that must be followed in order for a certification certificate to be awarded to the forest unit. These include:

- Application and proposal
- Pre-assessment
- Stakeholder consultation
- Main assessment
- Peer review
- Certification
- Surveillance
  (Nussbaum and Simula 2005, Higman *et al.* 1999)

Since certification is voluntary, it must be the forest owner, or manager, that contacts the forest certification organization to begin the process. A formal application and proposal commences the process (Nussbaum *et al.* 2005).

The pre-assessment phase, also known as scoping, involves preliminary site visits to make sure that certification is feasible in the area, to explain in detail the requirements and to identify any major gaps in the current forest management (Nussbaum *et al.* 2005).

The level of stakeholder consultation required depends on the certification scheme. In an assessment of credibility of various schemes, the environmental NGO FERN (2004) found FSC to have the most rigorous stakeholder consultation processes. Public participation is a key way to incorporate local values, and beliefs into the certification process, and is also used to identify deficiencies in the management of the resource.

The main assessment involves collecting objective evidence in order to demonstrate whether or not the standards are being met (Nussbaum *et al.* 2005).

Evidence derives from document reviews, field visits and the consultation of stakeholders. When certain standards are not met, a corrective action request (CAR) is issued and these must be addressed in order to bring the forest management into full compliance with the standard (Nussbaum *et al.* 2005). Minor CARs, also called pre-conditions, do not prevent certification but they must be addressed within a defined period of time (Higman *et al.* 1999). The main assessment is written into a report, which is sent to peer reviewers.

If the assessment report passes the peer reviewers, and all CARs have been addressed, then a certificate is awarded to the forest organization. Certificates are normally valid for five years, and are subject to reassessment at the end of that time period (Higman *et al.* 1999). Some or all of the final report is made publicly available as part of the transparency guidelines of the certification body (Nussbaum *et al.* 2005).

Surveillance is also a critical part of the certification process because it allows verification of ongoing compliance. Surveillance visits are usually annual, and include a site visit, verification of management practices and a random selection of activities to be monitored (Higman *et al.* 1999).

2.2.3.1 Corrective Action Requests (CARs)

Corrective Action Requests (CARs) are raised during the main assessment of the certification process. Corrective action requests illustrate areas of forest management practices that do not meet the FSC certification standard. These CARs must be rectified before a forest management unit can be awarded certification.

A CAR will outline environmental, social, management or economic areas that need to be improved upon in order to bring a forestry operation into compliance with the forest certification standard. Examining the conditions allows one to determine whether or not certification is leading to meaningful changes, and what sort of changes certification is leading to in specific forest management units. Furthermore, investigating conditions or CARs provides a means of investigating before / after situations in certified forests (Spilsbury 2005)

Studies of conditions have been undertaken multiple times (Newsom *et al.* 2005, Newsom and Hewitt 2005, Spilsbury 2005, Bass *et al.* 2001, Thornber 1999). The results of the Newsom and Hewitt (2005: 2) study demonstrated that FSC certification does in fact "change the way that certified forestry operations address environmental, social, economic, forest management and systems issues, and does not simply give a rubber stamp of approval to the "good players" and industry leaders".

2.2.4 Benefits and Limitations

2.3.4.1 Benefits

The benefits of forest certification may be divided into two categories: market benefits and non-market benefits. Market benefits include the opportunity for market access, opening of new markets, improved business profile and occasionally a price premium (Rametsteiner and Simula 2001, Upton and Bass 1996). Additionally, since the advent of certification, certain retailers have agreed to stock a certain percentage of certified lumber (Jayasinghe *et al.* 2007).

Also, by being certified, forest companies can appeal to a different market and base of clients. In North America and Europe, a growing number of consumers are interested in 'green' issues; these customers will identify more easily with certified organizations (Upton and Bass 1996). An increased price for certified lumber was cited as one of the main advantages of certification in the early 1990's. However, price premiums have not materialized as expected, with the exception of a few small specialized markets in North America and Europe (Rametsteiner and Simula 2001).

Non-market benefits are more diverse (see table 6). Non-market benefits can be generally divided into three categories: environmental, social and management benefits. Some argue that despite the fact that the emphasis of certification benefits has been on the market aspect, the non-market benefits are actually of greater significance (FSC 2003). This conclusion, echoed by Schlaefer and Elliott (2000), is partially due to the disappointment, or insubstantial, market benefits that have been felt within the forest industry. However, non-market benefits, are diverse and numerous and have often been felt more strongly. (Schlaefer and Elliott 2000).

Table 6 – Non-Market Benefits of Forest Certification		
Environmental Benefits	**Social Benefits**	**Management Benefits**
Maintenance and enhancement of high conversation value forest	Improved rights and working conditions of forest workers	Enhanced control of resources
Maintenance and enhancement of biodiversity	Enhanced community participation and stakeholder participation	Reduced regulatory control
Improved control of logging operations leading to a reduction in forest degradation	Improved transparency of forest management practices	Improved management systems, including internal mechanisms of planning, monitoring, evaluation and reporting
Promotion of non-timber forest products	Increased trust among stakeholders	Improved operational efficiency

Source: Meidinger 2003, Bass *et al.* 2001, Rametsteiner and Simula 2001, Elliott 2000, Vallejo and Hauselmann 2000

2.2.4.2 Limitations

Forest certification's weaknesses include cost, increased administrative needs, uncertainty about impacts of certification on forest management practices, and lack of equity.

There can be significant costs associated with forest certification, including the costs of improving forest management so that it meets the standards set out by the certification scheme, the costs of the forest audit, and the costs of chain-of-custody certification (Elliott 1996). In addition, there is also the cost of increased administrative resources that are inevitably due to certification (Klingberg 2003). Because certification is relatively new, there is very little evidence of the impacts that certification has had on the environment, on market access of companies, or on social matters (Klingberg 2003). Without proof of

tangible benefits, many are uneasy about adopting certification especially with added costs.

The issue of equity, or lack thereof, permeates certification debates. Certification, although initially developed to improve forest management practices in developing countries, has been more widely adopted in more developed countries, where forest management may already be achieving high standards of practice. "The debatable reality is that not all countries or enterprises have an equal opportunity of accessing certification and reaping its potential benefits" because of rigorous standards and the high cost of becoming certified (Thornber 2003: 67).

In a study of Canadian forest product companies, the top three ranked advantages of certification were: securing public confidence, responding to pressure from environmental NGOs and securing markets for their products (Wilson *et al.* 2001). Conversely, the top three disadvantages of certification were the increased paperwork, the direct expense of certification, and the insufficient price premium (Wilson *et al.* 2001).

While forest certification has weak aspects and drawbacks, its strengths and benefits can outweigh these. This is perhaps the reason why forest certification continues to grow and gain acceptance, both in terms of the number of certification schemes, as well as the amount of forestland certified worldwide.

2.2.5 Certification in Canada

In January 2002, the Forest Products Association of Canada (FPAC) committed its members to achieving third party certification by the end of 2006 (Abusow 2004). Similarly, the Ontario government announced in April 2004, that all the sustainable forest licenses in the province are required to be certified by an accepted performance-based standard by the end of 2007 (MNR 2004). As of October 2007, over 27.5 million hectares had been certified; however information regarding the number of SFL's certified is currently unavailable (Canadian Sustainable Forestry Certification Coalition 2007).

Canada is a strong supporter of certification and is leading the way globally in terms of area certified with nearly 120 million hectares of land certified; the United States has the second largest amount of land certified with 37.8 million hectares of land certified (Canadian Sustainable Forestry Certification Coalition 2006). Figure 5 shows the strong growth in certified land area that Canada has experienced in the last few years. In the past eight years, the amount of land certified in Canada has gone from only half a million hectares to nearly 125 million hectares, out of a total of nearly 295 million hectares of forests that are available for commercial harvesting (Natural Resources Canada 2006).

Figure 5 – Certification Growth in Canada, 1999-2006 in Million of Hectares
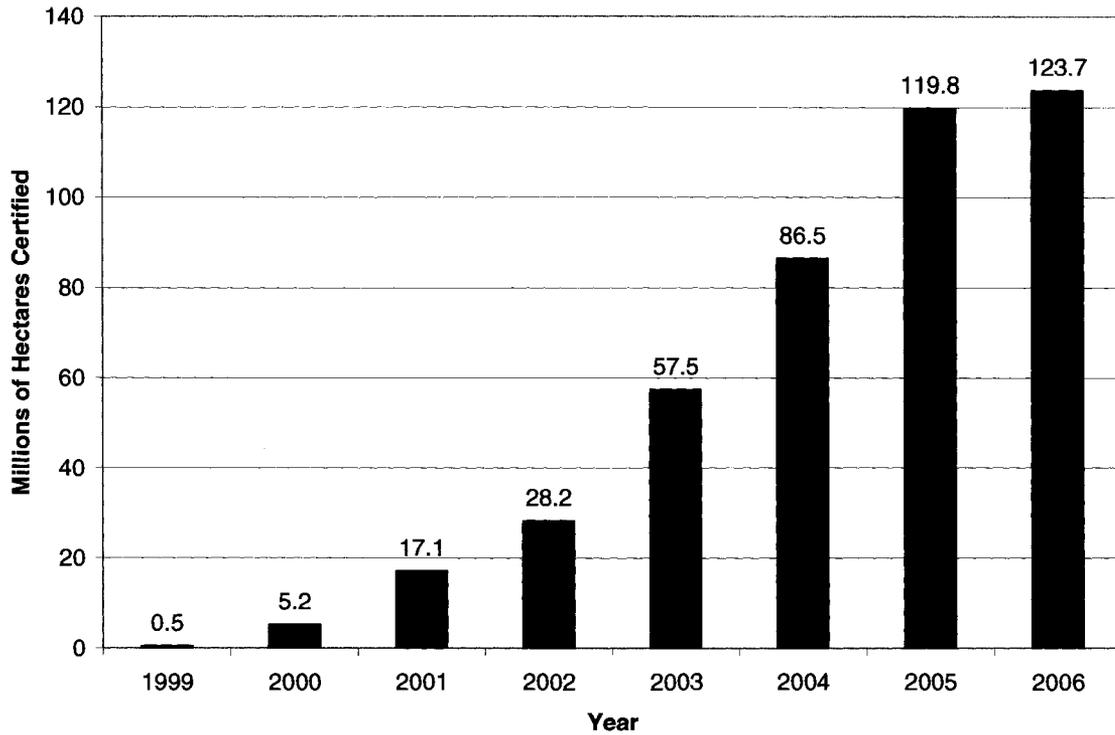
Source: Canadian Sustainable Forestry Certification Coalition 2006

Table 7 shows the breakdown in terms of hectares certified per certification scheme. FSC, the Canadian Standards Association (CSA) and Sustainable Forestry Initiative (SFI) are the three main schemes in the Canadian forest policy arena. CSA, as can be seen from the table below, has found the strongest foothold within Canada; while, SFI and FSC lag behind. The strength of CSA can be attributed to the fact that it was constructed by the Canadian forestry industry for the Canadian forestry industry. The NGO-developed FSC is more rigorous and wider in scope, and has been viewed less favourably by forest product companies (Cashore *et al.* 2004).

Table 7 – Certification Status in Canada (As of December 2006)	
Standard Used	Area Certified (in millions of hectares)
CSA	73.4
FSC	19.6
SFI	31.3
Total Certified	*123.7*

Source: Canadian Sustainable Forestry Certification Coalition 2006

The substantial growth of certified land in Canada can be attributed in part to the strong commitment to certification from the Ontario forest industry and Ontario's provincial government. The numbers will continue to grow, and certification's importance in forest management will strengthen. Certification will undoubtedly have an impact on the treatment of social issues in forestry, and this combined with the volume of forest that will be certified within Ontario in the next few years make this topic very relevant

2.3 Social Issues in Certification

To begin, it is important to define what social issues are, and how they pertain to forestry. Driver *et al.* (1996) define the social component of forestry as all the ways which humans use, affect, are affected by, and even think about natural ecosystems. Social values in forestry can include: spiritual, recreational, aesthetic, educational, and relaxation values. The forest is also valued because it allows for employment, income, subsistence activities, and maintains the economy and well-being of communities and Aboriginal groups. All of these social values derived from the forest translate into issues that forest management must take into consideration and maintain for present and future generations.

Social principles, criteria and indicators are incorporated into certification schemes to address human benefits and needs (Sheppard 2003).

Historically, economic interests have dominated forestry production and forestry management, and the study of social issues was secondary (Berry and Vogt 2000). However, the advent of the environmental movement in the 1970s and the development of SFM helped to change the perception of social issues (Berry and Vogt 2000).

2.3.1 Importance of Social Issues

The most recent forest management paradigm, sustainable forest management, breaks away from the single focus of economics in forestry. Instead, SFM emphasizes three dimensions, or pillars, of sustainability: economic, environmental and social issues. As forestry develops and adjusts itself to the demands of modern day society, social issues become increasingly important. Public forests must meet the demands of the citizens and increasingly people want multiple values to be addressed (Tindall 2002). Certification is a key way in which social issues have been brought into the forestry dialogue. Certification schemes explicitly address selected social issues, although some schemes recognize social issues more than others.

2.3.2 Social Issues and Forest Stewardship Council Certification

Social sustainability is a significant objective for FSC. Their mission statement reads as follows:

"The Forest Stewardship Council shall promote environmentally appropriate, socially beneficial, and economically viable management of the world's forests" (FSC 2003: 4).

FSC (2003: 15) also provides a definition of the term "socially beneficial" as forest management practices that:

- Enhance forest values, products and services;
- Ensure that current and future generations of forest-resident communities, Indigenous peoples, local people, forest owners, forest workers and society at large enjoy the benefits of well-managed forests
- Recognize, respect and address indigenous land tenure and rights, traditional and customary rights, and the local culture of indigenous peoples and local communities
- Contribute to the enhancement of local livelihoods and well-being.

The environmental NGO FERN (2001, 2004) conducted an international assessment of certification schemes and found the Forest Stewardship Council to have the strongest social criteria and indicators. Strong social standards have been incorporated into the FSC approach, and the clearest examples are in principles two, three, four and five (see table 2), which address issues such as long-term rights of land tenure of local communities, land and resource use right of Indigenous groups, social and economic well-being of forest workers and local communities, and multiple benefits such as economic viability, diversification of local economy, and social benefits for local communities (FSC 2004). Descriptions and criteria and indicators of these principles can be found in appendix A.

FSC's focus on social issues is also reflected in its governing system. The general assembly, which governs FSC, is made up of three chambers: the social, environmental and economic. Therefore social interests are put on equal footing

with environmental and economic interests when decisions are made (Newsom and Hewitt). The social chamber has one third of the voting power for all decisions which ensures that no single interest can dominate the process. In Canada, the FSC general assembly has a fourth chamber: an "Indigenous Peoples Chamber" (McDermott and Hoberg 2003).

The FSC itself admits that they "have not been as effective in responding to social interests as they had hoped" (FSC 2003: 6). The FSC's general response to their lackluster performance with regards to social sustainability issues is to state that the "initial expectations of social constituencies may have been unrealistic" (FSC 2003: 6). According to the FSC, many groups expected FSC to solve many social issues in forestry, but it is not a "panacea to all problems" and "does not replace domestic and international level avenues" (FSC 2003: 6). However, FSC is attempting to improve its performance in the social aspects of its standard. In 2003, FSC released the second version of its social strategy in hopes of rejuvenating its social goals and moving along towards their realization. The implementation of the social strategy is guided by the FSC's core social values: access, partnerships, legal rights, equity, cultural identity, subsistence forest use, and traditional forest stewardship (FSC 2003). The strategy also identified four objectives which needed special attention, and of which progress has been monitored. These objectives included compliance, communication, capacity building and market benefits (FSC 2003). The specifics of each objective were expected to be met by the end of 2006, but as of yet, no report has been published detailing the progress of the strategy implementation.

If the social issues within certification are properly implemented it can benefit forest management process and stakeholders. Molnar (2003: 14) explains that certification can create "a legitimate vehicle to promote national dialogue on issues of forest tenure, worker equity, citizen participation in the allocation and management of public resources, community value systems [and] sustainability". Certification also allows communities, citizens and First Nations more opportunities to "gain a seat at the table" in the discussions regarding forest management, and can foster a more participatory dialogue among all stakeholders (Molnar 2003: 14, FSC 2003). It can also lead to greater transparency of forest management practices, contribute to local development and protect areas of high conservation value for spiritual and recreational opportunities (Higman *et al.* 1999). It can help improve working conditions and increase the focus on worker health and safety (FSC 2003). Certification can help to generally improve the lives and situations of many groups, including forest workers, First Nations, communities and citizens.

As stated above, FSC address four main social issues in its principles and components: public participation processes, recognition of indigenous rights and culture, employee rights, and lastly, community rights and well-being. These four social issues addressed by FSC are the focus of this research and each will be elaborated upon below.

2.3.2.1 Consultation and Public Participation Processes

Public participation can be described as:

> "A voluntary process whereby people, individually or through organized groups, can exchange information, express opinions and articulate interests, and have the potential to influence decisions or the outcome of the matter at hand" (Wenner 2000: 6).

Public participation is ideally seen as a key way to incorporate and implement local views and values into the management of the resource (Nash 2002). Forest management and planning regulations in Canada have clauses for public participation. However, certification is yet another step and another way for stakeholders to become involved. By taking an active approach to involve people, certification organizations increase the potential for social benefits, and their chance of support from stakeholders (Higman *et al.* 1999). Public participation can also decrease the distrust that often exists between forest owners and local communities (Côté and Bouthiller 1999). Wilson *et al.* (2001: 312) believe that public participation in forest certification is important because it "has the potential to make all sector stakeholders more serious about resource management decisions and seek a balance among the multiple needs of society, ecology and economics".

In certification, public participation is needed at many steps along the process: during the development of the certification standard, as a requirement during the certification process, as part of the accreditation process and during the annual surveillance visits.

Part of the public participation / consultation requirements of the FSC are that the public should be provided with one-month prior notification of

opportunities to participate in the certification assessment (Palen 2004). Extensive consultation with stakeholders, experts and interested parties is also required (Nussbaum and Simula 2005). Public participation opportunities during certification assessments can include: public meetings, surveys and interviews, and field trips to managed sites (Palen 2004). Public participation in the certification process can also be used to identify deficiencies in the local management processes, and information gathered from public participation can be used to create conditions (CARs) of certification. The details of public participation with FSC certification will be discussed in the results and discussion chapters.

Finally, public participation also allows for more open dialogue about often neglected topics such as tenure rights of Indigenous people and forest dependent communities, benefit sharing between government, local communities and the forest industry, employment conditions and worker health and safety (Molnar 2003).

2.3.2.2 Recognition of Indigenous Rights and Culture

For First Nations in Canada, forests are extremely important. They are an intrinsic part of their culture and spirituality. Forests can also be significant economically as many of their traditional activities are land-based, such as hunting, trapping and fishing. In Canada, between 80 and 85 percent of indigenous communities are located within forests (Parson and Preset 2003). First Nations have been more impacted by forestry activities than any other group in Canada (Collier *et al.* 2002). Most of these impacts have been negative,

and indigenous communities have failed to receive many benefits from the forestry activities, such as employment or involvement in the management and planning of the resource (Collier *et al.* 2002).

While certification cannot rectify many of the issues relating to First Nations and the forestry industry, it can be of assistance. FSC's principle number three concerning Indigenous people's rights requires that companies go beyond the legal requirements of most countries (Collier *et al.* 2002). In addition, FSC certification allows for the recognition of Aboriginal rights and makes Aboriginal participation in forest management a condition of certification. FSC's principle on Indigenous people's rights also requires that Aboriginal values be given special consideration in forest management, denotes that both the legal and the customary rights should be taken into account, protects sites of special significance, protects tenure rights and includes compensation for the use of traditional ecological knowledge in management and planning (FSC 2003).

