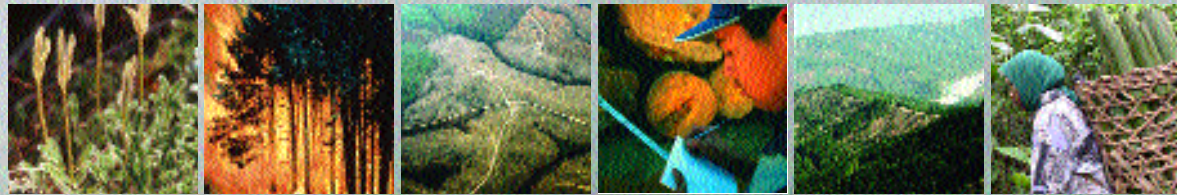


Footprints in the forest



**Current
practice
and future
challenges
in forest
certification**



The Canadian Standards Association SFM Standard Review and Analysis

Prepared for Fern by the Sierra Club of Canada

Purpose

The purpose of this report is to provide information about the Sustainable Forest Management (SFM) standard and certification requirements developed by the Canadian Standards Association (CSA). It is intended to provide information about the standard itself, rather than on its impact on forestry practices. Our examination of CSA-certified management plans did not extend to any on-the-ground examination of actual forests certified to the standard. Nevertheless, in order to better understand how the CSA SFM performance framework is translated into a management plan we have also reviewed several SFM plans from operations certified to the CSA SFM standard – in particular the objectives and targets that are the key field components subject to audit.

The report is intended to provide factual information that will allow for comparison between different certification schemes. Where the factual information has been interpreted or analyzed by the author of this study those sections are in italics.

1. History and current status

1.1 History

The Canadian Standards Association (CSA) is an independent, not-for-profit, nonstatutory, voluntary membership organization engaged in standards development and certification activities. It was chartered in 1919 and in 1973 was accredited by the Standards Council of Canada, which is the federal agency responsible for Canada's National Standards System. On behalf of the Standards Council of Canada, the CSA represents Canada on various ISO Committees, and administers the secretariats for the Technical Committees responsible for the development and maintenance of both ISO 9000 and ISO 14000 standards series pertaining to quality and environmental management systems.

The CSA has a separate division, called QMI, which along with KPMG is accredited to carry out registration of management systems as well as registrations to the CSA's Sustainable Forest Management standard. Another CSA division called CSA International carries out product certifications. CSA International's Forest Products Group delivers the Forest Products Marking Program, which is the chain of custody and product marking component of the CSA SFM program.

The CSA standard was developed through funding provided by the Canadian Pulp and Paper Association (subsequently renamed the Forest Product Association of Canada) and the federal government. It has also been supported by the Sustainable Forestry Certification Coalition, a collective of Canadian forest industry associations formed in 1993 to “promote the use of internationally recognized sustainable forest management certification standards in Canada in order for Canadian producers to continually move towards sustainable forest management, secure a sustainable supply of raw material, and to ensure marketplace acceptance of Canadian forest products.”¹

In 1994 the CSA set up a Technical Committee on Sustainable Forest Management that began to develop guidelines and specifications for a Sustainable Forest Management (SFM) system. The Technical Committee developed a Guidance Document (Z808) and a Specifications Document (Z809), which was approved as a National Standard by the Standards Council of Canada in September 1996. The Guidance document states that the purpose of the standard is to describe “the components and performance objectives of a Sustainable Forest Management (SFM) system that, when applied to a specified ‘defined forest area,’ will ensure that the Canadian Council of Forest Ministers’ (CCFM) criteria for sustainable forest management are being met.”² The standard must be applied to a ‘defined forest area,’ but does not specify an upper or lower size limit.

In 2002 the CSA completed its five-year review of the SFM standard. The revised standard (*CAN/CSA-Z809-02*) combines the Guidance and Specifications documents from the earlier standard into a single document, which was approved by the Standards Council of Canada in May 2003. It is this revised standard that is the subject of the current assessment. Certificates issued under the previous version of the standard must be upgraded to the new standard by June 27, 2006. Most companies certified to the original standard are upgrading to the revised standard at the time of their re-certification audit, which takes place three years after the last full certification audit.