Certification can potentially increase public participation of Aboriginal groups resulting in increased trust between Indigenous communities, government and the forestry industry, and can possibly lead to additional economic opportunities (Bombay 1996). At the very least, certification is a good tool to strengthen and recognize Aboriginal cultural and tenure rights in forest management.

2.3.2.3 Employee Rights

Forest workers are important stakeholders in forest management and employment is one of the most common local benefits of a forestry operation. As

Higman *et al.* (1999: 54) explains: "sustainable forest management is not possible without workers being capable and willing to work efficiently, avoiding damage to trees, to the environment, to equipment, to other people or themselves". Despite advances in mechanization, forest work is still physically demanding, dangerous, often seasonal and employees are exposed to adverse environmental conditions (Poschen 1997). The basic rights of employees working in the forest industry include: rights of representation and negotiation, health and safety provisions, facilities and services for staff, training and skills development opportunities and opportunities for equity and profit sharing (Higman *et al.* 1999).

Certification helps forest workers by creating sections in the standard which addresses most of the basic rights listed above. Companies must abide by these in order to become certified. In the FSC certification it is principle four which sets out the worker's rights. The principle and its associated criteria and indicators look to "maintain or enhance the long-term social and economic well-being of forest workers" (FSC 2003: 7). FSC principle four contains a section for training opportunities, living conditions, health and safety conditions, right to organize, compensation for damages and resolution of grievances of forest workers (FSC 2003). With these conditions in place, forest workers can be ensured of their rights and are in a good position to contribute towards the sustainable management of the local forest.

2.3.2.4 Community Rights and Well-Being

Community well-being and the sustainability of forestry-based communities are concepts that take into consideration employment, population

stability, quality of employment, wage levels, social cohesion, political attitudes, education levels and local empowerment (Meek 2001, Reed 1999, Beckley and Korber 1995). The FSC (2003) believes that healthy communities are necessary to maintain healthy forests. As a result, certification needs to successfully incorporate community issues into their standards and principles if they are to deem forests sustainable.

Community issues are raised multiple times within FSC's principles and criteria. In principle two, the tenure rights of communities are secured. In FSC principle four, issues of employment and training opportunities for local citizens, social impact assessment, and compensation for local damages are addressed. Finally, principle number five maintains that forest management should lead to economic, social, and environmental benefits for local communities.

When certification incorporates social issues effectively, it can have positive repercussions on local development. Certification, and the impacts of sustainable forest management, can contribute to development by creating an equitable distribution of costs, benefits and incentives between the owners of the resource, the forestry organization and the local communities (Higman *et al.*1999). Contributions to development can also occur through incentives to diversify the local forest enterprise (Higman *et al.* 1999).

Aside from the potential contribution to development, certification can also generate indirect social impacts and benefits for nearby communities. Community stakeholders can gain a seat at the table though public participation, they can become more informed through transparency and consultation and

community livelihoods can be strengthened as the forest companies gain additional market access (Forest Products Association of Canada 2005, Molnar 2003, Poschen 2001).

2.3.3 Gaps in Forest Certification Research

Certainly, certification has made huge progress since it was first conceived. Worldwide, tens of millions of hectares of forest have been certified and thousands of wood and paper products now carry certification logos and labels (Nussbaum and Simula 2005). The result is a potential improvement in forest management, and the recognition of environmental, cultural and social concerns. Many studies have analyzed certification standards, and the concepts behind various schemes (Nussbaum *et al.* 2005, FERN 2004, FERN 2001, Elliott 2000). Fewer studies have actually examined the impacts of certification on forest management practices (Newson *et al.* 2005, Rametsteiner and Simula 2003). Further research is now required to understand the impacts of certification on the environment, the economy and social matters (Klingberg 2003).

When social concerns are being considered there is a high degree of uncertainty involved. The previous sections maintain that certification can potentially improve public participation, Indigenous, employee and community rights. However, the actual impacts are difficult to measure, because often there are no pre-certification benchmarks. Also, social impacts are often simply more difficult to quantify (Nussbaum and Simula 2005). What we do have, however, is anecdotal evidence from certification bodies stating that certification has helped

improve the social situation of employees, Aboriginal groups and communities (Nussbaum and Simula 2005, FSC 2003).

Social aspects of certification scheme have proven to be difficult to implement (Poschen 2001, Sheppard 2003). Standards relating to social issues have proved to be challenging for both the certification organizations and the forest companies (FSC 2003, Thornber 2003). With respect to certification, social sustainability has appeared only recently on the forest policy and management agenda and many decision-makers and stakeholders are still adjusting. From the outset, the formulation of standards, criteria and indicators has tended to be biased towards environmental and economic concerns (Poschen 2001). Social aspects are paid less attention, are less quickly addressed, and often dealt with in an incomplete fashion (Poschen 2001, Bowling 2000, Reed 1999, Hummel and Sizykh 1997). Bowling (2000) explains that the social portion of SFM, including issues of communities, indigenous people and forestry workers, are usually under-represented or not well articulated. (Repetitive)

The research gaps in forest certification, with respect to social concerns, reflect a limited amount of research. Finding research that focuses strictly on social aspects, social concerns or social sustainability in certification or forest management has proven very difficult. Naka *et al.* (2000) identified five reasons why social analyses in forestry have been avoided. These include cost, measurement problems, data problems, methodological problems, and political problems. Qualitative research on subjects that do not generate physical

responses are less attractive to funding programs; the data is also often sensitive, and methodological problems abound (Naka *et al.* 2000)

Public participation is probably the most widely researched social impact within forest certification; Nash's (2002) comprehensive paper on the subject is one of the few. He discovered that "it was apparent that while there was a wealth of information on sustainable forest management, on forest certification, and on public participation, there was not as much current literature on the combination of public participation in forest certification" (Nash 2002: 1). This is definitely a theme that plays out for all social concerns listed above. Social issues are, however, an important topic in certification that require further analysis.

2.4 Chapter Summary

The literature reviewed in this chapter focused on three main areas. In section one key concepts and ideas associated with integrated resource management and sustainable forest management were outlined. The new paradigm of SFM embraces the belief that forests should be considered for their economic, environmental and social values. This idea of multiple dimensions of forest management provides the conceptual foundation for forest certification.

In section two, the development, concepts, characteristics, benefits and limitations of forest certification are detailed. Forest certification is still an emerging tool in forest management, yet significant progress has been made. Certification continues to influence forest management practices in Canada and worldwide.

In section three, social issues, specifically public participation, indigenous rights and culture, employee rights and community rights and community well-being are examined. These four social issues are the focus of this research project.

3. METHODS

3.1 Introduction

The goal of this research is to examine how and to what extent social issues, such as public participation, employees, First Nation and community rights, are addressed in the three case studies. The methodology of this study consists of a comparative case study approach. This approach was chosen because of the types of research questions being asked and because of the contemporary nature of forest certification. Three FSC-certified forests in Ontario were used as case studies. Using three different cases allowed for the design of this study to be stronger and more credible than a single-case study (Yin 2003).

Another key benefit of the case study approach was the opportunity to use multiple sources of evidence (Yin 2003). Several data collection methods were used in this research: a) a literature review to identify the themes and gaps in the research of social issues in forestry and in forest certification, b) participant questionnaire and interviews to gain a better understanding of how social issues are dealt with and the impacts certification can potentially have, and c) a document review to examine on-the-ground impacts of forest certification through the examination of CARs, also known as conditions, issued during the certification process. This research uses a triangulation approach, through the combination of several research methods, which allows for the possibilities of discovering converging lines of evidence, and also increases the reliability and validity of the results (Yin 2003).

The data collected from this research is both qualitative, from the interviews, and quantitative, from the document review and questionnaire. However, the analysis is mainly qualitative, as the objectives are descriptive and interpretive rather than statistical. Qualitative research is useful for understanding the behavior and range of perspectives of individuals and institutions towards specific concepts.

3.2 Background of Study Areas

Sustainable forest licenses (SFL) give the license holder the right to forest management activities, including management planning, harvesting, road construction, forest renewal activities, monitoring and compliance reporting on Crown land in Ontario. Currently there are forty-seven SFL's in Ontario. Single companies hold most of these licenses. However, a small number of SFL's in Ontario are held by cooperatives. A cooperative can include several companies that band together, of which there are nine SFL's in Ontario, or a community-based cooperative of which there is only one in the province (Gray *et al.* 2001). The case studies for this research include three SFL's in Ontario that are all cooperative but each of a different nature (Table 3).

The choice of case studies for this project was non-random. Cooperatives were selected because their operational size was larger which would provide a large sample of participants. The three cases selected for this research are those that appeared within the original literature search. The three case studies included:

- **Westwind Forest Stewardship Inc.** is located in Parry Sound and is the only community-based cooperative that holds a sustainable forest license in Ontario. The 855,446 hectares of this forest obtained Forest Stewardship Council certification in February 2002

- **Nipissing Forest Resource Management Inc.** is also a cooperative, but in this case it is a cooperative of five businesses. The Nipissing Forest is over 1.1 million hectares in size and was certified by FSC in May 2003.

- **Algoma forest**, the third case study, is headquartered in Sault-Ste. Marie. This is another cooperative SFL which is managed by Clergue Forest Management Inc., which in turn represents six forest company stakeholders. The over 1.5 million hectares of the Algoma forest were certified by FSC in June 2005

Information regarding the case studies was sought from the certification assessment reports, websites, newspaper articles and case studies in reports. Key information regarding the three case studies and the social and economic information is listed in table 8, but more detailed information about each case study is listed in the following chapters.

Table 8 – Case Study Details			
Case Study	**Algoma Forest / Clergue Forest Management Inc.**	**Nipissing Forest Management Inc.**	**Westwind Forest Stewardship Inc.**
Area Certified (Hectares)	1,094,000	1,147,501 ha	855,446 ha
Date Certified	June 2005	May 2003	February 2002
FSC Regional Standard used in Certification	National Boreal Standard and Great Lakes – St. Lawrence Forests of Ontario Standard	Great Lakes – St. Lawrence Forests of Ontario Standard	Great Lakes – St. Lawrence Forests of Ontario Standard
Structure of SFL	Cooperative of businesses (6 partners)	Cooperative of businesses (5 partners)	Community-based cooperative (29 partners)
Main tree species	White birch and maple	Maple, poplar, white birch and white pine	White pine, red pine, oak, maple
Products Produced	Largely pulpwood and sawlogs	Sawlogs, pulpwood and plywood	Sawlogs and pulpwood
Permanent Population	Approximately 80,000	86,000	77,000
Forestry related employees	1,400	975	N/A
Tourism Information	-70 tourism operators -70 bear management units and 100 traplines	-Over 100 tourism operators -57 bear management units, 65 trapper's cabins, 86 traplines -Popular destinations for Southern Ontario visitor - Tourism expenditures of $10.5 million (in 1997)	-Important cottage area -Tourism is the main source of employment in the area -Waterways and lakes are world renowned
First Nation Context	-Three First Nation communities -Six First Nations have current interest in the forest	-Four First Nation communities	-Six First Nations communities

(Canadian Sustainable Forestry Certification Coalition 2006, Ontario Government 2001, Scientific Certification Systems 2003, SGS Qualifor 2002, Smartwood Program 2005)

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3.3 Review of Literature

The first phase of research was an extensive review of literature on forest certification and sustainable forest management in order to identify current issues, recurring themes and recognize gaps. Most information came from journal articles and books. However, government documents, forestry magazines, NGO publications and forest certification websites were also used. Based on the topics extracted from the literature a questionnaire and interview guide was created.

3.3.1 Document Review

FSC certification procedures require the SFL being certified to provide the general public with summaries of the certification process. These public summaries are available in writing from the certifier, or are located on the certifier's website.

These summaries contain the conditions, also known as corrective action requests (CARs) that the forest company has received from the certifier. As mentioned in the certification process section, these CARs are circumstances that do not meet the FSC principles and criteria and must be rectified before a certification certificate is awarded. Therefore studying CARs allows one to see where actual improvements in forest management have occurred.

The methodology of this condition-related research was adapted from a previous study by Newsom and Hewitt (2006). For this review of CARs, each condition was categorized according to a predetermined set of five categories, which included: environmental issues, social issues, economic and legal issues,

forest management issues and systems issues. Each category has different sub-sections (table 9). An additional category was created after a gap was discovered; under the social issues heading there was no category for CAR's relating to First Nations. Therefore "First Nations rights and involvement" was added under the social issues heading.

Table 9 – Themes Examined in Conditions Analysis				
Environmental Issues	Social Issues	Economic and Legal Issues	Forest Management Issues	Systems Issues
Aquatic and riparian areas	Communication and conflict resolution	Profitability of operation	Road and skid trails	Management plan
Sensitive sites and high conservation value forests	Training	Compliance with laws	Regeneration and reforestation	Monitoring
Threatened and endangered species	Worker safety	Illegal activities and trespassing	Chemical use and disposal	Inventory
Landscape level considerations	Non-timber forest products	Long term tenure	Exotic species and pests	Chain of custody
Wood debris, snags and legacy trees	Worker wages and living conditions		Conversion to non-forest uses	
Soil and erosion	Special cultural sites			
	First Nation rights and involvement			

(Adapted from Newsom and Hewitt 2005)

It was also taken into account that some conditions fell into multiple categories. For the three case studies there were 37 conditions, but these amounted to 51 category references. For example, the following condition

addresses both issues of high conservation value forests (HCVF) and monitoring, and therefore, was listed in both categories:

> "[Nipissing Forest Resource Management] must expand upon the HCVF consultative process conducted to date and implement management prescriptions and monitoring techniques for continued protection of identified attributes" (Scientific Certification Systems 2003).

A second classification system addressed whether each condition was procedural or substantive. These two categories are based on the language of the conditions. Substantive conditions are those that will have an on-the-ground impact. While a procedural condition may or may not have actual on-the-ground impacts; these often necessitate the creation of new procedures. Newsom and Hewitt (2005) explained that a condition stating "increase riparian buffer zone width to 30 meters" would be considered substantive; while "implement a process for determining the appropriate riparian buffer zone width" would be classified as procedural. Table 10 illustrates the definitions and examples of the two language-based categories. Subtle differences in wording can mean the difference between procedural and substantive changes.

The examination of CARs or conditions allows one to understand what sort of impacts certification has on forest management practices in Ontario, and specifically what sort of changes might have occurred in the social domain of forest management.

Table 10 – Language Based Classification of Conditions		
Category	**Definition**	**Example**
Substantive	Operations are required to make on-the-ground changes to forest practices, or implement a procedure whose outcome will directly impact on-the-ground forest practices	"Surround special cultural sites with a buffer during harvesting" "Modify management plan to ensure that natural forest features are incorporated into plantations"
Procedural	Operations are required to implement a procedure that may or may not directly impact on-the-ground forest practices	"Provide a summary of the forest management plan to community groups" "Conduct an inventory of threatened and endangered species"

(Spilsbury 2005 adapted from Newsom 2004)

3.4 Participant Questionnaires and Interviews

The questionnaire and interview guide was created based on information pulled from the review of literature. The main research questions emerged from a review of SFM and forest certification literatures. These literatures maintained that certification could improve market benefits, lead the way towards SFM and social sustainability and improve specific social issues. The interview questions were created to see if these effects were plausible in Ontario.

The questions also sought to identify the participants' attitudes towards certification and examine the perceived impacts of certification on social issues such as First Nations, employee and community rights and public participation processes and opportunities.

Prior to each interview, the consent form, questionnaire and interview guide was emailed to each participant. The purpose of this was to give participants time to review the consent form and prepare for the questions that

would be asked. Looking over the interview questions beforehand also allowed for the interview to be less time consuming for the participant.

The questionnaire consisted of three sets of Likert-scaled questions. The first set of questions listed statements about social issues and asked whether they agreed or not. The second set of questions addressed the importance of a list of social issues. Finally, the last set of questions inquired about the participation of different stakeholder groups during the certification process. These types of Likert-scaled questions are advantageous because the "respondent[s] can be led fairly quickly through a range of statements which explores different aspects of the topic without over-burdening the respondent[s]" (Parfitt 1997: 82).

The semi-structured interview consisted of thirteen formal questions. Semi-structured interviews, with open-ended questions were chosen because they are targeted but allow flexibility, and permit comparability between responses (May 1993). The interview guide had three sections. The interview guide starts with more general questions on the motives behind the desire and goal of FSC certification. The literature stated many reasons why forestry companies might seek out certification (Collier *et al.* 2002) and this question was designed to see if these reasons were applicable in Ontario.

The second section dealt with benefits, both market and non-market, that have been experienced as a result of certification. The last section of the interview guide investigated forestry issues such as SFM and social sustainability, and had questions on the four specific social issues dealt with by

this study. The interview questions (see appendix B) were chosen in order to offer a clear and complete understanding of the certification process, results and impacts experienced by forest management units.

The interview guide was created as a framework for the interviews. All participants were asked the same list of thirteen questions. However, depending on the knowledge, or opinions of the participants, certain questions were explored in more depth than others.

Interviewees represented key interest groups from the three case studies. The original sample for the interviews was the major stakeholders: key company managers, members of the board of directors, members of the Local Citizen Committee's (LCC), local community groups, First Nation representatives and NGO members. Multiple attempts were made to contact LCC members, NGO members, First Nation representatives and local community groups. However, potential participants from the latter groups were either uninterested in participating, too busy at the time to participate or not knowledgeable enough about FSC certification and its impacts. As a result, these groups and their views are not represented in the findings of this study.

The participants for this research included elites or experts in their field (table 11). Initial contacts were taken from the websites of the three case studies. Additional participants were recruited through a 'snowball' sampling technique. After each interview the participant was asked if he or she could suggest anyone who fit the criteria of participants being sought. 'Snowball' sampling allows the researcher to easily seek out participants with particular experiences or

backgrounds. However, it may lead to the researcher "collecting data which reflects a particular perspective and thereby omitting the voices and opinions of others who are not part of a network of friends and acquaintances" (May 1993: 100). A total of nineteen telephone interviews were completed from September 7th to December 8th 2007. Some cases had fewer participants than others because of their operational size and the number of people involved.

Table 11 – Interview and Questionnaire Participants			
Participant categories *	Algoma Forest	Nipissing Forest	Westwind Forest
Key company managers / Members of the board of directors	1	2	5
Forestry employees	2	3	2
Government employees involved in management of the forest	1	1	1
Consultants involved with management plans and / or certification process and plans	1	1	

*Many participants could fit into multiple categories; however, were group into a single category that was most applicable

3.4.1 Data Analysis

The data collected was both qualitative and quantitative; however, the analysis was mostly qualitative. The questionnaire did provide quantitative information, from the Likert scales, but the sample was too small to justify any sort of statistical analysis without significant potential for error. Therefore, it was analyzed descriptively and put into tables to provide easy presentation and description.

"Data analysis consists of examining, categorizing, tabulating, or otherwise recombining both quantitative and qualitative evidence to address the initial propositions of a study" (Yin 2003: 109). The first step in the data analysis process was to reduce the amount of data into a manageable amount, while still retaining the relevant parts. The interview responses were shortened; the less relevant information was removed and the essential parts were kept and coded. Often information from one interview question was shifted to another question. Interviewees were left to speak as long as they wished and therefore often went off topic, but this information was often useful for other questions.

A code table was created for each interview question based on the most common responses. The process of coding the information further categorized the information into variables. These were placed into matrix tables, which aided in the visualization and interpretation of that data (see appendix C). The overarching goal of the analysis was to interpret what was occurring in each case study area, while also comparing and contrasting the study areas.

3.5 Ethical Considerations

The research project was reviewed by the Wilfrid Laurier University Research Ethics Board. The Board reviewed the information letter / consent form, the questionnaire and interview guide, all of which can be viewed in Appendix B. After some minor revisions the documents were approved.

An information letter and consent form was given to each participant prior to the interview and a signed consent form was received before each interview. The letter informed participants about the purpose of the study, potential risks,

benefits of participating and all confidentiality arrangements. Aside from agreeing to participate, the consent form also asked if the interview could be tape recorded and if the participants would allow anonymous quotations from the interview to be used in research publications. Participants were assured that their all information would be kept confidential and that their identities would not be disclosed.

3.6 Limitations

There are several limitations to this study. The focus on only the FSC scheme meant that only certain forests could be considered, and comparison with other forests certified under other schemes was not possible. The case study approach was another limitation as generalizations cannot be made due to the limited number of cases. However, while the cases may not be generalizable to other forest management units, they can be generalized to theoretical propositions (Yin 2003). The results of this research will be applicable to policy, and certification standards.

The data collection methods themselves were not without limitations. Questionnaires, and especially Likert scales, are created with a certain set of answers and respondents can feel pushed into particular categories which they might not have wanted to use (Valentine 1997). Structured questionnaires also do not explore themes in-depth. That is why a semi-structured interview was used in conjunction with the questionnaire survey. Also, like most other data collection methods there is the chance of bias entering into the data and influencing the results or conclusions.

The use of telephone interviews also has its limitations. It could be perceived as being impersonal and could lead to participants being distracted and giving short answers. This was corrected by using probes whenever answers were not descriptive enough. However, despite the use of probes, some participants still did not go into depth with their responses. As will be seen in the results section, many opinions were very neutral or negative about certification and these participants kept their answers brief.

Other elements that can influence information disclosed are the characteristics of the interviewer such as age, status, sex, presentation, style of interviewing and experiences (Patton 1980). These factors may influence the way respondents answer questions. This study was the first experience the researcher has had with interviews and this may have affected the way questions were posed. Also, as a female student without forestry qualifications participants may have simplified their answers or would have answered differently to someone with more experience in the forestry field. On the other hand, the researcher could have been viewed as non-threatening and this could have encouraged interviewees to be more open.

The 'snowball' sampling technique is non-random and could lead to biases or only certain perspectives being represented. Also, despite the use of the sampling methodology some case studies are better represented than others. The number of people involved in forest management and certification process in some case studies was very limited. Therefore the opinions of a few people must represent the entire case study. Despite this fact, the smallest case study still has

five participants, and their opinions and responses are similar. This demonstrates that they are representative of the general situation of those sampled with that case study.

4. NIPISSING QUESTIONNAIRE AND INTERVIEW RESULTS

4.1 Description of Nipissing Case Study

The first case study, Nipissing Forest Resource Management Inc., is a cooperative, consisting of multiple forestry companies and is managed by Nipissing Forest Resource Management Incorporated. There are five shareholders: Goulard Lumber Limited, Grant Forest Products Corporation, Hec Cloutier and Sons Inc., R. Fryer Forest Products Limited, and Tembec Inc. (Nipissing Forest Resource Management Inc. 2005). The Nipissing forest is located near the city of North Bay (Figure 6) and its mission is to maintain and enhance the long-term health and productivity of the forest, while providing environmental, economic, social and cultural opportunities for the benefit of present and future generations (Nipissing Forest Resource Management Inc. 2005). The SFL is over 1.1 million hectares in size and was certified by FSC in May 2003. Nipissing falls within the Great Lakes - St. Lawrence forest region; the FSC local standard used by the same name was used in the certification process. The main tree species harvested include maple, poplar, white birch and white pine. These are used to produce forest products such as sawlogs, pulpwood and plywood.

The Nipissing Forest region houses a population of 86,000 people living in two main communities; North Bay and Sturgeon Falls, multiple smaller villages and four First Nations communities (Scientific Certification Systems 2003). Forestry is an important economic activity within this region and continues to be a major employer. Forestry-related activities employ nearly 1,000 people from the

area (Ontario Government 2001). Data from the 1996 census and the 1999 Crown fibre wood flow study shows that in the Nipissing MNR district nine percent of the labour force works in the forest industry, with one percent specifically associated with logging activities (Nipissing Forest Resource Management Inc. 2004). The area is home to six old growth forest sites, 18 existing or soon-to-be-regulated provincial parks, 21 conservation reserves, and is a popular recreational destination (Scientific Certification Systems 2003). For this case study there were seven participants.

Figure 6 – Map of Nipissing Case Study
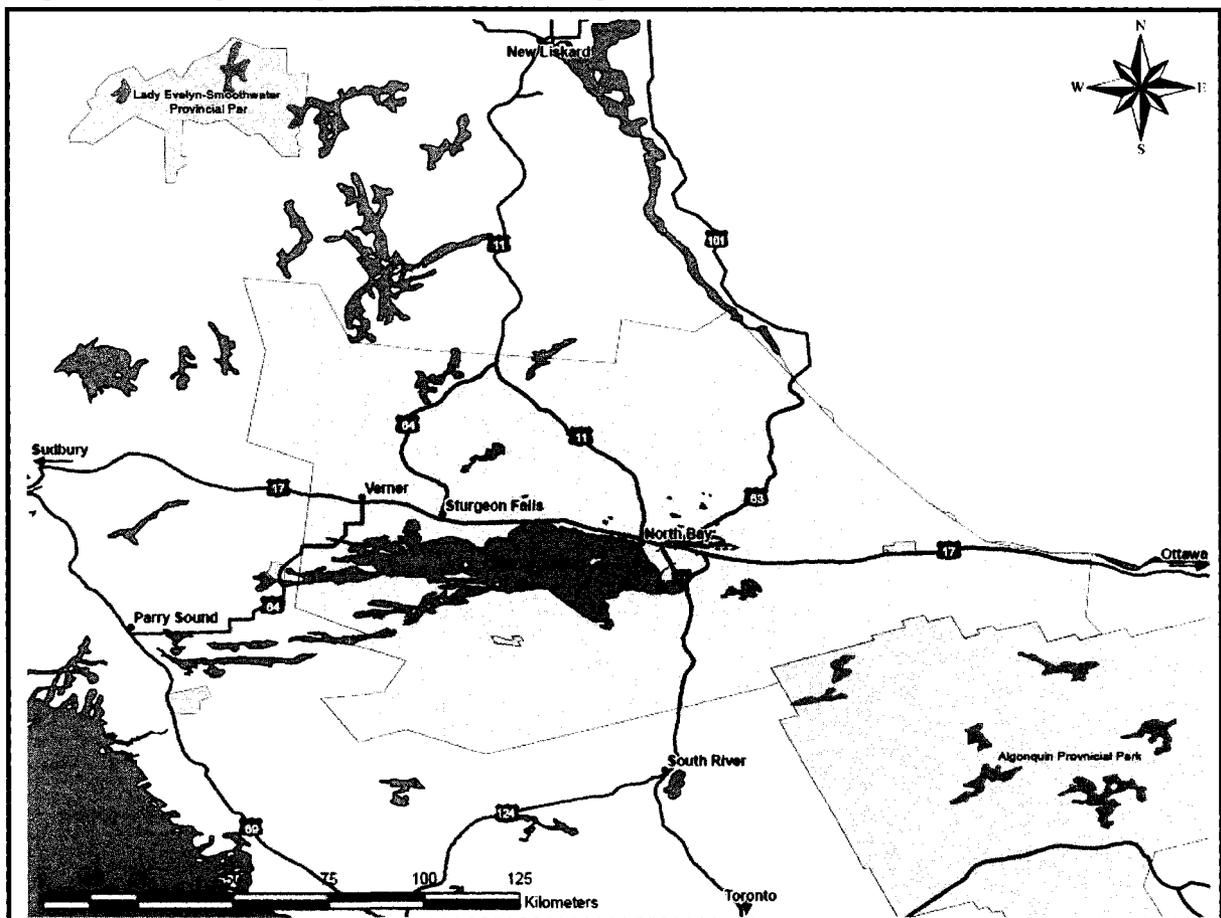
Program 2005). Data from the 1996 census and the 1999 Crown fibre wood flow

reveals that in the Sault Ste Marie MNR district 3.5 percent of the labour force

works in the forest industry, with one percent dedicated to logging (Nipissing

Forest Resource Management Inc. 2004). For the Algoma forest case study

there were five interviewees.

Figure 7 – Map of Algoma Case Study
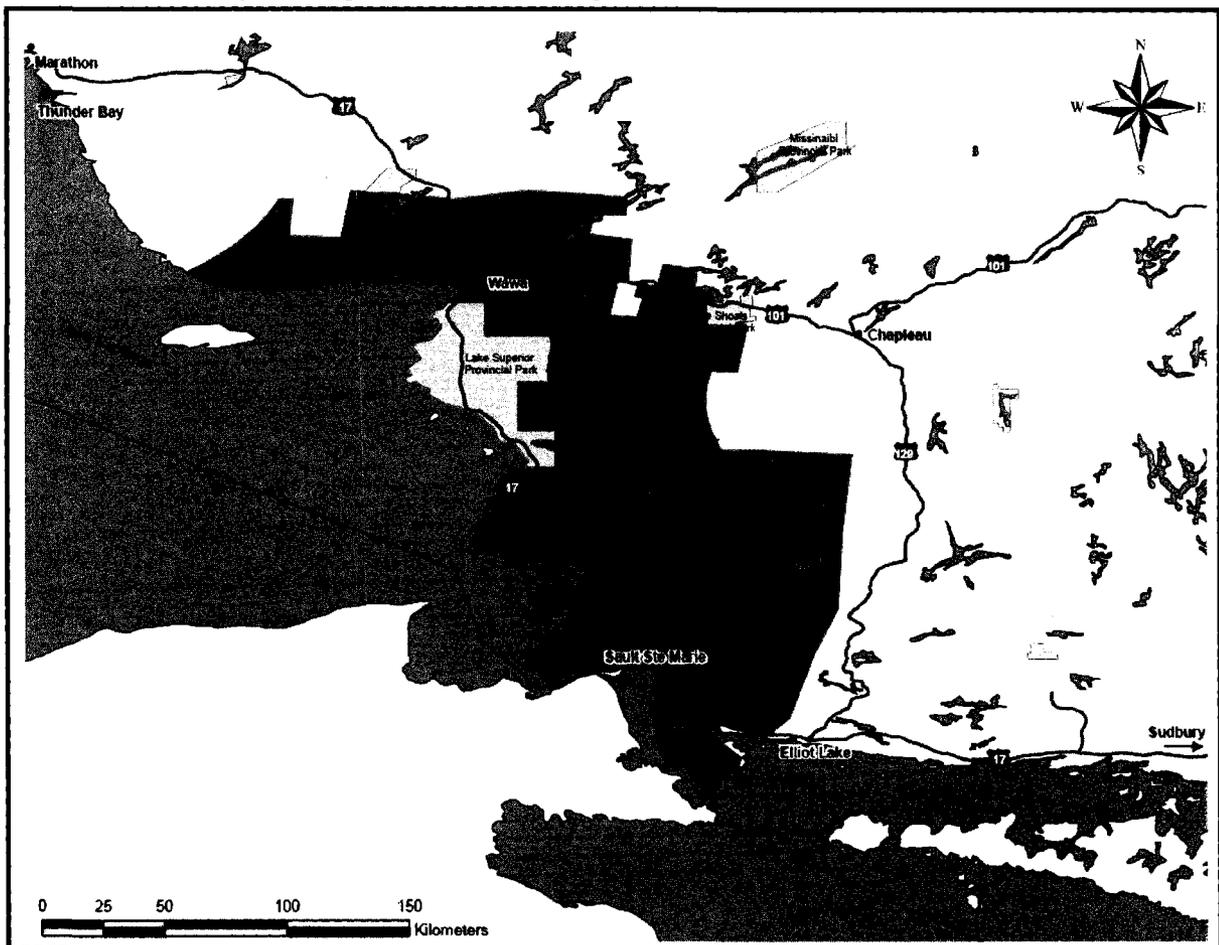
5.2 Document Review Results

During the certification process, Algoma received the most CARs of the

three cases in this study with 18 conditions (see appendix D). Conditions were

categorized by issue and the 18 conditions lead to 27 category references. The

4.2 Document Review Results

During the certification process the Nipissing SFL received eight CARs, or conditions (see appendix D). These indicate problems that need to be resolved before a certification certificate can be awarded. Amongst the three case studies, Nipissing received the fewest conditions.

Conditions were categorized by issue (see table 9). For Nipissing, the eight conditions led to nine category references. These include four conditions relating to environmental issues, three conditions relating to social issues and two for systems issues. The most common conditions for the Nipissing forest included: sensitive sites and high conservation value forest (HCVF) (3 conditions), and First Nations rights and involvement (2).

For Nipissing Forest Resource Management, five conditions were labeled procedural, and the other three were considered substantive. Each of the three social issues CARs will be discussed as they apply to the themes below.

4.3 Interview and Questionnaire Results

The questionnaire and interview (see appendix B) can be separated into the following seven themes. Tables with the participant's responses from each individual question can be found in appendix C.

4.3.1 Motivation to Become Certified

The first interview question inquired about the motivation for Nipissing to become certified. The Nipissing SFL is a cooperative consisting of six stakeholder companies. One of the largest companies of this cooperative is

Tembec Inc. Tembec made a commitment in 2001 to certify their tenures with FSC as part of an agreement with the World Wildlife Fund (WWF) (Tembec 2007). The influence of Tembec was a strong motivator for Nipissing to become certified, as three out of the seven respondents listed it as the primary reason that Nipissing pursued certification. But, it was not the only reason. Market benefits were also important (2 participants). Nonetheless, despite the encouragement that Tembec and WWF might have had in this decision, many acknowledged that FSC was the right certification scheme because it is seen as "the best umbrella scheme" for the Nipissing forest. Since Tembec Inc. pushed FSC specifically most interviewees were not aware of whether the social aspect of FSC played any part in the decision to choose this particular certification scheme.

4.3.2 Benefits

As mentioned in the literature review, certification can lead to both market, and non-market benefits. It was agreed upon by nearly half of the respondents from the Nipissing case study that so far market benefits have been very limited (3). One individual stated that FSC has lead to minor market advantages for pulp wood, while another mentioned that it led to more demand for their wood products, and a competitive advantage in the market place (1). One individual explains the advantages for some Nipissing stakeholders:

> "We became well-known as a producer of FSC certified products and in a number of cases, companies like Home Depot are selling those products. There is lots of debate about "could the benefits be more?" and "why isn't there more visibility?" but those represent opportunities going forward. [FSC] certainly is the only system that offers the opportunity for market

advantage, and it's not necessarily a [price] premium, there are other ways in which to benefit from it".

However, one individual summarized their views by saying: "I don't believe that certification pays for itself in market benefits". This respondent indicated that certification is a costly endeavor, and cost is an often cited limitation of forest certification, and without clear and consistent market benefits the process may not be financially worthwhile.

The next interview question asked whether or not certification had lead to non-market benefits. Non-market benefits can include such things as improved working conditions, employee morale, recognition of indigenous land claims or improved public participation processes. Nearly half the respondents did not know, or thought that certification had no impacts on non-market aspects; while another four respondents thought that certification had some sort of impact on non-market benefits. The benefits discussed included: improved First Nations relationships (2), increased community and industry recognition (2), improved employee morale (1), protection against environmental conflict (1), and that certification led to more dialogue about social issues (1). The mixed responses indicate that perhaps certification has not greatly improved one or two large issues, but has lead to many small improvements.

Interviewees were also asked if local communities felt any benefit from the forest being certified. Only two participants stated that certification could be beneficial to a community because certification could lead to healthier forests, and more consistent market demand which could lead to consistent employment, and healthier communities. But generally, the response was that it did not lead to

any discernable community benefit, or people did not know if it did. Part of this issue could be the lack of awareness; most respondents acknowledged that few people were aware of the FSC certification for the local forest (3), and that the general public as a whole was not aware (4).

In the questionnaire, community rights and well-being were listed as "important" social issues. Also, in the first section of the questionnaire, participants thought that certification influenced community stability and community well-being in a positive way. But felt neutrally about certification's ability to impact the distribution of costs and benefits of forest management between the owners of the resource, the forestry organization and local communities.

4.3.3 Sustainable Forest Management and Social Sustainability

Participants were also asked questions relating to the concepts of sustainable forest management and social sustainability. The interview examined if participants thought certification could help achieve these latter concepts in forestry.

Most had positive opinions towards certification as it relates to SFM. Many believed that certification helped reinforce SFM (3). One participant believed that certification could help achieve SFM because FSC has a tougher standard than parts of Ontario regulations: "FSC supplements the regulatory regime and holds the manager to a higher standard. There is no question. It is a tougher standard because portions of it are more subjective". The subjective part of the standard that the respondent is alluding to is the social aspects. Literature on the topic

discusses how social issues are considered to be more "fuzzy" or "subjective" because they are "harder to quantify and have usually been ignored in efforts to apply science to forest management" (Sheppard 2003). However, not all had such positive reviews; two participants did not have an opinion towards this topic, and another two thought the Ontario forest management process achieved SFM on its own.

When asked about social sustainability, nearly half of respondents thought certification was not useful (1), would only have limited benefits (2), or did not know (1). The other participants thought certification was useful for various small progressions towards social sustainability, such as providing a check process against the forest management process (FMP) (1), more documentation (1), and greater awareness of social issues (1).

4.3.4 Impact on First Nations Issues

The interview questions also tried to evaluate the impact of certification on the four specific social issues explicitly addressed by FSC. The first of these was recognition of rights and the relationship with First Nations. When asked if certification affected Nipissing's relationship with First Nations the most common responses were:

- That certification had no impact (2)
- Certification lead to greater effort to involve First Nation groups (3)
- Certification reinforced an already good working relationship (2)
- Certification led to more formalized agreements or documentation was the result of certification (2)

One participant described how certification had changed their relationship with First Nations:

"Certification has made an already good relationship better. Several First Nations actively assert their rights on the forest, but their assertion is tempered by a greater understanding of all the pressures and objectives that the Nipissing must account for. The understanding came from participating in the certification process and from participating in the active management of the forest".

Four First Nations communities are located within the Nipissing boundaries. The area is also home to a land treaty, the 1850 Robinson Huron Treaty, of which two of the First Nation groups of the area are signatories (Scientific Certification Systems 2003). Two respondents indicated that an already good working relationship was already in place pre-certification, but other respondents indicated that certification did have an impact and influenced in minor ways the relationship between the forest industry and First Nations groups.

In the questionnaire, participants thought that certification had recognized and respected the rights of indigenous people, and as a social issue First Nations rights were rated on average as "important".

Two CARs from the certification process related to First Nations rights and involvement. The first condition stated that Nipissing must create a comprehensive First Nations policy statement whereby its commitment to a productive working relationship would be outlined. In reaction to this CAR, Nipissing chose to pursue an "Agreement of Understanding" with the local First Nations (Scientific Certification Systems 2003). However, only one First Nations group signed. The agreement of understanding is most likely what interviewees referred to when they stated that certification lead to more formalized agreements and increased documentation.

The second condition in this category required Nipissing to implement a program to improve the identification and documentation of Native values (Scientific Certification Systems 2003). To resolve this issue a prescription was added to the forest management plan, and a forester visited all the First Nations in order to involve these groups in the process.