1.2 Current status

Table 1: Current certifications to the CSA SFM Standard (December 2003)

Company	Division	Province	Certifier	Area (ha)
Abitibi-Consolidated				
	Fort Frances	Ontario	QMI	1,600,000
	Quebec Ouest	Quebec	QMI	1,600,000
	Newfoundland	Newfoundland	QMI	1,800,000
	Fort William	Ontario	QMI	780,000
Canfor				
	Grand Prairie	Alberta	KPMG	650,000
	Nimpkish Tree Farm License	B.C.	KPMG	200,000
	Chetwynd Tree Farm License	B.C.	KPMG	650,000
	Sinclair Tree Farm License	B.C.	KPMG	180,000

¹ Canadian Sustainable Forestry Certification Coalition website, www.sfms.com/

² CAN/CSA-Z808-96, p.XI.

	Houston Operation, Prince George	B.C.	KPMG	470,000
Fort St. John Pilot Project (group certification)	Fort St. John Timber Supply Area	B.C.	KPMG	4,150,000
Stora Enso	Port Hawkesbury Woodlands	Nova Scotia	QMI	630,000
Tolko Industries Ltd.				
	Thompson Woodlands	B.C.	QMI	580,000
	Nicola Woodlands	B.C.	QMI	250,000
Weldwood of Canada Ltd				
	100 Mile House	B.C.	QMI	240,000
	Babine Forest Products	B.C.	QMI	340,000
	Hinton Forest Resources	Alberta	QMI	1,000,000
	Houston Forest Products	B.C.	QMI	380,000
	Quesnel Operations	B.C.	QMI	280,000
	Sunpine Forest Products	Alberta	QMI	530,000
	Williams Lake	B.C.	QMI	120,000
Western Forest Products	North Vancouver Island	B.C.	QMI	230,000
Weyerhaeuser				
	Alberta Forestlands	Alberta	QMI	1,155,000
	North Island	B.C.	QMI	230,000
	Port McNeill	B.C.	QMI	110,000
	Stillwater Timberlands	B.C.	QMI	190,000
	West Island Timberlands	B.C.	QMI	310,000
	Edson Forestlands	Alberta	QMI	510,000
	Grande Prairie/Grande Cache	Alberta	QMI	1,360,000
	Kamloops & Vavenby Forestlands	B.C.	QMI	480,000
	Lumny & Okanagan Falls	B.C.	QMI	300,000
	Ontario Forestlands (Dryden)	Ontario	QMI	1,750,000
	Princeton Forestlands	B.C.	QMI	410,000
	Saskatchewan Forestlands	Saskatchewan	QMI	4,940,000
Total				28,405,000

Prepared by Kathy Abusow for the Canadian Sustainable Forestry Certification Coalition

Table 1 shows the current status of CSA certifications in Canada. Thirty-three certificates have been issued, comprising a total area more than 28 million hectares. The size of forest lands certified under each certificate ranges from a low of 110,000 hectares to a high of 4,940,000 hectares, with an average size of 860,758 ha and a median size of 480,000 ha. There are as yet no small forests certified to the CSA standard.

A forest certification intentions survey compiled in December 2002 reported that respondents intend to obtain CSA SFM certification by the end of 2006 on forest lands totaling 71.7 million hectares in Canada.³

1.3 Chain of custody and product label

In addition to the SFM standard the CSA International Forest Products Group operates a *Forest Products Marking Program* which provides for the tracking of a forest product's

³ Canadian Sustainable Forestry Certification Bulletin, December 31, 2002. Available at www.sfms.com

chain of custody from its origin through all phases of ownership, processing and transportation to the end consumer. These requirements are set forth in a document entitled *PLUS 1163 - Chain of Custody for Forest Products Originating from a Defined Forest Area Registered to CAN/CSA-Z809*. This document is not a standard and has not been approved by the Standards Council of Canada, but defines the requirements that are audited against in a third party CoC qualification audit and that must be met before a CSA mark can be placed on a forest product or its packaging. These requirements are reviewed in Section 2.6 below.

Currently CSA International has issued 44 chain of custody certificates covering 76 sites, with additional certifications underway. Three sites are licensed to apply the CSA SFM mark on certified forest products.