4.3.5 Impacts on Employee Issues

Forestry is a large employer in the region and the health, safety and well-being of these employees is important. Participants were asked if certification changed the way employee issues were dealt with. Two people did not know, and two others thought that that the situation remained the same as pre-FSC. Lack of change was attributed to the strength of existing regulations. However, three individuals did think some changes had occurred, including the following: that FSC increased the morale of the staff (1), and lead to more discussions on employee related issues (1). Certification also lead to the creation of new policies (1): "certification is one of the reasons why we have this "hire and buy locally" policy and we really follow that policy because of our FSC certification". The policy aimed at hiring and buying locally was also listed in the second section of the questionnaire as both an "important" and "very important" social issue. However, one person believed that certification decreased the morale of staff. The extra workload brought on by certification increases the stress level which, according to the respondent, decreased the morale of staff members working on the Nipissing forest.

When asked to evaluate statements about social issues and certification in the questionnaire participants "agreed" that certification had positively impacted employee rights and the relationship between employer and employee. Employee rights were rated as an "important" social issue for the Nipissing in the second section of the questionnaire.

In the document review, one CAR was categorized as relating to employee issues. The condition identified in the certification process found that Nipissing lacked a health and safety representative. As a result, a representative was appointed, and a number of health and safety policies were developed (Scientific Certification Systems 2003).

4.3.6 Impact on Public Participation

The Nipissing region is an important area for outdoor recreation, tourism, hunting and fishing (Scientific Certification Systems 2003). With such multi-use of the forest, public participation is very important to make sure all stakeholders remain satisfied. Responses were mixed as to whether or not certification had an impact on the level and quantity of public participation. Nearly half believed that enough is done through the FMP and certification had no impact (3). This type of opinion was stated in one interview:

> "Public participation on this management unit has always been high – with a large [local citizens committee] and high level of interest in forest management. I don't believe that certification had that much impact on these processes for this management unit."

The other half of interviewees believed that FSC certification did have an impact and increased the consultation and participation processes by offering

increased advertising, mail outs and interviews with the public during the certification process (2). The yearly audits offer yet another opportunity for those that wish to be involved (2): "It also gives people an annual opportunity at the surveillance audit to voice their concern, which is more often than the five year government independent audit".

In the first section of the questionnaire, participants "neither agreed nor disagreed" that certification increased the number of people involved in forest management. Subsequently, in the second section of the questionnaire, the importance of four specific social issues was rated. Public participation was rated as "important". In addition, two participants filled out the other option of the questionnaire and added "public awareness of forest management planning opportunities" as an "important" and "very important" social issue for the Nipissing forest.

The third and final set of questions in the questionnaire addressed the participation of different stakeholder groups during the certification process. The respondents rated the involvement of the different Nipissing stakeholders as being generally involved; although some groups were clearly more involved than others. Forest companies were overall rated as "highly involved", but they were the only group that fell into that category. The groups rated as "involved" included: environmental organizations, government agencies, local interest groups and community members. Union representatives and forest workers had mixed responses but these were listed as either "mostly uninvolved" or "neither involved nor uninvolved".

<u>4.3.7 Overall Social Impact</u>

The final interview question related to the overall impact that certification may have had on social issues. A similar distribution occurred as when asked about the four specific social issues mentioned above. Nearly half thought that no impact had occurred, due to the strength of Ontario regulations, or because of the high standards that existed pre-certification (3). Others thought that it had a limited impact (1):

- It had helped to create more formal agreements or increased documentation, including agreements with remote tourism operations and more formalized agreements with First Nations and communities (2);

- It helped improve the understanding and dialogue about social issues (1), and;

- It assisted the forest industry to become more engaged with communities (2), as one individual explained that FSC makes you "sit and meet with that community to understand what their goals are, how they relate to this forest and we are going to identify things we can work together on"

Some of the changes might have only been in terms of attitude, or how a problem is dealt with, as one participant explained: "You are compelled on any issue to think it through in a pretty broad way. You can't just look at any issue from an economic perspective".

In the first section of the questionnaire, participants "agreed" that certification had increased the visibility of social issues in forest management, and has increased the amount of information about forest management practices available to the general public.

4.4 Nipissing Summary

The Nipissing forest, certified in 2005, was motivated to pursue certification by Tembec's commitment to FSC and the possibility of market benefits. Few discernable market benefits have since been attained according to respondents.

The responses to most impact-related questions had a nearly equal distribution between those that believed certification influenced the way Nipissing dealt with the specific social issues of community rights and well-being, First Nations relationships, employee rights and public participation, and those that believed no impact had occurred because of certification. The changes that were enumerated were not major changes. However, small improvements in the treatment of stakeholder groups are better than no improvements at all, such as increased documentation and formalized agreements with stakeholder groups, additional public participation opportunities and improvements in the relationship with First Nations.

The questionnaire revealed that respondents felt neutrally or agreed with most statements regarding certification and social issues. All the social issues listed were rated as important, with indigenous rights being ranked as the most important, and finally, most stakeholder groups were involved in the certification.

The Nipissing case study received the smallest number of CARs of the three case studies, with only eight conditions. Three of the eight conditions were also categorized as substantive, therefore indicating that on-the-ground changes from certification most likely occurred. Only three conditions related to social

issues: two regarded First Nations, and one concerned employee issues. The results from the document review, and interview results corroborate each other. All of the social issues conditions lead to changes that participants enumerated during the interviews.

5. ALGOMA QUESTIONNAIRE AND INTERVIEW RESULTS

5.1 Description of Algoma Case Study

The Algoma forest is headquartered in Sault-Ste. Marie (Figure 7). It is a cooperative SFL managed by Clergue Forest Management Inc., who in turn represents six forest company stakeholders: Boniferro Mill Works, Columbia Forest Products, Domtar Inc., Midway Lumber Mills, St. Mary's Paper Ltd, and Weyerhaeuser Company Ltd. (Clergue Forest Management Inc. 2006). The Algoma forest is over 1.5 million hectares in size. But only the Crown land portion of nearly 1.1 million hectares was certified by FSC in June 2005 (Smartwood Program 2005). Two forest regions, the Boreal and Great Lakes - St. Lawrence forest regions occur within the Algoma Forest. Each occupies approximately 50 percent of the forest area. Both the FSC National Boreal Standard and the Great-Lakes St. Lawrence standard were used during the certification process. The main products produced include pulpwood and sawlogs from white birch and maple (Smartwood Program 2005).

The region hosts the larger city of Sault Ste Marie, the town of Wawa, several smaller communities, and three First Nations communities: Michipicoten, Batchewana and Garden River. The population of the area is around 80,000 (Smartwood Program 2005). While this area is less popular as a tourism or recreational destination than the other two case studies, it is still utilized by the local population and is an important area for hunting and fishing (Smartwood Program 2005). Other Algoma shareholders employ a total of 1,400 people in this region and are a very important contributor to the local economy (Smartwood

conditions for Algoma were lengthy and often consisted of many sub-sections. For example, condition 6.3 has nine different sub-sections and fell into six categories. The different categories received the following number of references:

- Environnemental issues : 11 conditions
- Social issues: 10 conditions
- Economic and legal issues: 1 condition
- Forest Management issues: 2 conditions
- Systems issues: 4 conditions

The most common CARs include: sensitive sites and HCVF (6), First Nation rights and involvement (4), landscape level considerations (3), communication and conflict resolution (2), training (2), and the management plan (2).

For the Algoma forest, ten conditions were procedural and eight were categorized as substantive. There are ten conditions that fell into the social issues category and each will be discussed further as they apply to the themes listed below.

5.2 Interview and Questionnaire Results

5.2.1 Motivation to Become Certified

The Algoma forest first sought certification in 2004. According to the respondents they were motivated to seek certification in order to take advantage of the market benefits that were associated with certification, including such things as increased market share and price premiums. Certification originally was largely sought after by the pulp and paper-related Algoma stakeholders (Smartwood Program 2005).

FSC was chosen because it was seen as the scheme that would be most accepted by consumers and by the market, as stated by an Algoma participant:

> "FSC certification has the most credible form of certification in a public environment from a marketing point of view. Most forms of certification are more industrially based and I would say don't have a good reputation"

However, according to respondents. the strong emphasis that FSC has on social issues played no part in the decision to choose FSC.

5.2.2 Benefits

According to respondents, some, albeit limited, market benefits have been achieved since Algoma became certified. These include increased market share, maintaining market share, and receiving a competitive advantage in the market. As one respondent stated:

> "You might be competing directly with some other company, same price per ton but you might have the advantage of being certified and that might be the difference between getting a contract or not getting a contract"

The forest industry in Ontario is currently going through a difficult economic time. Therefore any sort of economic advantage, even if it is limited, from certification is a welcomed benefit. One individual did mention that the benefits have largely been on the pulp side, and another believed that no market benefits had been achieved because no one wants to pay more for certified wood. The latter respondents believed that certification has not led to market advantages because it is not selling:

> "I think that the bottom line [is that] people's economic behaviour is still get the cheapest source they can – and that is such a powerful motivator […] They go with the best deal they can get."

However, regarding non-market benefits, participants believed that none were applicable to this case study in particular (5). As stated by many interviewees, the Ontario FMP process is strong and comprehensive and provides all the social benefits needed within forestry: "Ontario forests, and the responsibilities from the government take care of th[ese] types of things". Many stated in this section and elsewhere throughout the interview that not much changed socially pre- and post-certification because of the strength of the Ontario FMP process.

When asked about benefits that the communities might have felt as a result of certification, similar responses were shared. Three out of five interviewees believe that communities do not feel any benefits, because of a lack of awareness. Although some benefits were cited, such as more trust from the community (1) and a belief that healthier forests due to certification could lead to more consistent employment in the future (1). As one individual explained:

> "On the community side, having a certified forest is another indicator to the community that things are being done in the proper manner [...] I think that makes people in the community comfortable"

The Algoma forest surrounds many towns and villages, with a total population of over eighty thousand (Smartwood Program 2005). However, despite the importance of forestry to the economy of the region many are not aware that their local forest management unit is certified. Two respondents thought that the communities were not aware and another two believed that there was a limited awareness. One person was not familiar with this topic and could not answer the question. One of the larger stakeholders, St. Mary's Paper, has

been undergoing serious financial problems, declaring bankruptcy in 2006 and finally closing its doors in April 2007. Boniferro Mill Works also had financial problems, announcing an indefinite shutdown in spring 2007. Media attention has surrounded these issues and the company and this may have overshadowed the positive aspects of forestry in the region, such as the FSC certification of the forest.

The questionnaire examined the importance of four specific social issues. In rating these, Algoma participants put community rights and well-being as most important, receiving an average response of "very important". Yet when asked about statements regarding the social aspects of FSC certification, participants "disagreed" that certification influenced community stability and community well-being in a positive way, or that it led to more equitable distribution of costs and benefits between the forest industry and communities.

5.2.3 Sustainable Forest Management and Social Sustainability

Opinions were mixed when discussing the role of certification in sustainable forest management. Some thought certification was not useful as a tool to achieving SFM (3). These respondents thought that SFM is regulated by the Ontario government (2), or that certification was perhaps useful but only as verification of good forest management, yet in itself does not push forestry operations towards SFM (1). One participant believed that certification could help achieve SFM but only if everyone was certified. Another person thought that certification could only help if the standard is properly adhered to.

Interviewees were then asked if they believed that certification could aid in achieving social sustainability in forestry. Over half of participants did believe that certification could help in achieving social sustainability (3), or that at least it could have a limited impact (1). The other two participants did not think certification could aid in achieving social sustainability in forestry due, again, to the strength of the Ontario's forest management regulations.

5.2.4 Impact on First Nation Issues

The certification assessment team deemed six First Nations groups to have current interest on this forest management unit; the area is also home to three First Nation communities (Smartwood Program 2005). Despite these pressures, and the strength of FSC Principle three which focuses on indigenous people's rights, four out of five respondents indicated that FSC had no effect on the relationship with First Nations groups. Based on the interview results, the relationship with First Nations in this case study was described as "evasive at best" and fraught with "unsolvable issues". One participant described the influence of certification: "It doesn't matter what [they] do, [you] just can't make it better". On a more positive side, one participant did however express that the certification process drew on a larger cross section of First Nations groups than the regular FMP.

When rating the importance of social issues in the questionnaire, Indigenous rights and culture was rated as "important". However, in the first section of the questionnaire participants felt neutrally about the impact that certification can have on indigenous people.

The Algoma forest also received four CARs relating to First Nation issues; twice as many as the other two case studies, which confirms some of the opinions received by the interview participants about the tumultuous relationship between the forestry industry and First Nations groups in the area. Most of conditions involved taking further steps to involve First Nations. For example, Algoma was required to obtain and incorporate the input of local First Nations into the HCVF report. A strategy to facilitate greater involvement of First Nations in forest management planning also needed to be developed and implemented. The forest management unit needed to develop a strategy to determine the interest of First Nations in participating in the collection and integration of traditional ecological knowledge in forest management. Finally, Algoma was asked to "provide documentary evidence of its effort to confirm with First Nations their interest in pursuing the memorandum of understanding agreements" (Smartwood 2005). It is interesting that four out of five participants thought no changes occurred as a result of certification. Yet, four conditions relating to these issues were received during the certification process.

5.2.5 Impact on Employee Issues

Forestry is an important contributor to the regional economy and to the well-being of many communities in this region (Smartwood Program 2005). But the general agreement from this research is that FSC certification did not impact employee well-being or relationships (4). The strength of Ontario regulations and the high standard regarding employee pre-certification was the reasoning behind

this lack of change. The other participants did not know if certification had impacts on employee rights or relationships.

In the second section of the questionnaire social issues were ranked in importance: results for the employee rights category were split between the "important" and "neither important nor unimportant" categories. When asked if FSC certification positively impacted employee rights, in the first section of the questionnaire, participants "strongly disagreed".

Despite the lack of change stated by interviewees, the certification assessment reports different information. During the certification assessment three conditions were given to the Algoma forest for deficiencies in worker safety and employee training. Conditions include:

- The Algoma forest must assess its health and safety records and provide an annual summary report
- Training programs for operational staff on appropriate identification and protection of ephemeral and intermittent streams must be developed
- Training programs to contracted operators and woodlands staff detailing the environmental requirements and obligations of FSC forest certification must be delivered

The issues identified in these three conditions were rectified within one and two years of the initial certification assessment in order to keep the certification certificate. Despite the results from the interviews, the document review demonstrates that certification did have an impact on employee issues in slight ways.

5.2.6 Impact on Public Participation

Another interview question asked whether certification has offered additional opportunities for the public to be involved in the management of the

Algoma forest. One person did not know if certification offered additional chances for the public to participate. Others thought that enough is already done through the FMP and that certification did not change the public participation processes (2). Two respondents did agree that certification offered the public additional chances to be involved through increased mailouts, advertisements and interviews (1), but often people are not interested and the turnout is low despite the supplementary opportunities to become involved (1).

Public participation in terms of its importance as a social issue was rated as "important" by all respondents in the questionnaire. However, when asked in the questionnaire if certification increased the number of people involved in forest management, participants "disagreed". The third and last section of the questionnaire addressed the participation of the various stakeholder groups. The average response indicated that most were "mostly uninvolved". These included local community members, union representatives and forest workers. Government agencies had a split response, with half answering that they were "mostly uninvolved" and the other half believing they were "highly involved". Lastly, local interest groups had very mixed reactions with each respondent answering differently, from "completely uninvolved" to "highly involved".

Forest companies were rated as the most involved. Environmental organizations were rated as second most involved. For this Likert-scaled question only four out of the five participants responded. One person felt that they were not informed enough to answer this set of questions.

5.2.7 Overall Social Impact

Considering the results of the above interview questions regarding the four specific social issues, perhaps it should come as no surprise that when asked about the overall social impact, many stated that there had been none (4). Many stated that the lack of change is, again, associated with the strength and robustness of Ontario forest management policies. One person believed: "It is my view that with the FMP process and associated policies in Ontario, we are already about 80% of the way there to FSC certification". Therefore, according to the latter participant, to receive certification not many changes were necessary. Many from this case study agreed with this opinion (3).

Two changes in response to the certification process include: the increased documentation regarding social issues (1), and the improved understanding and dialogue about social issues (1).

In the questionnaire, the first set of Likert-scaled questions considered statements about social aspects of FSC certification. Respondents tended to "agree" that certification increased the visibility of social issues and increased the amount of information available to the public.

The results from the document review show that two conditions relate to the communication and conflict resolution. Algoma was required to make a public summary of the result of all monitoring activities on the forest, prepare a more comprehensive socioeconomic profile of forest uses, and expand the interest that are present on the Wawa LCC (Smartwood 2005).

The reason for the lack of change as stated by the interviewees: "I don't think [FSC principles and criteria] were developed for Ontario and with our social structure in mind". Perhaps this is true, considering that certification schemes were originally created for forest management practices in developing countries. However, changes have been experienced by other case studies in developed countries. So perhaps the standard was not implemented to its fullest extent in this case study in particular.

5.3 Algoma Summary

Certification was pursued by the pulp and paper related stakeholders of the Algoma forest in order to achieve market benefits. The certification assessment report asserts that:

> "FSC certification is of more interest to the pulp and paper and veneer producers of Clergue. The remaining shareholders are supportive of acquiring FSC certification and are committed to the implementation of the conditions in this report" (Smartwood 2005).

However, some interview participants stated that they were against the certification process and these more negative opinions about certification are noticeable in the results of this case study.

The questionnaire revealed that views about certification were not as positive as they were in the other case studies and few stakeholder groups seemed very involved in the certification process. In response to the interview questions, there was an overall agreement that FSC certification did not positively impact First Nation relationships, employee rights or public participation. However, the stakeholders of the Algoma forest did seem to receive

some market benefits, but non-market and community related benefits were not received due to a lack of awareness about FSC certification.

This case study received the most conditions during the certification process than the other cases, with 18 CARs. Ten of those fell into the social issues category, including multiple conditions relating to First Nations issues, and communication and conflict resolution and employee issues. Furthermore, eight conditions out of 18 were considered substantive. Therefore, on-the-ground changes as a result of certification have potentially occurred. Yet, the interviewees did not recognized or acknowledge any changes as a result of certification.

6. WESTWIND QUESTIONNAIRE AND INTERVIEW RESULTS

6.1 Description of Westwind Case Study

Westwind Forest Stewardship Inc. is located in Parry Sound (Figure 8) and is responsible for the management of the French/Severn forest. It is a community-based, not-for-profit forest management company, which in 1998 became the first such organization to receive the SFL designation in Ontario and in 2002 became the first large public forest to be certified by FSC in Canada (SGS Qualifor 2002). Westwind is unique within the Ontario forest industry because it is directed by a community-based board of directors, which includes forest industry representatives, community citizens and a First Nations representative (Westwind Forest Stewardship Inc. 2005). Westwind's mission is to manage the forest in a way that is ecologically and socially sustainable. Westwind itself does not harvest timber. Timber is harvested by forest industry shareholders and by a range of independent operators. The largest shareholder of timber rights is Tembec Inc. with 43 percent. Four medium sized companies are entitled to 35 percent of the timber volume, and the remaining 22 percent is divided among 24 small independent operators (SGS Qualifor 2002).

The 855,446 hectares of the French/Severn forest, which Westwind manages, obtained Forest Stewardship Council certification in February 2002 and underwent its five year re-certification audit in October 2006 (Westwind Forest Stewardship Inc. 2005). This area falls within the Great Lakes - St. Lawrence forest region of Canada and was certified using the FSC local standard by the same name. The main tree species growing in the area are hardwood

maples, oak and white and red pine. These are logged to produce sawlogs and pulpwood (SGS Qualifor 2002).

Figure 8 – Map of Westwind Case Study

This forest region is home to approximately 77,000 people living in four main communities: Huntsville, Bracebridge, Gravenhurst and Parry Sound, and the surrounding rural area (SGS Qualifor 2002). However, during the summer the population triples due to an influx of cottagers (SGS Qualifor 2002). According to the 1996 census and the 1999 Crown fibre wood flow study, in the Parry Sound MNR district the forest industry accounts for 5.1 percent of the labour force, with another 1 percent of the labour force dedicated to logging (Nipissing Forest

Resource Management Inc. 2004). Hundreds of jobs rely on the forestry industry in this region, and the maintenance of stable employment is necessary for the well-being of both employees, and local communities.

The tourism industry is also a significant employer in this area, and together with recreational and forest-based activities remains the most important contributor to the economy of the region (SGS Qualifor 2002). This makes proper forest management important for the economy of the region and the continued success of the tourism sector. Tourism is most important in this case study as compared to the others.

Another important social issue that Westwind must properly deal with is the six First Nations that live on reserve lands within the forest district. Historically these First Nations have not been involved in forest management, but have recently expressed an interest in forest values, forest planning and employment opportunities from forestry (SGS Qualifor 2002). These groups included the Parry Island, Henvey Inlet, Waabnoong Bemjiwang, and Shawanaga First Nation (SGS Qualifor 2002). There were eight respondents who completed the questionnaire and interview questions.

6.2 Document Review Results

Westwind Forest Stewardship Inc. received 11 CARs during the certification process (see appendix D). These represent areas where the forest management practices did not meet FSC standards.

The 11 CARs received by Westwind produced 15 category references. Social issues and systems issues received the most references, with five and six

conditions relating to these issues respectively. Environmental issues and forest management issues had two conditions each. The most common conditions for Westwind related to: the management plan (4), monitoring (2), First Nations rights and involvement (2), communication and conflict resolution (2), and sensitive sites and HCVF (2).

For the Westwind certification assessment conditions were worded to explain what was lacking and did not explain the specific changes that needed to be done. For example, one of the conditions relating to First Nations rights and training reads as follows:

> "While substantial opportunities for non-aboriginal people for employment, training and other services are available there is no strategic plan to identify training and employment opportunities with First Nations, and provide support and initiatives to build First Nations' capacity to develop employment opportunities" (SGS Qualifor 2000: 34).

Due to their wording, all eleven Westwind conditions were labeled as procedural since they do not specify what type of on-the-ground impacts the corrections of these issues might have lead to. Each of the five CARs relating to social issues are discussed as they apply to the themes below.

6.3 Interview and Questionnaire Results

6.3.1 Motivation to Become Certified

Westwind is governed by a board of directors which includes, amongst others, three forest industry representatives (SGS Qualifor 2002). Tembec Inc. is the largest shareholder with Westwind. However, the influence of Tembec, as seen from the Nipissing case study, did not affect this forest operation, as it began the certification process in 2001, the same year that the agreement

between Tembec, WWF and FSC was initiated. The resounding response was that Westwind sought certification in order to achieve market benefits, and to gain public recognition of the good work they were doing:

> "We saw certification as a promising thing and we thought it would get us an improved market share. But first of all, what we really wanted to do, [was] let the public know that, hey we're doing a good job here as a well managed forest".

The majority of respondents believed that FSC was chosen because it was the strongest and most credible scheme amongst the other certification programs available. However, three of the respondents did not know why FSC was specifically chosen as they were not involved in that decision. This is understandable considering that the decision on the certification scheme occurred at least six years ago and board of directors members and employees do alternate and change over time.

Contrary to the other case studies, when asked if the social component of FSC played a part in the decision to choose FSC many agreed that it did (6), at least in a limited way (3). FSC was more comprehensive and gave equal value to environmental, social and economic issues which attracted the attention of Westwind. Two respondents specifically mentioned the strong First Nations content of FSC as a strong factor in their decision to choose the latter.

6.3.2 Benefits

Market benefits from certification have been hard to achieve, and Westwind is no exception. Some Westwind participants believed that no market benefits had been gained (2), while others thought that limited benefits have

been seen post-certification (4). The types of benefits that have been received include a price premium (2), and increased market share (3). Two participants mentioned that market advantages have occurred more strongly for pulp and paper industries. As one participant described the advantages of certification for pulp producers:

> "[Pulp and paper mills] have a good market for FSC certified paper, consequently, they are paying a premium price for pulp and as well, there is a very strong demand for the pulp. So, in the past, when we shipped pulp, there would be times when there would be a glut of pulp on the market. We were just out high and dry. We had this big pile of pulp on the side of the road and no home for it. But now that it's certified, it flows more consistently, and consequently, the whole industry is more consistent"

Non-market benefits from certification have not occurred, according to four participants from this case study. The other three thought that some existed; namely better First Nation relationships, more recognition from the community, increased employee moral and protection against environmental conflict. As one individual stated with regards to community recognition:

> "That's what happens with FSC certification, people then recognize that we are not just a bunch of crazy loggers [...] So the real benefits is acceptance by the community that the forest managers are professionals and that they are using their best judgment [...] That is really important"

The following interview question asked whether or not the communities felt any benefit from the forest being certified. As one interviewee commented "community issues are at the forefront because [Westwind is] a not-for-profit community organization". Interview results showed that the local communities felt a limited benefit from certification (3). It has lead to more trust between the communities and the forest industry (2). All the participants mentioned that

certification could have positive impacts on communities; however one person did mention that because of the downturn in the industry, certification may not have a positive impact on communities in the midst of an economic recession.

In terms of awareness of the public about certification, there continues to be a lack of knowledge about FSC certification in this case study as well. Some believed that a limited number of people understood what FSC was and that the French/Severn forest was certified (3): "Many do [know], because the general manager has meetings and promotional stuff. But 98 percent don't. People are more worried about tourism than forestry". Westwind has been very good at promoting itself, and has received media attention, including multiple newspaper articles and discussions in a few research papers and NGO publications (Clark 2007, Collier, Parfitt and Wollard 2002, Harries 2002, Tan 2003). However, five out of the seven respondents thought that lack of awareness of certification was still prevalent, or did not know.

The first section of the questionnaire examined statements on certification and the social aspects of FSC. Two statements addressed issues of community: whether certification had influenced community stability and community well-being in a positive way, and whether certification lead to more equitable distribution of costs and benefits between the forest industry and local communities. Respondents "neither agreed nor disagreed" with these two statements. However, when rating the importance of community rights and community well-being, it was ranked as an "important" social issue.

6.3.3 Sustainable Forest Management and Social Sustainability

Does certification push an operator towards sustainable forest management? According to the Westwind respondents it does not. Six out of seven disagreed with this statement; three stated that Ontario regulations take care of SFM, and the other three thought Westwind was practicing SFM before certification. One person believed that certification did challenge staff to better themselves and in turn this improved forest management practices:

> "FSC challenges you to say 'well prove to me that you are sustainable'. So it's much more challenging to foresters to answer that question than just sit and answer a government question"

The response to the same question regarding social sustainability received more positive responses. Many thought that certification could aid in achieving social sustainability in forestry (5), if at least in a limited way.

A theme that has resounded in many responses is the idea that if certification can improve forest management and lead to tangible market benefits then it could affect the well-being of communities, First Nations group, create new employment opportunities and therefore lead to social sustainability. Other responses focused on how certification could lead to greater awareness of the issues of social sustainability and better discussion of these: "I think it can just because of the profile of FSC. If you can get the message out there I think people will feel more comfortable and I'm not sure they'll buy FSC but they'll recognize it". Nonetheless, not all agreed that certification could impact social sustainability. Two participants did not have the knowledge to answer the question, and one

individual believed that certification was not useful in implementing social sustainability because of the strength of Ontario forestry regulations.

6.3.4 Impact on First Nation Issues

The Westwind forest management unit overlaps with the traditional lands of eight First Nations, and there are also six Aboriginal communities within the forest district (SGS Qualifor 2002). These communities and groups have historically not been very involved in forest management or planning, but have recently expressed interest in forest values, planning and employment opportunities from forestry (SGS Qualifor 2002).

Previous research on Westwind's relationship with First Nations and the certification process found that First Nations "were not adequately or meaningfully consulted" (Tan 2003). As a result of past oversights and First Nations current interest in forest management, certification did benefit Westwind in improving their relationship with First Nations.

Westwind's board of directors has, in the past, been comprised of four community members and three industry representatives (SGS Qualifor 2002). But one of the major developments as a result of certification was the addition of a First Nations representative to the board of directors. Four participants talked about this as an important certification impact. One outlook on the changes from certification states that not only did the board of directors add a First Nation representative, but they also changed their perspective on these issues: "I think FSC helped raise the consciousness of the board of directors and say "Look at all the First Nation stuff in here, how are we dealing with this stuff?""

It was the general opinion of most participants that FSC certification did have an impact on Westwind's relationship with First Nations groups (7). They might have been doing some of these things pre-certification, but FSC has persuaded them to do a bit more:

> "We were working with First Nation communities, the FSC process lead us into better relations due to a common goal of sustainable management [...] We probably would have done that anyways, but certification gave us a bigger push"

Some also thought that certification guided Westwind and its operators into a better relationship with First Nations (2), and that it resulted in greater efforts to involve First Nations in forest management planning (2). Only one person thought that certification did not impact First Nations relationships due to the strength of Ontario regulations and the FMP process; one other person did not know.

When ranking the importance of social issues in the questionnaire, opinions were mixed on indigenous rights and recognition of indigenous culture: half thought it was an "important" social issue, and the other half thought it was "very important". Participants also "agreed" that FSC certification had recognized and respected the rights of indigenous peoples.

Two CARs from the certification assessment related to First Nations issues. Both of these issues were resolved in order to receive the certification certificate. The first condition stated:

> "There is no strategic plan as to how First Nations will be included in forest management. There is no documented consent from First Nations for forest management operations within their traditional lands. First Nations lack capacity and information to participate effectively in the process" (SGS Qualifor 2000: 34).

The second condition also related to strategic planning: this time of First Nation capacity and employment opportunities. As a result of these conditions, Westwind did develop strategic plans to address these issues with the participation of First Nation groups (SGS Qualifor 2000).

6.3.5 Impact on Employee Issues

When employees are treated fairly and with respect, they treat the resource in a similar fashion which is why employee rights are an essential part of sustainable forest management (Bowling 2000). However, certification has not seemed to positively impact employee rights in this case study. Two participants thought that no changes had occurred due to certification. Ontario regulations regarding employee rights were the principle influence affecting these.

Another two participants thought certification had actually negatively impacted employee rights and treatment of employees: "It has put more stress on our SFL to not only meet the requirements of our SFL document but extra work to achieve FSC". More work from certification can lead to more stress and lower morale. However, there were a few examples of positive impact:

> "It help[ed] in the area of pride knowing that [the forest is] recognized by an international body and that the quality of work done here is up to worldwide standards"

The latter participant thought it had helped increase the pride of forest workers. Another thought it helped improve the relationship between employee and employer. While a different interviewee said certification lead to more

discussion about employee related issues: "It's given us something to talk about and work at".

In the questionnaire, employee issues were ranked as an "important" social issue. Participants felt however neutrally about FSC certification's impact to positively effect employee rights and relationships between employer and employee.

In the document review of CARs, one condition related to employee issues. The certification assessment team identified that no strategic plan existed to identify training and employment opportunities for First Nations. A plan was developed within a year in order to keep the FSC certification certificate.

6.3.6 Impact on Public Participation

The permanent population of the area is 77,000; the area is also a very popular tourist destination, and as a result non-industrial uses of the forest, such as recreation, fishing, and boating are significant to the economy (SGS Qualifor 2002). Due to the importance of the forest, and the summer population flux, the public should be made aware and be involved. As one respondent stated:

> "They have to be involved [...] but they are not. They just think 'Here's another government thing' and really don't care. Until the machines show up and 'Oh, you are cutting on this road. I didn't know that'".

Many believed that certification did not offer additional opportunities for the public to be involved (4). Some believed it did (3), although the public was still not interested (2). Furthermore, as was seen from the benefits section above, the public is generally not aware about the FSC certification designation of the

Westwind forest. Therefore, the public would not even be aware of the additional public participation opportunities afforded to them by FSC certification.

In the questionnaire, public participation was rated as the most important social issue, but when asked if certification increased the number of people involved in forest management participants "neither agreed nor disagreed". In the last section of the questionnaire, participants rated the involvement of various groups. Most stakeholder groups were rated as "involved" or "highly involved" in the certification process. The most involved groups were forest companies and government agencies. Groups that were rated overall as "involved" included environmental organizations, local interest groups and forest workers. By far the least involved group was union representatives which received an average response of "mostly uninvolved". Local community members received mixed responses, receiving multiple counts in the three middle options, ranging from "mostly uninvolved" to "involved". From these results, it can be acknowledged that many groups were involved in the initial certification process.

6.3.7 Overall Social Impact

Three out of seven interviewees thought that certification had no overall impact on social issues in forest management for Westwind Forest Stewardship Inc. The other four thought FSC had a limited impact. As one interviewee stated: "I don't think certification really has much influence to go beyond the status quo here". The impact was minimal because the Ontario regulatory system is very strong and Westwind had a strong standard regarding social issues pre-certification.

Some changes that were produced included: increased documentation (1), improved dialogue about social issues (1), improved discussions with communities (2), and an improved relationship with First Nations groups (3). One individual described some of the differences post-certification: "What it has done is encourage the forest industry to try to become more involved [...] It's a different perspective".

In the questionnaire, participants "agreed" that certification has increased the visibility of social issues in forest management and has increased the amount of information available to the general public. These echo the responses obtained during the interviews.

According to the document review, the final two CARs relating to social issues fall into the category of communication and conflict resolution. One stated that social and economic impacts at the forest management unit level needed to be better defined in the forest management plan. The second condition required a less complex public summary of the forest management plan to be released. The resolution of these two conditions leads to a more knowledgeable staff on the social impacts of forestry practices, and a more aware public.

6.4 Westwind Summary

The questionnaire results for Westwind revealed that opinions on statements regarding certification and social issues were generally regarded neutrally. Additionally, in the second section of the questionnaire, all social issues ranked almost equally as "important" and many stakeholder groups were involved in the certification process.

The interview questions revealed that certification was sought after for its market benefits, and these have been felt in limited ways. Unlike the other two case studies, the strong social aspects of FSC actually played a part in the decision to choose this particular certification scheme.

Certification did have impacts, albeit minor ones, on the management of social issues in forestry for Westwind. As one participant explained: "I don't think it has changed the world, but it has changed the attitudes". Some of the more important changes that have occurred as a result of certification have been: the addition of a First Nations representative on the board of directors, stronger community recognition and more discussion and awareness of social issues.

During the certification process Westwind received 11 CARs. Of these five related to social issues, mainly First Nation issues and communication and conflict resolution. Because of their wording, all conditions were categorized as procedural. Therefore, the conditions may or may not have lead to actual on-the-ground changes in forest management practices. But judging from the interview and questionnaire responses, we can assume that slight changes in the consideration of social issues have occurred.

7. DISCUSSION

7.1 Important Themes

The following synthesizes the important themes discussed in the results chapters. The three case studies are compared in their management of the four important social issues of this thesis: community, First Nation and employee rights, and public participation. The second section of the chapter enumerates possible reasons why social change as a result of FSC certification was limited.

7.1.1 Market and Non-Market Benefits

Forest certification was initially designed as a market-based tool, whereby consumers would favour sustainably produced, certified products, and the market would then provide economic incentives for forest operators to maintain certification (Bernstein and Cashore 2001). However, these economic incentives, such as price premiums and access to new markets have not been as profitable as expected (Innes and Hickey 2005, Rametsteiner and Simula 2003).

As Nash (2002) explains, it is not necessarily the consumer who is demanding certified products, but the retailers and supply stores. Large retailers, including well-known ones such as Home Depot and Ikea have changed their business strategies to include the purchase of certified products (Jayasinghe *et al.* 2007). These retailers are searching out certified forest products because it is seen as a way to advertise themselves as being "green" and environmentally friendly. However, neither consumers nor retailers seem willing to pay more for certified forest products (Overdevest and Rickenbach 2006).

For the three cases of this research, the most significant motivator to becoming certified was to seek out market benefits. However, few market benefits have been realized in any of the three case study areas. The most commonly listed benefits included: increased market share, competitive advantage and price premiums. According to most respondents, however, most of these were experienced in a very limited way. Nonetheless, at least one person from every case study pointed out that market advantages were felt more strongly for pulp and paper industries. As explained by interview participants, new lines of FSC paper by Domtar Inc. and Tembec Inc. seem to be driving the demand for FSC-certified pulp wood. Whilst, wood product manufacturing and its many related industries feel very limited market benefits from certification.

When asked about non-market benefits, the majority of respondents from the Algoma case study believed that none existed because the Ontario regulatory system ensures these. Over half of Westwind respondents also believed that non-market benefits were not experienced because these issues were already taken care of pre-FSC. For Nipissing on the other hand, many believed that some non-market benefits had been achieved, including: more First Nation participation and a better relationship, more community recognition, protection from environmental conflict, increased employee moral and more discussion about social issues.

Results from a 2002 intentions survey of forestry operations found that expected or gained non-market benefits included: improved SFM planning or performance, improved community relations, increased employee satisfaction

and pride, improved NGO relations, increased shareholder satisfaction and improved Aboriginal relations (Canadian Sustainable Forestry Certification Coalition 2002). The latter study and other research (Schlaepfer and Elliott 2000, Wilson *et al.* 2001) demonstrate that non-market benefits from certification do exist and are possibly more important than market benefits. Yet, for the case studies in question not many were experienced. The reasons behind the lack of non-market benefits, and impact for other social issues, are explained in the second section of this chapter.

7.1.2 Community Benefits and Awareness

Certification can affect the well-being of the community by potentially providing economic benefits such as sharing of market benefits, environmental benefits such as more wildlife habitat and protection of high conservation value forests, and social benefits, such as consistent employment, and protected recreational values (Maser and Smith 2001). According to Poschen (2001: 100) "certification has clearly helped to advance social justice in forestry" by "putting people back on the map from which they had been swept by environmental and economic interests". Community circumstances can also be affected by certification through increased involvement, sharing of benefits, consistent employment and community recognition.

However, more than half the participants of the Algoma and Nipissing case studies did not believe that certification led to any benefits for the communities, or did not know. On the other hand, all of the Westwind participants thought that the local communities did benefit from certification. The limited

benefits included more trust from the community, more awareness of forestry issues and the possibility that it could lead to more consistent employment and a healthier forest if market benefits further developed.

When asking about local awareness of certification, the most common response was that a limited number of people were aware of it, but that the general public was not. As part of FSC requirements, advertisements and announcements are mandatory one month before the certification process begins, and throughout the certification process stakeholders and interested parties must be contacted (Nussbaum and Simula 2005). However, even with these measures in place the public was not aware. The general public may not be aware because forestry issues probably seem unrelated to their lives. In fact, while seeking out participants for this study, three LCC members from two case studies were contacted, but none fully understood what FSC certification was or the impact it had, and were therefore unable to participate. If LCC members, who are actively involved in forest management, are not knowledgeable about what certification is, then the general public certainly must not be. The lack of knowledge about FSC within the LCC is surprising, but may also be due to participant turnover and sampling error.

7.1.3 Impacts on First Nations Issues

First Nations have an intricate relationship with nature, and their interest in forests in Canada extends to environmental, social, spiritual and economic values (Parson and Prest 2003). Their legal rights to the forest are protected by the Canadian constitution (1982) and land treaties, and as a result forest

management in Canada must reflect these rights (Canadian Council of Forest Ministers 2006).