1.5 Support for the CSA SFM standard

In 1996 the Canadian Council of Forest Ministers decided not to endorse any single certification scheme, but instead approved a “Framework of Guiding Principles” intended to apply to any and all certification systems. In the intervening years it has emerged that there are three forest certification systems currently in use in Canada, developed by the Forest Stewardship Council (FSC), the Canadian Standards Association (CSA) and the American Sustainable Forestry Initiative (SFI). The expectation that companies obtain certification to one of these systems is by now widely accepted, and has been made a requirement by both the Forest Products Association of Canada for its members as well as by the government of New Brunswick for license-holders on public land in that province, with several years’ grace provided to allow operations to become certified.

In November 2002 the Ontario Ministry of Natural Resources signed a Memorandum of Understanding with the Standards Council of Canada, recognizing the complementary nature of the ministry’s regulatory framework and the CSA’s SFM standards, with a goal of “leveraging the strengths of both organizations and streamlining processes.”⁴

There is a growing recognition in Canada that independent certification is becoming the “norm” for forestry companies, especially if they operate on public land, which comprises approximately 94% of Canada’s forests. At this time there are three forest certification systems in use at a broad scale in Canada, CSA, FSC and SFI. Based on a recent survey of the forest industry in Canada, the CSA-SFM standard remains the preferred forest certification system for a majority of large-scale companies seeking independent voluntary certification in the coming years.⁵ For the most part, however, non-governmental organizations that carry out conservation advocacy have not been supportive of the CSA SFM standard, and do not recognize CSA certification as a definitive indicator of progressive forest management or good forestry practices.

⁴ “Ontario First to Sign Important Forestry Agreement”. CSA press release, November 7, 2001.

⁵ Canadian Sustainable Forestry Certification Coalition Bulletin, December 31, 2002. Available at www.sfms.com

2. Description of the CSA SFM standard

The SFM standard includes requirements pertaining to public participation, performance in the field and the management system.

2.1 Public participation requirements

The key components of the CSA's public participation process require the organization to:

- a) establish and implement a public participation process;
- b) openly seek representation from a broad range of interested parties, including DFA-related workers, and invite them to participate in developing the public participation process
- c) provide interested parties with relevant background information
- d) demonstrate through documentation that efforts were made to contact Aboriginal forest users and communities affected by or interested in forest management in the DFA
- e) demonstrate through documentation that efforts were made to encourage Aboriginal forest users and communities to become involved in identifying and addressing SFM values;
- f) recognize Aboriginal and treaty rights and agree that Aboriginal participation in the public participation process will not prejudice those rights
- g) ensure that the public participation process works according to clearly defined operating rules that are agreed to by the participants, and that include provisions on, *inter alia*, timelines, internal and external communications, resources, roles and responsibilities of participants, conflict of interest, decision-making methods, access to information, participation of other experts and government, and a dispute-resolution mechanism.

Once established, the public participation process shall have opportunities to work with the organization to:

- a) identify and select values, objectives, indicators and targets, based on the CSA SFM elements;
- b) develop alternative strategies to be assessed;
- c) assess alternative strategies and select the preferred one;
- d) review the SFM plan;
- e) design monitoring programs, evaluate results and recommend improvements; and
- f) discuss and resolve any issues relevant to SFM in the DFA.

The organization has communication responsibilities to, for example, provide information to a broader public about the progress being made in the implementation of the standard, and demonstrate that all input is considered and responses are provided.

The public participation requirements of the CSA SFM standard are in many respects exemplary. As written, they allow for local publics to play an effective role in influencing forestry operations in their region, and increase the likelihood that an organization is

making genuine efforts to obtain the ‘social license’ to practice forestry on publicly owned lands. The public participation requirements in the FSC Canadian Boreal draft standard, for instance, are modeled on the CSA requirements. FSC requirements are less stringent in some respects (especially on private lands) although considerably more stringent with regards to Aboriginal participation.

There are several cautionary points worth noting.