First Nations involvement and rights in Ontario are provided by the 1994 Crown Forest Sustainability Act within the Forest Management Planning Manual. The manual provides the opportunity for First Nation participation and documentation. Before the commencement of any forest public consultation processes, the preparation of the forest management plan, amendments or the creation of the annual work schedule, each Aboriginal community must be notified, and invited to participate. If Aboriginal communities are interested, a consultative approach is developed to address the needs and involvement of each group. In addition, during the creation of the forest management plan, documents addressing Aboriginal background information, a report on protection of identified Aboriginal values and a summary of Aboriginal involvement are created, with the input of local Aboriginal communities. Each community is also offered a seat on the planning team, or on the local citizens committee (MNR 2004). Ontario's regulations have in-depth clauses for the involvement of First Nations and the preservation of their values.

However, conflict continues to exist. Collier *et al.* (2002: 6) believe that "with governments slow or unwilling to enact adequate policies or legislation on Indigenous Peoples' forest issues, certification can lead to innovations in dealing with Aboriginal and treaty rights, traditional land use and perhaps other key issues". Certification can also be a useful tool in moving unending and frustrating discussions about First Nation rights and land uses away from provincial

governments to someplace new, and when that happens some tangible gains can occur (Collier *et al.* 2002).

Certification systems can have an impact, and FSC is considered to have the strongest standards regarding First Nations among other certification schemes used in Canada (Collier *et al.* 2002). Certification is not expected to solve tenure, land-use or other long standing issues, and is not a substitute for the full government recognition of treaty and Aboriginal rights (Collier *et al.* 2002, Parsons and Prest 2003). However, it is a tool that can be used to potentially strengthen the relationships between the forest industry and First Nation groups. Certification can also reinforce the recognition and protection of treaty rights and Aboriginal values (Bombay 1996).

Positive information has emerged from the literature on forest certification about the potential impact on First Nation groups and communities. Certification systems can strengthen the recognition and protection of Aboriginal and treaty rights and ensure Aboriginal participation and the inclusion of Aboriginal values in forest management (Bombay 1996, Collier *et al.* 2002). Certification can also be used to create business and economic opportunities and involve First Nations in monitoring (Bombay 1996).

However, the Algoma case study was an exception among the case studies. Based on the certification assessment report, CARs, and interview responses, this SFL seemed to have the most tenuous relationship with First Nations groups. When study participants were asked if certification had impacted First Nation issues the overwhelming response was that it had no effect.

However, four CARs related to First Nation issues could indicate otherwise. These CARS required change within a year or two of the initial certification assessment for Algoma to maintain its certification status. However, these changes were not acknowledged by any participants. Perhaps economic issues and the hardships this area has been experiencing are considered more important at this point in time. Or, the complicated relationship with First Nation groups is not a topic that Algoma participants wished to discuss in detail. A strenuous relationship with First Nations is probably not a subject matter that participants wished to advertise. Perhaps participants did not wish to further strain an already difficult relationship.

The most change with regards to First Nation issues occurred for Westwind Forest Stewardship Inc. They added a First Nation representative to their board of directors and went to greater lengths to involve First Nations in forest management. Most respondents recognized these changes and attributed them to the acquisition of FSC certification.

Most Nipissing participants also acknowledged that certification had an impact on First Nation issues for this forest management unit. Certification lead to greater efforts to involve First Nations, initiated more documentation about this issue and reinforced an already good working relationship. As one Nipissing participant explained:

> "[FSC provides] an approach to reducing pretty complicated issues around First Nations and saying, we want to be good neighbours here. So reaching out to the First Nations and saying "sit around the planning team for a forest management plan. FSC was as much a validation as well as identifying some things they needed to work on"

While certification did improve representation, participation and working relationships in many of the case studies it did not lead to larger, more fundamental changes such as improving access, or more employment or economic opportunities.

7.1.4 Impacts on Employee Issues

In countries such as Canada, forestry remains one the main sectors of economic activity (Bowling 2000). Even in areas where forestry is not the main economic driver, a small number of forestry jobs can create employment and income in downstream industries such as manufacturing and services. A single forest industry job generates 1.7 indirect or induced jobs in other sectors (Canadian Council of Forest Ministers 2006). As explained by Higman *et al.* (1999), conditions of employment include all aspects of the relationship between the employer and employee including:

- Wages and benefits
- Rights of representation and negotiation
- Health and safety provisions
- Facilities and services for staff
- Training and skills development
- Opportunities for equity and profit sharing

The FSC certification standard addresses all these issues in principles four and five. However, according to the results of this research, employee issues remained untouched by certification for the three case studies. Most of the participants agreed that certification did not positively affect employee rights or relationships. All of Algoma's respondents thought that certification had no effect on these issues. Nipissing and Westwind's participants mentioned a few positive

impacts of FSC certification, including more discussion about employee issues, and increased pride or morale. However, the latter two case studies also had three participants in total mention that certification decreased morale because of the added stress and workload associated with certification.

The lack of change for this social issue was attributed to a strong standard pre-certification, and the strength of regulations regarding employee issues. Employee issues for forestry workers in Ontario are guided by the Occupational Health and Safety Act (1990) and the Employment Standards Act (2000). The latter acts were considered rigorous enough, according to most participants, that certification did not create an impact. In the Nipissing and Westwind cases some changes were enumerated, indicating that FSC principles four and five regarding employee rights can create changes despite the strength of Ontario's regulatory system.

7.1.5 Impact on Public Participation

Most of the forests managed for economic gain in Canada are on public land. Therefore it is essential that certification schemes used in Canada involve the public, communities and First Nations in order to include their views and values, and ensure that there is an economic benefit at the local level (Nash 2002).

Forest certification is an added benefit to the already established public participation mechanisms in forest management in Ontario because it provides yet another opportunity for the public to be involved. Public participation in forest certification is needed at many steps (see table 11), but of interest for this

research was the participation process as part of the initial certification assessment and then at the annual at the certification audit.

Table 12 – Public Participation in Forest Certification Schemes	
During the development of the standard	-Provides input of technical information -Provides input into the decision on how to deal with gaps in information -Provides input into the decision on how to balance conflicting requirements -Ensures that the standard has support
As a requirement of the standard to be carried out by the forest organization	-Provides the basis for interaction with local communities and stakeholders -Promotes equity and empowerment, thus contributing to sustainable development -Contributes to the management of social impacts -Provides input into the process of balancing conflicting social, economic and environmental needs which the forest managers may need to undertake
As part of the certification process	-Provides input into the interpretation of the standard for the specific organization being certified -Provides the assessment team with information on the organization being assessed. -Provides objective evidence on compliance or non-compliance with requirements relating to the interaction with consultees -Contributes to the credibility of the final decision
As part of the accreditation process	-Provides the accreditation body with information and objective evidence relating to the compliance certification body -Contributes to the credibility of the accreditation process

(Nussbaum and Simula 2005)

The FSC requirement of public participation and public awareness includes the following steps (Nussbaum and Simula 2005):

- The certifying body must publish announcements of plans for a pending certification to stakeholders 30 days in advance of the certification audit

- Consultation processes must be initiated four weeks prior to the main assessment and extensive consultation must involve stakeholders, experts and interested parties.
- The award of certification requires a summarized report by the certifying body that must be made available to the public. The summary must include an explanation of how stakeholder's comments were considered and a list of any conditions' on which the certificate has been granted.

In principle, the one month notice of certification allows the public to become aware of this new process, and extensive consultations gives the opportunity for more people to understand what certification is. The certifying body contacts a large number of stakeholders, and the list of contacted groups is often listed in the public certification assessment report. Participation opportunities include community meetings, interviews, and surveys (Nussbaum and Simula 2005). All of these requirements allow for a transparent and equitable process.

Public participation in certification processes consists mainly of consultation. Consultation is considered more appropriate since it does not jeopardize the independence of the certification process, and allows decision makers to consider the public's knowledge and interests in the creation of the certification assessment report (Nussbaum and Simula 2005). Information gathered during the consultation process can also potentially lead to correction action requests (CARs) or recommendations (Nussbaum *et al.* 2005)

Results from the interviews revealed that overall participants thought that certification did not create additional opportunities for the public to be involved in forest management, and if it did, people were not interested in participating. There are many reasons why the public is either uninterested or unable to be

involved. Diduck and Sinclair (2002) identify five categories of barriers to public involvement, including: information deficiencies, lack of resources, opportunities to participate, lack of impact on ultimate decisions, and individual motivation and interest. Interview questions did not specifically address this issue. However, based on information from the participants, information deficiencies may play an important role in the lack of interest in FSC certification participation opportunities for the three case studies. As mentioned above, when asked about awareness of the public about FSC certification respondents strongly believed that the general public was not aware. If the public was not aware about the certification designation of their local forest they would most likely also not be aware of the additional opportunities for them to participate (table 11). As Bass (2003) explains, another possibility for the lack of participation may be that transparency and information flow were good enough to create fewer demands for participation. In addition, interview participants and forestry stakeholders might as well be lacking in awareness, and did not know of the consultation during the initial certification process and during the audits and therefore did not recognize these as additional participation opportunities.

Only in the Nipissing case study did four participants acknowledge that the FSC established additional public participation opportunities, through the mailouts, advertisements and interviews of the initial certification process, and through the annual certification audits. As one individual from this case study explained: "The auditors were quite good at engaging and contacting people. It

also gives people an annual opportunity at the surveillance audit to voice their concern".

<u>7.1.6 Overall Social Impact</u>

As was mentioned in the literature review, many consider FSC to have the strongest overall standard amongst the other certification standards in existence. Furthermore, FSC also has the most stringent social standards when compared with competing schemes (FERN 2004, Gulbrandsen 2004). In its comparison of certification schemes, FERN (2004) found FSC to be transparent, benefiting from NGO support, with suitable consultation processes and the most advanced in recognition of forest people's and Indigenous groups' rights.

The general response when asked about the overall impacts that certification may have had on social issues was that there was limited effect. However, some small changes were cited including improved understanding and dialogue about social issues, improved relationship with First Nations and improved dialogue with communities.

It is difficult to compare the results of these studies to other research since most reporting of certification impacts is anecdotal and does not consider pre-certification situations. The general exception to this statement is research done with corrective action requests. CAR studies examine before and after situations of forest management units. Studies by Newsom and Hewitt (2005), Newsom *et al.* (2005), Spilsbury (2005) and Thornber (1999) found that certification does in fact change the way forestry operations address environmental, social, economic and forest management issues. With regards to social issues, Newsom and

Hewitt (2005) discovered that social issues were deficient in 56 percent of forestry operations seeking FSC certification in developed countries. The most common CARs were communication and conflict resolution, worker training and safety (Newsom and Hewitt 2005). Another similar study by Newsom *et al.* (2005) of FSC certificates in the United States found the most commonly issued social CARs related to special cultural sites and worker safety.

In developed countries, CARs in these studies tended to be focused more strongly on environmental and management issues; while social issues were less frequently addressed than in developing countries (Newsom and Hewitt 2005, Spilsbury 2005, Thornber 1999). Yet, as stated by Spilsbury (2005: 84) "relatively small improvements to certification standards are significant because they apply over very large areas of forests".

Results from this research show similar trends. Social issues were affected in slight ways. The areas of change were different than those enumerated in pervious research. In this study, CAR and interview results indicated that First Nation and community rights and involvement were the most changed as a result of certification. However, areas of change can be affected by geographical and jurisdictional changes in policy and legislation. Nonetheless, this study and those mentioned above do indicate that social change from FSC certification in developed countries is possible; although not substantial.

In addition to these changes, forest certification can also impact the documentation related to forest management. At least one participant from every

case study stated that certification led to increased documentation or the creation

of more formal agreements. As one respondent from the Westwind case study

stated:

> "Certification for us has been mainly about documenting. Certification is forcing us to document how we are going how we are going to reduce the use of herbicides, document our progress towards doing this or that. So we're already doing that, we're not changing our forest management approach. That documentation that we are doing now, we wouldn't have been doing. But [documentation] can be a tool. It certainly leads us to more specific targets in the forest management plan. Is that a good thing? Ya, I think it is."

Increased documentation may seem tedious to staff. But the creation of

more formal agreements and strategies leads to long-term arrangements

between the forest industry and shareholder groups. Many of the SFL general

managers of the case studies in question were praised by participants for their

good work, commitment and innovation. Nevertheless, these general managers

will not be working with their current SFLs forever and often upon leaving, the

agreements and relationships may disintegrate with their departure. As one

participant stated:

> "If [the general manager] left tomorrow and if we didn't have FSC in place, if we didn't have a formal agreement in place then whatever working agreements they had had over the last ten years would leave with the general manager"

As another participant asserted: "certification gets rid of that dependence

on personality". Agreements are documented and relationships remain stable in

spite of who the general manager may be.

7.2 Factors Impeding Significant Social Change

7.2.1 Strength of Forestry Regulations in Ontario

Forest management in Ontario is governed by the Crown Forest Sustainability Act (CFSA). The CFSA is the enabling legislation which provides the regulations for forest planning, information, operations, licensing, trust funds, processing facilities, enforcement and licensing (MNR 2007). This act is designed to take into consideration all forest-based values, and includes four planning manuals:

- The *Forest Management Planning Manual* gives direction for all aspects of forest management on Crown lands in Ontario. Forest management plans provide the authority to carry out activities including road construction, timber harvesting, forest renewal and protection treatments, wildlife habitat management, sensitive values protection, surveys and evaluation

- The *Forest Operations and Silviculture Manual* provides guidance and direction for the conduct of operations authorized by approved forest management plans.

- The *Scaling Manual* provides direction for the measurement of all timber harvested from Crown land in Ontario. It provides the means through which Ontario collects revenue from the disposition of Crown timber.

- The *Forest Information Manual* provides guidance for information management that supports forest management planning and operations. (MNR 1995)

Ontario's regulations were quoted numerous times by respondents as the reason behind certification's lack of impact on social issues in Ontario. As one individual from the Algoma case stated:

> "I think that in Ontario the regulatory process and the forest policies that we work under directly from the government is the driving force behind our social approach and that matches the FSC requirements very well"

Guided by the legislation, many individuals from all case studies considered themselves to have high standards, and therefore remained unaffected by certification: "I guess you could say that it wasn't hard to certify this forest because they were already doing a lot of the things that met the requirements of certification". Some literature declares that FSC certification goes beyond the legal mandate of governments (Collier *et al.* 2002, Poschen 2001), even in developed countries, and a few participants articulated similar opinions: "FSC supplements the regulatory regime and holds the manager to a higher standard. It's a tougher standard because portions of it are more subjective". However, these opinions were much less frequent than the belief that Ontario forestry regulations guide the social conduct of the industry.

Certification was originally developed as an incentive to increase management standards in developing countries. Yet, most certified forests occur in developed countries, such as Canada, the United States and European countries where forest management is already highly regulated. Even the Minister of Natural Resources, David Ramsay stated: "Ontario manages its forests sustainably and we've got a very strict system in place for responsible forest management [...] that means Ontario's forest industry is well-positioned to meet any certification standard" (MNR 2004B). Most interview participants agreed, and one individual stated: "It is my view that with the FMP process and associated policies in Ontario, we are already about 80% of the way there to FSC certification". Another said:

"Anyone that thrusts their hand in the air and says "I'd like to be FSC certified" is relatively in line with the FSC standards", "So, there weren't a lot of fundamental changes at Nipissing after FSC certification"

Ontario does have relatively strong forest policies. According to a study by Cashore and McDermott (2004), Ontario scored an eight out of ten when considering the stringency of regulations across Canada and the United States. Alberta and British Columbia were the only jurisdictions to have tougher regulations than Ontario according to the report (Cashore and McDermott 2004). This study used the following factors to measure the stringency of forestry regulations in each jurisdiction: ownership, clearcutting, annual allowable cut, reforestation, enforcement and forest certification.

FSC certification is one set of universal standards, principles and criteria that apply worldwide. Regional standards are developed to help FSC tackle specific issues in different areas. Yet, perhaps, due to the strength of provincial regulations in Ontario, the regional standard should have been more rigorous. Certification is meant to be an achievement, yet as confirmed by participants within the three case studies, it was not difficult to obtain. The strength of Ontario's regulations is one of the reasons why FSC certification in the three case studies in particular did not significantly impact social issues.

7.2.2 Downturn in the Forestry Sector

Employment in the forest sector remains an important source of sustainable economic well-being for Canadians and for resource-dependent communities. However, forestry employment is often unstable, and has been

declining in areas such as logging, forestry, and paper and allied products since 2004 (Canadian Council of Forest Ministers 2006). In fact, in the last five years, the Canadian forest industry has experienced significant change. A series of domestic, market and trade forces have been converging on the forestry sector, creating what some observers have called a "perfect storm" (table 12) (Natural Resources Canada 2006).

Table 13 – Forces Driving Change in Canadian Forestry	
Domestic Forces	• Changes in regional fibre supply • New technology • Higher energy and other input costs
Market Forces	• Shifting demand for traditional commodities • Changes in export markets • More low-cost competitors on the global scene
Trade Forces	• Softwood lumber dispute • Stronger Canadian dollar

(Natural Resources Canada 2006)

The combination of these forces is drastically affecting the competitiveness of the Canadian forest industry, and threatening the continued economic and social well-being of forest communities and forest workers. As Natural Resources Canada (2006: 50) explains in its annual State of the Forest report, for the forest industry "costs are rising, demand is shifting, mills are closing, firms are restructuring and forest communities are caught up in the tide".

From April 2005 to March 2006, across Canada, 46 mills shut down due to the downturn in the forestry economy. Of these, 15 closures occurred within Ontario (Natural Resources Canada 2006). During the course of this research, two mills from the Algoma case study suffered closures and bankruptcies. Both have rebounded thanks to financial help of new buyers and the municipal

government. One force is stronger in Ontario than in any other province: the cost of energy. In Ontario, energy costs have risen sharply. Presently energy costs consist of 30 to 40 percent of the cost of getting wood from the forest to the mill (Natural Resources Canada 2006). This drastically affects the abilities of Ontario forestry operations to compete nationally and internationally. Additionally, Northern Ontario is home to many single industry towns where the closure of a single mill can severely affect the sustainability of the community.

In 2004, Ontario's Minister of Natural Resources announced that by the end of 2007, all SFL's would be required to be certified under an accepted performance-based standard. Certification was required in order to "help ensure the Ontario forest industry is given preference in export markets, and will contribute to a more innovative and thriving economy" (MNR 2004B). The decision may have been for the good of the forest industry, and can be viewed internationally as another indication of the high standard of forest management in Ontario. However, with the downturn of the industry, an expensive commitment such as certification, without any financial help or incentives from the Province creates another economic burden for an industry already under pressure. FSC certification is not a cheap endeavour. According to Clergue Forest Management Inc. the initial certification process cost more than $100,000, with annual review audits running between $15,000 and $30,000 (Ross 2005). In addition, the strength of certification is its voluntary nature. Making certification mandatory leaves it vulnerable to all the problems associated with regulations such as corruption, and inflexibility to changing needs (Bass 2003).

In over half of all the interviews, comments were made about the state of the industry. One individual expressed concerns regarding certification and the current status of forestry in Ontario:

"We feel the benefits [of certification] will outweigh the extra costs in the market place that we are in. Certainly, some of the players that participated are not getting the same opportunities that we are and I can understand that they would be concerned about the cost, because today, obviously, our industry is going through one of its more difficult times in history and because of that every cost has to be looked at".

Despite the industry difficulties, the previous statement still represents a positive outlook on certification. However, as another participant stated: "Now the economic health of the forest sector is so poor – no matter how well FSC is doing you can't trump these types of downward pressures".