- 1. No standard can guarantee that a public participation process is truly effective at elucidating, addressing and resolving public interests and concerns with respect to forest management. Even with everyone’s best intentions, effective participation requires a tremendous commitment of time and energy, as well as a number of specific qualities such as patience, attention to detail, interpersonal skills, negotiation ability and the like. Especially in rural Canada, the people who display these qualities tend to be over-committed in their volunteer activities and may or may not have the available time to devote to the laborious certification process.*
- 2. A poorly facilitated process, or one that is dominated by the applicant so as to achieve a predetermined outcome, may technically fulfill all of the public participation requirements of the CSA standard, but without achieving the desired result of an engaged and satisfied public.*
- 3. Local public advisory groups may lack adequate independent expertise with knowledge of the latest advances in science or in best management practices. The advisory groups may instead rely on the selective information given to them by the applicant organization, and thereby miss out on the opportunities to apply relevant progressive models from elsewhere in the country.*
- 4. Although local residents are most directly affected by forestry operations it remains the case that forests and forest health are a matter of national and even global concern. Issues such as identifying and managing forests having a high conservation value or candidate protected areas, use of genetically modified organisms, the role of forests in carbon storage (to cite just a few examples) are issues that cannot necessarily be adequately addressed through local participatory processes.*
- 5. Any standard that incorporates local public involvement must strike a delicate balance between the need for regional flexibility and the sometimes conflicting need for national or international consistency. While any standard addressing something as complex as forests and forest management will require flexibility in order to adequately reflect local conditions, there is a risk that too much flexibility weakens the ability of the standard to produce consistent and standardized results.*

These cautionary notes apply to all public participation processes. They are especially important in the case of the CSA standard, however, because of the high degree of importance assigned to the public participation process. It is through that process – rather than the standard itself – that organizations receive guidance on specific targets or thresholds.

2.2 Performance requirements

Performance objectives are set within a framework that is based on the six Criteria of SFM established in 1995 by the Canadian Council of Forest Members. Under these six Criteria the SFM standard sets out seventeen elements, each one of which is accompanied by a normative statement. The table below offers one example from each Criterion, in order to give an overall impression both of the breadth of the standard as well as the degree of detail in its normative requirements. A complete list of all 17 elements and their associated requirements is included in Appendix A (in particular, Section 6: SFM Performance Requirements).

Table 2: Examples of Criteria, Elements and Requirements

Criterion	Element	Requirement
Conservation of Biological Diversity	Ecosystem diversity	Conserve ecosystem diversity at the landscape level by maintaining the variety of communities and ecosystems that naturally occur in the DFA.
Maintenance and Enhancement of Forest Ecosystem Condition and Productivity	Forest ecosystem resilience	Conserve ecosystem resilience by maintaining both ecosystem processes and ecosystem conditions.
Conservation of Soil and Water Resources	Water quantity and quality	Conserve water resources by maintaining water quality and quantity.
Forest Ecosystem Contributions to Global Ecological Cycles	Forest land conversion	Protect forestlands from deforestation or conversion to non-forests.
Multiple Benefits to Society	Fair distribution of benefits and costs	Promote the fair distribution of timber and non-timber benefits and costs.
Accepting Society's responsibility for Sustainable Development	Aboriginal and treaty rights	Recognize and respect Aboriginal and treaty rights.

The normative requirements (examples given in the right-hand column in Table 2) are new additions to the revised standard. These 17 requirements are roughly analogous to the 10 'Principles' in the FSC International Principles and Criteria. There are differences between the two sets: the CSA requirements provide more detailed guidance than the FSC Principles when it comes to ecological considerations, and less guidance with respect to Aboriginal rights. The main difference, however, is in how these requirements are further elaborated in a way that can be audited.

In the case of the FSC the international Principles are described in greater detail through 56 Criteria, all of which are then interpreted through regionally specific standards subject to approval by FSC International. Where regional standards do not yet exist certifiers use an interim standard that has been approved by FSC International.

In the case of the CSA the applicant itself is responsible for providing additional detail on each of the seventeen Elements, including values, objectives, indicators and targets. The standard offers only broad guidance on how to adequately address these Elements in the management plan. The guidance from the public participation process is the crucial mechanism to ensure that the company adopts the best possible targets, and for this reason the shortcomings of any public participation process are especially critical in the case of the CSA SFM standard.

2.3 System requirements

The CSA's system requirements describe the 'continual improvement loop' that requires an organization to:

- a) define and maintain a policy commitment to SFM;
- b) undertake a planning process for a clearly defined forest area (DFA);
- c) set DFA-specific performance requirements;
- d) make forecasts;
- e) implement the plan, including the training required to carry it out;
- f) monitor and report on results;
- g) take corrective action; and
- h) undertake management review.

The performance requirements in (c) above must be defined as follows:

1. For each of the 17 elements one or more DFA-specific values must be identified.
2. For each value, one or more objectives must be set.
3. For each value, one or more indicators must be identified.
4. For each indicator, data on the current status must be provided and a target must be set, together with acceptable levels of variance and timelines for achievement.

There are other requirements of a more general nature, pertaining to such matters as adherence to the law, documentation, communications, emergency preparedness, etc.

2.4 Requirements with respect to Aboriginal rights

Section 35 of the Canadian Constitution recognizes and affirms the existing rights of the Aboriginal peoples of Canada, including rights to self-government, rights to land, rights to hunt, trap and fish, customary law and cultural and religious practices. Aboriginal interests are of primary relevance to forest management, since management activities that curtail traditional Aboriginal activities (such as through fragmentation or loss of habitat) have been declared by the courts to be in violation of Aboriginal and treaty rights.⁶ Other rights – such as rights to commercial exploitation – are more contentious, although the courts continue to further define Aboriginal rights.

The status of Aboriginal rights varies across Canada, governed by historic treaties, modern-day treaties, claims under negotiation or assertions of claim. The vast majority of forest lands in Canada are subject to some form of Aboriginal title. For this reason it is especially important that Aboriginal and treaty rights are adequately addressed in any forest certification in Canada. The CSA SFM standard contains a number of requirements that pertain to Aboriginal interests. An applicant organization must:

- a) demonstrate that efforts were made to encourage Aboriginal forest users and communities to become involved in identifying and demonstrating SFM values;
- b) recognize and respect Aboriginal and treaty rights;

⁶ A. Peeling, "Review of the Application of Principle 3 in the Boreal Forests subject to Treaties and Aboriginal Rights (of First Nations and Métis), legal opinion commissioned by FSC Canada, December 2002, available at http://fscCanada.org/pdf_document/peeling_executive_summary.pdf

- c) agree that Aboriginal participation in the public participation process will not prejudice those rights; and
- d) respect traditional Aboriginal forest values and uses identified through the Aboriginal input process.

The standard includes some guidance on how to fulfill these requirements, including the note that “[t]he appropriate bodies to make decisions related to Aboriginal and treaty rights are the governments.”

These requirements, while well-intentioned, are lacking enough detail to be meaningful. The accompanying non-binding guidance is also quite vague for the most part, and in some instances is distinctly unhelpful. The guidelines state, for instance, that “Some jurisdictions have specific regulations or policies on the ways of achieving Aboriginal participation”, although the courts have found that government guidelines are inadequate to protect Aboriginal and treaty rights. The SFM plans that were reviewed in researching this report (with findings summarized in Section 4.2 below) are particularly weak when it comes to specific targets for how a company intends to “recognize and respect Aboriginal and treaty rights.”

2.5 Transparency and availability of information

The CSA standard is available for free downloading from the CSA website.

The organization obtaining CSA SFM certification must make publicly available three important documents:

- a) its SFM plan;
- b) an annual report on its performance in meeting and maintaining the SFM requirements; and
- c) the results of independent certification and surveillance audit reports.

These requirements set a high standard for transparency and accountability.

2.6 Label protection and chain of custody

Within the CSA International’s Forest Products Marking Program there are three marking options. These marking options are based on how the inventory of certified forest products are managed. The marking options include:

- a) 100% of the product has been tracked and monitored from its point of origin (a Z809 certified forest) to the end consumer. This mark appears on the product and/or the packaging.
- b) At least 70% of the input used to make this product line has been tracked and monitored from its point of origin (a Z809 certified forest) to the end consumer. This mark appears on the product and/or packaging only.
- c) At least 70% of the content of this composite product has been tracked and monitored from its point of origin (a Z809 certified forest) to the end consumer. This mark appears on the product and/or the packaging.