Perhaps the lack of impact that certification has had on social issues in these case studies can be partially attributed to the current decline in forestry. SFL's are struggling financially and less effort may be put into strengthening relationships with stakeholders. One participant explained: "I think there is a very strong case to be made that strong communities persist when economic structure is strong. Strong communities do not exist in a weak economy, they just don't".

7.2.3 Certification Weaknesses

Forest certification has been described as a "remarkable social, economic and historical phenomenon"; it has become an integral tool for addressing forestry issues, providing accountability for good forest management and has attracted worldwide attention (Fanzeres and Vogt 2000: 11). However, it is not without limitations and drawbacks. Criticism of forest certification is not frequent;

however, a few articles have addressed some of the problems that can be associated with certification.

Meidinger (2003) believes that certification can sometimes suffer from corruption; specifically that certifier's judgement can be influenced and biased. Certain social criteria are difficult to assess, and this increases the likelihood of different interpretations depending on the individual auditors (Gulbrandsen 2004).

Certifiers are in business as well. They are hired by forest operations and are under certain pressures to satisfy them. Certifiers are placed in a difficult position; "they are, in effect, public fiduciaries employed by the very private actors whose activities they are supposed to assess and monitor" (Meidinger 2003: 313). Certifying organizations have a vested interest in ensuring successful audit outcomes, and therefore they may not be as independent as they should be (Gulbrandsen 2004). Some believe that certification audits may suffer from "creative compliance" whereby rules are worked around and not completely conformed to (Meidinger 2003). In subjective areas such as the social component of forest certification there is perhaps some of this "creative compliance" occurring.

The three case studies of this research were certified by three different organizations: the FSC certification assessment for the Algoma forest was done by Smartwood, Nipissing's evaluation was carried out by Scientific Certification Systems and Westwind's certification assessment was prepared by Qualifor Programme. Two other companies also perform FSC audits in Canada: KPMG Forest Certification Services Inc., and Soil Association – Woodmark. They are in

competition with each other, and therefore competing in pricing, and as suggested by a few participants, some can possibly be known as performing easier audits than others. This may be a factor in why some case studies seemed to have less social changes than others.

7.3 Discussion Summary

As a result of FSC certification, minimal changes were felt in the four social issues of concern: public participation, employee issues, First Nation rights and relationships and community rights and well-being.

The Nipissing and Westwind case study participants seemed to report or attribute more changes to FSC certification than the Algoma case study. The latter has gone through a difficult economic recession, with two of its six shareholders experiencing temporary shut-downs or bankruptcies. Certification might be seen as another financial burden and attitudes regarding certification might not be as positive as in other regions of Ontario.

Both the Nipissing and Westwind case studies had one or two "champions" of certification whose high opinion of FSC might have skewed results to show more of a transformation than actually occurred. These types of participants had very positive opinions about certification and believed it had created change. The Algoma case study did not have any "champions" of certification. In fact, the Algoma case study had more participants with quite negative views of certification than any other location, which might have also affected the results.

Nevertheless, some minor changes in the treatment of social issues can be attributed to certification and reoccurred in multiple case studies. These include: a better First Nation relationship or more First Nation participation, community recognition, increased documentation or formal agreements and more dialogue about social issues in general.

Certainly, there are many factors that limited the amount of change possible. Ontario's forestry regulations were cited in almost every single interview question as the guiding force in forestry today. The strength of these has created SFL's with strong standards; 11 out of 19 participants explicitly mentioned that they had strong social standards prior to FSC and that certification only implemented minor changes. In addition, the forest sector in Canada has been suffering greatly in the past few years and a focus on regaining economic stability may have put social issues on the back burner. Lastly, it is also possible that some of the downfalls of certification, such as creative compliance, and biases, have led to the social principles and criteria of FSC not being implemented to their fullest extent. All of these factors have likely had some impact on the lack of real social changes from certification experienced in the Algoma, Nipissing and Westwind case studies.

In reality, social changes occur often at a higher level than the forest management unit. Social changes such as increased participation or changes in employee related policy can occur provincially and therefore the impact that FSC can have on a small scale is limited. In addition, no real significant transformations occur because of a single process. Social changes in forest

management will be impacted by certification in combination with other processes such as SFM and provincial regulations.

8. CONCLUSION

8.1 Summary

Drawing from the principles of integrated resource management and sustainable forest management, forest certification developed as a voluntary, market-based tool whereby forest management is evaluated against a set of standards (Bass and Simula 1999).

Integrated resource management is characterized as comprehensive, interconnective, strategic and goal-oriented. Sustainable forest management expanded on this management paradigm by integrating multiple dimensions of sustainability. Forest certification pulled from both of these management approaches, and in turn, incorporated environmental, social and economic principles into its standards in an attempt to deal with a forest system's interconnections and be holistic.

However, both IRM and SFM suffer from a lack of clear understanding as to how these broad concepts are properly applied on-the-ground (Margerum and Born 1995, REF). This difficulty in implementation is an issues that certification can help resolve. Certification translates the objectives of IRM and SFM into quantifiable principles, criteria, and indicators (Vallejo and Hauselmann 2000). In turn, certification can help transform complex forestry problems, such as complicated social issues, into manageable units of information.

This research project focused on the social component of Forest Stewardship Council forest certification using a multiple case study approach. The overall goal was to examine how and to what extent social issues were

addressed within three FSC certified forests in Ontario through a survey of elites. Other objectives included identifying opinions and attitudes regarding social issues within certification, and the details surrounding four main social issues. Lastly, the project sought to understand and describe the impacts of social issues in certification on forest management practices within Ontario.

Within the forest certification literature, few studies examined the on-the-ground impact of certification, especially regarding social issues. When social issues were addressed they were done in an incomplete fashion (Poschen 2001). Therefore this study was developed in order to provide a more complete account of social issues in FSC certification.

The questionnaire revealed that overall opinions and attitudes regarding certification were positive and statements regarding social issues in certification were ranked highly on the Likert scales. Respondents seemed to believe that certification could and has had an impact on forest management, that social issues are important and that most stakeholder groups were involved in the initial certification assessment. However, the interviews revealed something different. Most participants believed that FSC certification and its associated social principles and criteria lead to only minor changes. The certification assessments and the resulting corrective action requests (CARs) corroborate the interview results.

In the three case studies, community rights and well-being were only affected in very limited ways. In fact, the local communities were considered to be generally unaware of the FSC certification of the forest. Certification lead to

greater efforts to involve First Nation groups and created more representative relationships. Employee rights were improved in limited ways, such as improved discussion; but these also deteriorated as certification created more stress and lower morale. Finally, public participation was also affected in very moderate ways. Added opportunities, including at the annual audit, increased mail outs and interviews were created but the public was generally not interested in participating.

Many interviewees expressed uncertainty regarding the impact of forest certification on specific social issues. In each interview question there was at least one respondent who could not answer. This may be due to lack of knowledge. Stakeholders may be focused on certain issues of forest management and may not be fully informed on every aspect.

Some places, such as Nipissing and Westwind, experienced more positive changes as a result of certification. This may be due to the timing of their initial certification. They were certified in 2003 and 2002, respectively, which was prior to the economic slowdown that is currently affecting forestry. Therefore, these two forest management units may have had more time and effort to concentrate on social issues. On the other hand, the Algoma case study was certified in 2005 in the midst of the economic recession in forestry. Attention and energy might have been more strongly centered on economic and financial issues.

Other factors such as the strength of current Ontario forestry regulations, and potential creative compliance with certification standards limited the amount of social change possible as a result of certification. The individual cause of the

lack of impact cannot be isolated, but the fact remains that most of the stated benefits of certification (table 6) where certainly not felt in any significant way in these case studies.

As seen from the results chapters, market benefits were also minimal. This raises the question as to why certification continues to grow so rapidly if market and non-market benefits remain largely elusive. There are many factors that may be contributing to certification's continued growth. In Ontario due to a commitment made by the Minster of Natural Resources in 2004, all SFL's must become certified by the end of 2007. Within Canada, with the growing popularity of certification, many forestry operations may fear losing access to markets if they are not certified. Also, perhaps the hype surrounding certification may be bigger than the actual on-the-ground results.

The overall conclusion was that FSC certification had only a limited impact on social issues in the three case studies. FSC did not make any fundamental changes although it did improve representation, discussion of social issues and relationships with stakeholder groups.

8.2 Suggestions for Future Research

No research is all inclusive, and this study, like most others, raises additional questions. This research examined the potential impact of certification on social matters. However other research is required to understand the impact that FSC certification may have on the environment and the economy.

Additionally, this study explored only one certification scheme, the FSC. Yet, within Canada other schemes are in use, including CSA and SFI, and their

impacts on social issues should also be examined. Many consider FSC to have the strongest social standards amongst other schemes. Therefore, it would be fascinating to study the social impact of these other schemes. Furthermore, a comparative analysis of FSC and other forest certification schemes would provide a more comprehensive picture of the impact of certification across the province and across the social, economic and ecological components of sustainability.

Moreover, due to outside forces, such as the downturn in the market, it is unknown whether the lack of social change in the three cases of this study is due to the economy or if the FSC social principles and criteria are simply too lax for Ontario. Further study of social components of FSC in Ontario would be needed to identify the actual causes behind the lack of social change in FSC certified forests.

Market benefits continue to be minimal for the three case studies. Further research may be necessary to investigate whether or not the situation is similar in forestry operations across Canada. If certification is to remain economically viable, the issue of market benefits needs to be addressed.

There are also lessons to be taken from the methods and methodology of this research that could be used to create a more robust research design. The use of telephone interviews could have impaired trust and openness between the interviewer and participants. Future research could use in person interviews, focus groups and meeting attendance as a way to increase rapport.

A limitation of this research was the lack of participants from the general public, local citizens committees, First Nation groups, or local interest groups. The lack of input from these stakeholder groups could have created a bit of bias in the research. Most of the groups were not represented in this research due to lack of knowledge or interest. However, these groups could be approached in a different manner, and could hold a different type of knowledge that could have been useful and of significance to the results.

The number of certified forests continued to grow at an incredible rate, yet as the interview results showed, there seems be a lack of clear understanding of certification amongst the general public. Research is needed to explore in more detail the general awareness about certification. Without awareness or understanding, the general public will not change its purchasing habits and the entire intention of the forest certification movement will not be successful.

Finally, with the deadline for mandatory certification of Ontario SFL's looming at the end of 2007, it would be interesting to see how many SFL's choose FSC over the other certification schemes. FSC has the strongest standard, socially and otherwise. But, given the choice of other more lax certification standards such as CSA and SFI many forest management units might choose the latter. Also, the mandatory institution of forest certification changes the basic parameters of certification as a "voluntary market-based tool" and this could affect how certification is perceived and applied. Research post-2007 could give insight to these questions.

8.3 Implications and Recommendations

The results of this study showed that Ontario's forestry regulations deal with most of the social issues addressed by FSC certification. Owing to external forces, such as the downturn in the market, it is unknown whether the root problem is the economy, or if the FSC social principles and criteria are simply not strong enough to overcome the strength of the existing regulatory system in Ontario.

This research contributes to academic literature on the topic by identifying and quantifying the changes that are possible on social issues as a result of FSC certification in Ontario. This project also highlights potential deficiencies in FSC policies as they relate to developed countries.

The results from this study will be forwarded to FSC Canada in hopes that the social component can be strengthened so that certification could have a true impact on social issues and forestry stakeholders. Nonetheless, FSC certification did have a slight impact, and created better working relationships and created a more open dialogue about social issues.

At times, the social component of SFM and certification seemed extraneous to the management of a forest according to interview result. This may be especially true for foresters and employees who previously worked under the maximum sustained yield management paradigm of the 1950's to the early 1980's. This previous forest management paradigm focused on economic issues with social issues clearly in the background. However, with SFM and the growth

of forest certification, it is clear that the social component of sustainability must be taken more seriously by foresters, the general public and certification auditors.

As mentioned in the discussion, forest auditors and their associated companies are in a difficult situation. They are hired to independently assess a forest, but they also have a vested interest in maintaining satisfied customers. It is suggested that perhaps certification auditors be hired by a third-party, such as the local citizen's committees, in order to be truly independent. Certification prides itself on being autonomous from normal governing bodies, such as provincial and federal governments. However, the questionable relationship between forest certification audit companies and the forestry companies that hire them needs to be resolved if forest certification is to remain credible (Meidinger 2003).

Another significant recommendation from this study relates to issues of awareness of the general public and customers. Once the initial certification process is complete the forest operation is under no responsibility to continue advertisements about FSC. Yet, if the public is not conscious of certification then they will also not likely be aware of the public participation opportunities associated with it. Lack of consumer awareness about certification will also result in the inability to distinguish certified labels and logos when purchasing forest products. If the certified products are unable to be sold then certification does not have an impact on markets, and the forest industry will not financially benefit. Therefore, it is an SFL's best interest to advertise and get the word out on what certification is, and the benefits of buying certified products. More needs

to be done in terms of advertising by certification companies, forestry companies and SFLs if FSC certification is to become more well-known. More awareness has the potential to benefit everyone involved.

Forest certification auditors should take the assessment of social issues more seriously and award CARs as issues arise. On the other hand, forest management units should actually resolve the social CARs, and not simply by documentation. By strengthening stakeholder relationships through certification, future conflict can potentially be avoided.

The Nipissing and Westwind cases faired well enough in their consideration of social issues but improvement can always be possible. These two SFL's should perhaps review the CARs that were awarded to them and see if additional changes could be made. The Algoma forest, on the other hand, seemed to have a less positive view of social issues and the impact of certification. Again, perhaps a review of socially-related CARs could elucidate issues that could be improved upon. Social issues need to be seen by these case studies as not inferior to economic and environmental issues. If SFM is to completely succeed in Canada, all three dimensions of sustainability need to be equally addressed. But, as Bass and Simula (1999) maintain, certification alone cannot achieve SFM; it can however, play an important complementary role. As Canada's forest industry moves towards SFM, certification can be used, together with policy and regulation to maintain and expand the fair treatment of all issues within forest management.

Canada is a forest nation. The vast expanses of forested landscapes are part of our Canadian identity (Canadian Institute of Forestry 2006). Our forests are also an important setting for recreational activities, an integral part of the spiritual heritage of Aboriginal peoples, provide employment for thousands of workers, and support hundreds of communities (Canadian Institute of Forestry 2006). As Kimmins wrote:

> "Forestry is about people – their needs and desires – and not fundamentally about biophysical issues such as biodiversity and specific ecological conditions. The reason why these and other issues are of pivotal importance in forestry is that we now understand that they are important to sustaining the values and environmental services people want from forests" (Kimmins 2002: 270)

While, in the three case studies of this thesis, FSC certification did not have a strong social impact, certification can certainly create small changes in the treatment of social issues. There are opportunities to improve and FSC can make an impact if it can change and further develop its social standards to represent Ontario's already challenging regulatory system. Perhaps as certification continues to grow and becomes more well-known, then the public can put pressure on certification schemes so that their standards represent the needs of the general public.

APPENDIX A
FSC PRINCIPLES AND CRITERIA RELATING TO SOCIAL ISSUES

Principle #2: Tenure and use rights and responsibilities
Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.

>2.2 Local communities with legal or customary tenure or use rights shall maintain control, to the extent necessary to protect their rights or resources, over forest operations unless they delegate control with free and informed consent to other agencies.

>2.3 Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights. The circumstances and status of any outstanding disputes will be explicitly considered in the certification evaluation. Disputes of substantial magnitude involving a significant number of interests will normally disqualify an operation from being certified.

Principle #3: Indigenous peoples' rights
The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.

>3.1 Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and informed consent to other agencies.

>3.2 Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.

>3.3 Sites of special cultural, ecological, economic or religious significance to indigenous peoples shall be clearly identified in cooperation with such peoples, and recognized and protected by forest managers.

>3.4 Indigenous peoples shall be compensated for the application of their traditional knowledge regarding the use of forest species or management systems in forest operations. This compensation shall be formally agreed upon with their free and informed consent before forest operations commence.

Principle #4: Community relations and worker's rights
Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities.

>4.1 The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services.

>4.2 Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.

>4.3 The rights of workers to organize and voluntarily negotiate with their employers shall be guaranteed as outlined in Conventions 87 and 98 of the International Labour Organisation (ILO).

4.4 Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups (both men and women) directly affected by management operations1.

4.5 Appropriate mechanisms shall be employed for resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources, or livelihoods of local peoples. Measures shall be taken to avoid such loss or damage.

Principle #5: Benefits from the forest

Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.

5.1 Forest management should strive toward economic viability, while taking into account the full environmental, social, and operational costs of production, and ensuring the investments necessary to maintain the ecological productivity of the forest.

5.2 Forest management and marketing operations should encourage the optimal use and local processing of the forest's diversity of products.

5.4 Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.

Questionnaire

The forest stewardship council (FSC) principles and criteria focus on specific social issues such as indigenous rights and recognition of indigenous culture; community rights and community well-being; employee rights and public participation. The following questionnaire will ask questions regarding these. The interview to follow will elaborate on some of the themes from the questionnaire.

Rate the importance of the following statements and how applicable they are to Westwind Forest Stewardship Inc.. Check the box that is most appropriate.

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

Social Issue Statements	1	2	3	4	5
FSC certification has recognized and respected the legal and customary rights of indigenous peoples					
Certification has influenced community stability and community well-being in a positive way					
FSC certification has positively impacted employee rights and the relationship between employer and employee					
Certification has led to a more equitable distribution of costs and benefits of forest management between the owners of the resource, the forestry organization and local communities					
Certification increases the visibility of social issues in forest management					
Certification has increased the number of people involved in forest management					
Certification has increased the amount of information about forest management practices available to the public.					

**Rate the importance of the following social issues on a scale of 1 to 5.
Check the box that is most appropriate.**

1. Very unimportant
2. Unimportant
3. Neither important nor unimportant
4. Important
5. Very important

Social Issues	1	2	3	4	5
Indigenous rights and recognition of indigenous culture					
Community rights and community well-being					
Employee rights					
Public participation					
Other:					

**Rate the involvement of the following groups in the certification process.
Check the box that is most appropriate.**

1. Completely uninvolved
2. Mostly Uninvolved
3. Neither involved nor uninvolved
4. Involved
5. Highly involved

Groups Involved	1	2	3	4	5
Environmental Organizations					
Government agencies					
Local interest groups					
Local community members					
Unions representatives					
Forest workers					
Forest companies					
Other:					

Interview questions

Introductory questions

What was the motivation for Westwind Forest Stewardship Inc. to become certified?

The FSC certification scheme has a much stronger emphasis on social issues than other certification schemes. Did that influence the decision to become certified under FSC?

Benefits

What type of market benefits do you think have been received from certification?

Has Westwind Forest Stewardship Inc. experienced any social, or non-market benefits that are sometimes associated with certification? (Such as improved working conditions, employee morale, recognition of indigenous land claims, improved public participation processes etc...)

Does the local community feel any benefits from the forest being certified?

Forest Management

In what ways do you think certification is a useful tool to achieve sustainable forest management?

Do you believe certification will aid in achieving social sustainability in forestry? If so, why?

Do you think certification has affected Westwind's relationships with First Nations?

Do you believe certification has changed the way employee issues are dealt with? (Including employee morale, working conditions, health and safety issues)

Has certification offered additional opportunities for the public to participate in forest management?

In the questionnaire, you answered that X is the most important social issues for Westwind Forest Stewardship Inc.. Why do you believe that?

Overall, has certification influenced the way Westwind Forest Stewardship Inc. deals with social issues?

APPENDIX C
INTERVIEW QUESTIONS AND RESPONSES

Q.1 What was the motivation for (case study name) to become certified?	Algoma	Nipissing	Westwind	Total
1- Market benefits (market share, price premium)	4	2	7	13
2- Public recognition	1		4	5
3- Verification of good management practices	1	1	1	3
4- Sense of pride / Felt good			2	2
5- Learning tool			1	1
6- Demand for certified products		1		1
7-Tembec's commitment		3	1	4
8- Protection from environmental issues / NGO's	1			1
9- Do not know		1		1

Q.2 Why did (case study name) choose FSC?	Algoma	Nipissing	Westwind	Total
1- Stronger scheme / More credible	1	2	4	7
2- Most accepted by customers and by the market	3	1	1	5
3- Influence of Tembec or Domtar	1	3		4
4- Do not know / Were not involved in that decision	1	2	3	6

Q.3 The FSC certification scheme has a stronger emphasis on social issues than other certification schemes. Did that influence the decision to become certified under FSC?	Algoma	Nipissing	Westwind	Total
1- No (other issues were more important, marketing purposes, relationship with WWF)	4	2	1	7
2- A little bit / FSC was more comprehensive	1		3	4
3- Yes, more socially acceptable / responsible		1	1	2
4- Yes, specifically the FN content			2	2
5- Do not know / Were not involved in that decision		4	1	5

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Q.4 What type of market benefits do you think have been received from certification?	Algoma	Nipissing	Westwind	Total
1- None (lack of awareness, no one wants to pay more)	1		2	3
2- Very limited benefits	1	3	4	8
3- Price premium			2	2
4- Market advantages on the pulp side only	1	1	2	4
5- Increased market share	1		3	4
6- Maintained market share	1			1
7- Competitive advantage	1	1		2
8- More demand		1		1
9- Do not know		1		1

Q.5 Has (case study name) experienced any social, or non-market benefits that are sometimes associated with certification?	Algoma	Nipissing	Westwind	Total
1- None, because of the strength of the Ontario regulatory system	5			5
2- None, because they are already being done		2	4	6
3- More FN participation / Better FN relationship	1	2	3	6
4- More community / industry recognition		2	2	4
5- Increased employee moral		1	1	2
6- Protection against environmental conflicts		1	1	2
7- More involvement in social issues		1		1
8- Do not know		1		1

Q.6 Does the local community feel any benefits from the forest being certified?	Algoma	Nipissing	Westwind	Total
1- No (different reasons)	2	1		3
2- No, because of lack of awareness	1	1		2
3- Limited benefits			3	3
4- More trust, more awareness	1		2	3
5- Healthier forests and better management leads to more consistent employment	1	2	1	4
6- Downturn in the forest industry makes certification irrelevant		1	1	2
7- Extra person to talk to			1	1
8- Don't know		2		2

Q.7 Do you think the local communities are aware that the forest is certified?	Algoma	Nipissing	Westwind	Total
1- No, lack of awareness	2	1	2	5
2- A limited amount of people are aware, but not the general public	2	3	3	8
3- Generally people are aware because of the promotional stuff surrounding FSC		1		1
4- Do not know	1	2	3	6

Q.8 In what ways do you think certification is a useful tool to achieve sustainable forest management?	Algoma	Nipissing	Westwind	Total
1- Not useful in achieving SFM, Ontario regulations take care of SFM	2	2	3	7
2- Certification is a tool to verify good management practices but does not lead to SFM	1			1
3- We were already practicing SFM before certification			3	3
4- Certification can only help the goal of SFM if everyone is certified	1			1
5- If the standard is adhered to then certification can help achieve SFM	1			1
6- Certification challenges forestry staff to do better		1	1	2
7- Certification reinforces SFM		3	2	5
8- Provides a check process against the FMP		1		1
9- Tougher standards, leads to better forest management		1		1
10- Do not know		2		2

Q.9 Do you believe certification will aid in achieving social sustainability in forestry? If so, why?	Algoma	Nipissing	Westwind	Total
1- Not useful in achieving social sustainability (various reasons)	2			2
2- Not useful because of the strength of the Ontario regulations	1	1	1	3
3- Limited impact on social sustainability (various reasons)	1	2	1	4
4- Provides a check process against the FMP		1		1
5- Leads to more formal agreements / more documentation		1		1
6- If certification creates better forest management and better markets which will affect the well being of communities, FN, employees, etc	1	1	2	4
7- Certification leads to greater awareness / Better discussion of social issues		1	2	3
8- Do not know		1	2	3

Q.10 Do you think certification has affected Algoma's relationships with First Nations?	Algoma	Nipissing	Westwind	Total
1- No effect (good relationship pre-FSC, relationships with FN are problematic with or without FSC, FN did not want to be involved)	4	2	1	7
2- Certification identified problems with FN		1		1
3- Better relationship		1	2	3
4- More representatives in forest management planning			4	4
5- Greater effort to involve FN / Involvement of more FN groups	1	3	2	6
6- Reinforced an already good relationship		2		2
7- More formalized agreements / More documentation		2		2
8- Increased understanding between foresters and FN groups		1		1
9- Do not know			1	1

Q.11 Do you believe certification has changed the way employee issues are dealt with?	Algoma	Nipissing	Westwind	Total
1- No effect, Ontario regulations were already strong enough	2		2	4
2- No effect, same as pre-FSC	2	2		4
3- More work, more stress, lower moral		1	2	3
4- Increased pride / morale		1	1	2
5- Better employer / employee relationship			1	1
6- More discussion about these issues		1	1	2
7- New policies		1		1
8- Do not know	1	2	1	4

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Q. 12 Has certification offered additional opportunities for the public to participate in forest management?	Algoma	Nipissing	Westwind	Total
1- No, enough is done through the FMP	2	3	4	9
2- Yes, but people are not interested	1		2	3
3- Yes, increased ads, mail outs and interviews	1	2	I	4
4- Yes, because of annual audits		2		2
5- Do not know	1	1	1	3

Q.13 Overall has certification influenced the way (case study name) deals with social issues?	Algoma	Nipissing	Westwind	Total
1- No effect, certification was easy to obtain, no real changes were needed	1	2	1	4
2- No impact, (focus within certification is not on social issues, strength of Ontario regulations, high standard pre-FSC)	3	1	2	6
3- Limited impact (Ontario regulatory system is very strong and deal with most social issues, already doing these things)		1	4	5
4- Increased documentation / Formal agreements	1	2	1	4
5- Improved understanding and dialogue about social issues	1	1	1	3
6- Improved dialogue with communities / More engaged in communities		2	2	4
7- Improved relationship with FN			3	3

APPENDIX D
CORRECTIVE ACTION REQUESTS ISSUED TO THE THREE CASE STUDIES

Algoma Corrective Action Requests
Information retrieved for certification public summary issued by Smartwood
Program (2005).

Condition 1.1
By the end of year one, CFMI must demonstrate a long term commitment to
adhere to FSC Principles and criteria and integrate FSC National Boreal
Standard principles and criteria in the 2010 Forest Management Plan and annual
operational plans developed for the current management term (2005-2010).

Condition 3.1
By the end of year one of certification, Clergue Forest Management Inc. shall
provide documentary evidence of its effort to confirm with First Nations their
interest in pursuing the MOU agreements developed by CFMI.

Condition 3.2
By the end of year one of certification, CFMI in cooperation with the OMNR and
affected First Nations shall develop and implement a strategy to facilitate a
greater involvement of local First Nations in the forest management planning
process. Elements of this strategy must include a process/mechanism for the
exchange of information (e.g. values maps) and a reporting system that
documents FN rights, concerns, issues and interests and the CFMI
response/action.

Condition 3.4
By the end of year one of certification, CFMI shall develop a strategy to
determine and document the interest of local First Nations in participating in the
collection and integration of Traditional Ecological Knowledge. In instances
where First Nations have expressed an interest in integrating TEK in the planning
process, CFMI will develop and implement a collaborative process with the
OMNR and FN to collect TEK data and information and integrate this information
into the 2010 Forest Management Plan

Condition 4.2
By the end of year one of certification, Clergue shall assess its health and safety
records and provide an annual summary report that can be used as the basis for
any potential corrective actions.

Condition 4.4
A. By the end of year 2 of certification, Clergue is to work with the OMNR and the
Wawa LCC to expand the interests that are present on the Wawa LCC.
B. By the end of year 2 of certification, as a component of the planning process
for the 2010 Forest Management Plan, CFMI is to work with OMNR to prepare a

more comprehensive socioeconomic profile of forest uses and in particular document the importance of tourism and recreation

Condition 6.1
A. By the end of year three of certification, Clergue shall incorporate consideration of the management of surrounding forest lands into its management of the Algoma/Wawa Forest with emphasis on impact assessment, connectivity, establishment of core areas and High Conservation Value Forests
B. By the end of year two of certification, Clergue will have completed the writing and peer review of the PIC report.
C. By the end of year two of certification, Clergue shall prepare a document addressing landscape and site level benchmarks in accordance with the requirements of criteria 6.16 and 6.17.

Condition 6.2
By the end of year one of certification, Clergue in consultation with OMNR shall modify wood turtle prescriptions in the 2005-2010 FMP to better address all habitat requirements of the species (not just hibernacula) and the impact of roads on turtle populations.

Condition 6.3
A. By the end of year three of certification as a component of the planning process for the 2010 Forest Management Plan, Clergue shall spatially depict forest condition over the long term planning horizon.
B. By the end of year two of certification, Clergue will identify hemlock, red oak, and other significantly under-represented forest units/communities relative to the PIC (see 6.5) and develop strategies including site-specific prescriptions to increase their abundance over time. Clergue should initiate the planning and implementation of suitable treatments as quickly as possible.
C. By the end of year two of certification, Clergue will develop targets and retain old growth on the Algoma Forest consistent with the pre-industrial condition report or a minimum of 20%.
D. By the end of year three of certification, Clergue shall implement residual retention levels approximating levels expected in natural post-disturbance conditions identified by the PIC analysis.
E. By the end of year two of certification, Clergue will undertake an analysis of cores on the Algoma forest and ensure that at least 20% (higher if guided by PIC) of the landscape is maintained as FSC core habitat.
F. By the end of year one of certification, Clergue shall assess connectivity on the Algoma Forest in either the FMP or a separate report.
G. By the end of year three of certification, Clergue will in consultation with the OMNR develop a comprehensive access management plan that gives due consideration to sensitive values as required by the standard. The plan must describe abandonment and maintenance strategies for *all* roads and water crossings in the Algoma Forest and assign responsibility for their management.
H. By the end of year one of certification, Clergue shall demonstrate that existing

reserves provide an equal level of protection for riparian values or increase the width of 30 and 50 m reserves to be consistent with the FSC requirements.

I. By the end of year one of certification, Clergue will in consultation with OMNR develop direction and training for operational staff on appropriate identification and protection of ephemeral and intermittent streams.

Condition 6.4
By the end of the year three of certification, Clergue shall have initiated formal discussions with First Nations, ENGO's and other stakeholders to identify gaps in protected area representation, and have approached the provincial government with proposals or options to complete the protected areas network on the Algoma Forest.

Condition 6.5
By the end of year one of certification, Clergue will develop and deliver training programs to contracted operators and woodlands staff detailing the environmental requirements and obligations of FSC forest certification, particularly with respect to the protection of the forest environment during harvesting operations.

Condition 6.6
By the end of year one of certification, Clergue shall prepare a report that:
- Compiles information on herbicide use since 2000, which identifies the volume of active ingredient and the area treated;
- Outlines Clergue policy and procedures to minimize use of herbicides and justify under what conditions their use is essential to meet silvicultural objectives;
- Develops benchmarks on herbicide use against which future performance can be measured; and
- Sets quantitative targets for meaningful continuous reduction in herbicide use for tending and site preparation.

Condition 8.3
By the end of year one and prior to the sale of any FSC certified product, Clergue shall provide to SmartWood evidence that it has in place a system for tracking wood from the stump to the forest gate. Such procedures must be approved by SmartWood prior to the sale of FSC certified product.

Condition 8.5
By the end of year one of certification, Clergue shall make public summary of the results of all monitoring activity on the Algoma Forest.

Condition 9.1
A. By the end of year one of certification, Clergue shall a) ensure that its approach to identifying high conservation values on the Forest includes all high

conservation values that meet the relevant criteria independent of whether the values:
- Occur in forested or non-forested habitat
- Are demonstratably affected by management activities or not; or
- Have management strategies in place or not; and

B. Develop strategies with technical input and consultation with interested parties to identify management strategies to maintain or enhance those high conservation values that Clergue affects through management activities.

Condition 9.2
A. By the end of year two of certification, Clergue will obtain input from local First Nations and incorporate their input into the HCVF report.
B. By the end of year one of certification, Clergue shall incorporate in the HCVF report the specific strategies and management actions to ensure the maintenance and/or enhancement of all high conservation values consistent with the precautionary approach.

Condition 9.4
By the end of year two of certification, Clergue, in collaboration with OMNR and/or other partners, shall implement and participate in a monitoring program for all known high conservation values on the Algoma Forest.

Condition 10
By the end of year one of certification, Clergue shall provide a report which provides detailed information on the extent of and management objectives for historic and planned plantation areas. This report should provide a detailed discussion of plantation management strategies on the Forest and demonstrate that existing plantation management strategies on the Algoma Forest are consistent with FSC requirements.

Nipissing Corrective Action Requests
Information retrieved for certification public summary issued by Scientific Certification Systems (2003).

CAR 2003.1
Within 1 year of award of certification, NFRM, in consultation with interested First Nations, must formalize its organizational commitment to continuing and productive working relationships with local First Nations in a comprehensive First Nations policy statement.

CAR 2003.2
Within 1 year of award of certification, NFRM, in full co-operation and consultation with interested First Nations communities, must develop and implement a program that contributes to the improved identification and documentation of Native values in areas where forest operations are scheduled

to occur. The intent of such a program is: 1) to add to the existing body of knowledge with respect to Native values on the Nipissing Forest; 2) to contribute to improvements and refinements in the current modeling approach; and 3) to ensure that native values on the Forest receive appropriate protection. Conformance with this CAR will be ascertained through SCS' review of a written briefing report of the actions taken and confirmation that the plan is being implemented.

CAR 2003.3
Within 6 months from award of certification NFRM must cause to be implemented those parts of the Occupational Health and Safety Act that pertain to the selection of at least one health and safety representative and the performance of duties of that person with respect to the Act.

CAR 2003.4
Prior to completion of the new FMP, special prescriptions and protection strategies for uncommon hardwood tree species, as listed in Appendix XI of the Standard, must be developed, documented, and implemented.

CAR 2003.5
Within one year from award of certification, NFRM must develop, implement, and document procedures that ensure that there is no net decline of current levels of 121 year and older white pine over the next 100 years. These procedures must demonstrate management objectives that will increase the presence of old growth white pine to a minimum of 10% of the white pine forest unit on the NFMU in the long term.

CAR 2003.6
Within 3 years of award of certification, NFRM must develop, assure funding for, and implement an ongoing actual forest inventory system to supplement and test accuracy of modeled growth rates and regeneration estimates. The highest priority for this inventory is in complex forest types such as the mid-tolerant hardwoods.

CAR 2003.7
Prior to completion of NFRM's 2004-2009 management plan, NFRM must expand upon the HCVF consultative process conducted to date (ensuring that representation gaps as described in the Great Lakes St. Lawrence Standards are addressed) and implement management prescriptions and monitoring techniques for continued protection of identified attributes. This HCVF policy must be integrated into the 2004-2009 management planning process.

CAR 2003.8
In the absence of the province completing its network of representative protected areas, NFRM must, within one year from award of certification, take necessary steps to engage in the candidate selection process. It is recommended that the

process uses the Room to Grow report as a reference and includes: identification of candidate areas; delineation of candidate areas on maps; strategies and timelines; and, removal of the candidate protected areas from the land base for the 2009 Plan. It is not necessary for NFRM to recalculate the AHA for the 2004 Plan, however, the 2009 Plan must be adjusted accordingly.

Westwind Corrective Action Requests
Information retrieved for certification public summary issued by SGS Qualifor (2002).

CAR 1 / MAJOR

While there is some evidence of consultation with First Nations there is limited involvement in all stages of forest management planning including the prescription process. There is no strategic plan as to how First Nations will be included in forest management. There is no documented consent from First Nations for forest management operations within their traditional lands. First Nations lack capacity and information to participate effectively in the process.

- No strategic plan for dealing with First Nations involvement
- First Nations do not see current consultation as meaningful or adequate
- No documented agreements for forest management

CAR 2 / MAJOR

While substantial opportunities for non-aboriginal people for employment, training and other services are available there is no strategic plan to identify training and employment opportunities with First Nations, and provide support and initiatives to build First Nations' capacity to develop employment opportunities.

- High rates of unemployment within First Nations communities
- No strategic plan to deal with First Nations' unemployment levels

CAR 3 / MINOR

While impact appraisal has been carried out at a provincial level through the Class Environmental Assessment, potential social and economic impacts at the FMU level are not well defined.

- Limited review using Stats Canada provides rudimentary review of economic and social impacts

CAR 4 / MINOR

The modelling used to determine long-term harvest levels uses a comprehensive approach (i.e. models both timber and biodiversity values). However implications of accuracy of input data and robustness of the modelling assumptions have not been tested.

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- Problems associated with poor FRI data, growth and yield data and implications of extensive partial harvesting through the FMU.
- Lack of testing of assumptions for all values. This should include a) identification of key assumptions and b) assessment of the accuracy of key assumptions to ensure timber supply modelling is precautionary.
- Biodiversity analyses: benchmarks used are based on the current forest condition, which changes every 5 years. This approach does not assess whether "current" forest condition maintains viable populations

CAR 5 / MINOR

There is no landscape level plan specific to the forest management unit, which identifies targets for seral stage by forest type. While the current FMP addresses old growth management, particularly white and red pine, it does not deal comprehensively with landscape level targets for all forest ecosystem types. The Provincial Conservation strategy for white and red pine states that targets based on historic conditions should be set for these particular species. Specific targets are not included in the current FMP. In addition, targets for old growth hardwood stands have not been identified or rationalized.

- FMP identified broad objectives to maintain white and red pine, however specific targets based on historic conditions are not set.
- No old growth targets for other species or other ecosystems are identified in the FMP
- No assessment of the adequacy of other crown land to meet landscape level objectives

CAR 6 / MINOR

While roads maintained by Westwind (and its Operators) are in good condition, roads within the FMU where responsibility for the upkeep is not well defined and are not always adequately maintained.

- Paxton-Joli Township road damaged by erosion through lack of drain maintenance
- Responsibilities for upkeep of multiple-access roads not well defined

CAR 7 / MINOR

While a policy exists committing Westwind to minimizing use of synthetic chemicals this does not include specific reduction targets nor has the company identified the strategies through which any reduction in chemical use will be achieved

CAR 8 / MINOR

While the FMP provides discussion and direction on a variety of provincial goals and objectives and details a number of operational issues it does not provide a comprehensive description of specific management objectives and strategies for the FMU.

CAR 9 / MINOR
While details of the existing FMP are available in a summary document, this is too complex and is not in a format which can be easily accessed and understood by the public.

CAR 10 / MINOR
While there is a considerable amount of monitoring work undertaken, monitoring is related to the broad provincial goals or operations described in the FMP. Monitoring programmes that relate back to landscape level planning objectives for the FMU have not been fully identified and documented.

CAR 11 / MAJOR
Westwind has not completed an assessment to determine the presence and attributes of HCVF, which includes an appropriate consultative process. Further, management planning documentation does not include specific measures to ensure maintenance or enhancement of HCVF values. There is no annual monitoring plan available to assess the effectiveness of management of HCVF

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