In the case of percentage-based claims (b and c above) none of the wood-based raw material may come from controversial sources. “Controversial sources” are defined as

“wood or wood raw material from illegal or unauthorized harvesting such as harvesting in forest areas protected by law. Also, wood or wood raw material from forest areas officially published by government authorities (or the body with the legal authority to do so) as planned to become strictly protected by law, without the government authorities (or the body with the legal authority to do so) giving permission to harvest.”⁷

The CSA chain of custody guidelines also include requirements for the organization to undertake initiatives to demonstrate that it is operating and managing its site, facilities, structures, activities, processes, raw materials, by-products, finished products and their associated environmental impacts in a “proactive and responsible manner.” The guideline further recommends that the organization apply life cycle thinking when designing, implementing and operating its chain of custody, such as not trucking wood beyond the normal transportation radius in order to meet certification threshold requirements, and moving to recyclable packaging.⁸

Self-declared product claims are to be “accurate, verifiable, relevant and not-misleading,” and consistent with the requirements of CAN/CSA ISO 14020 and CAN/CSA-ISO 14021.⁹

The CSA definition of “controversial sources” is limited to illegally logged wood or wood logged in areas that have been formally registered by Government to become protected areas. The requirement does not prohibit using wood from logging rare old growth or other high conservation value forests. The life cycle analysis requirement is progressive but may be hard to audit. The CSA’s Chain of Custody guidelines are not set out in a standard but rather in a supplementary publication prepared internally by CSA, without prior review or approval by the CSA’s Strategic Steering Committee on the Environment, and without being approved as a standard by the Standards Council of Canada.

Except for its requirements pertaining to wood from controversial sources, the CSA’s chain of custody requirements equal or surpass those of any other major forest product CoC label.

3. The development of the CSA SFM standard

The responsibility for developing CSA standards rests with Technical Committees, with members appointed from various sectors, making up a “balanced matrix.” The makeup of the Technical Committee at the time that the standard was unanimously approved is shown in Table 2.

⁷ “Specifications for Use of the CSA SFM Mark” CSA International Forest Products Group, March 2003, section 14.0, available at <http://certifiedwood.csa.ca>

⁸ Plus 1163: Chain of Custody for Forest Products Originating from a Defined Forest Area Registered to CSA Standard CAN/CSA-Z809, June 2001, section 4.10.

⁹ Ibid, Section 4.11.

Table 3: Technical Committee on Sustainable Forest Management

Industry	Academia, Individuals, Practitioners	Environmental and General Interest	Government and Regulatory
Québec Lumber Manufacturers' Association	University of Alberta	Wildlife Habitat Canada	Canadian Forest Service
Fédération des producteurs de bois du Québec	Abusow International Ltd	Ontario Federation of Anglers and Hunters	Ontario Ministry of Natural Resources
Lowood Enterprises	Dalhousie University	Consumers' Association of Canada	B.C. Ministry of Forests
Abitibi-Consolidated Co. of Canada	PricewaterhouseCoopers	Canadian Wildlife Federation	Ministère des ressources naturelles du Québec
Canadian Forest Products Ltd	Forintek Canada Corp.	International Woodworkers' Association Canada	Alberta Innovation and Science
	K. Armson	Weldwood Public Advisory Group	New Brunswick Department of Natural Resources and Energy
	G. Baskerville		
	P. Griss		

The standard lists a number of Associate Members and other contributors to the development of the standard, including CSA, CSA International, CSA International Forest Products Group, the Standards Council of Canada, KPMG (an accredited CSA SFM auditor) and the federal Department of Foreign Affairs and International Trade. Input was also received during a public review process, as well as from committee members who subsequently resigned from the Technical Committee.

The standard states that when CSA set out to review the original standard it “strengthened the conservation representation on its SFM Technical Committee, which now includes representatives from Wildlife Habitat Canada, the Canadian Wildlife Federation, and the Ontario Federation of Anglers and Hunters.”¹⁰ In fact, all three of these groups were on the Technical Committee in 1996 when the first version of the standard was approved, along with the Federation of Mountain Clubs of British Columbia and the Task Force on Churches and Corporate Responsibility.¹¹

For a brief period in 2001 the Technical Committee did strengthen conservation representation, but those representatives did not endorse the resulting standard. Three major organizations withdrew from the Technical Committee shortly before the revised standard was finalized.

The Sierra Club of Canada withdrew in October 2001. Its main reason for resigning hinged on its desire to ensure that the standard, if it is to be promoted as though it is a performance standard, “meets the Sierra Club’s minimum expectations of what an acceptable performance standard must contain. Unfortunately, the explicit refusal by the Technical Committee to consider determining minimum performance expectations (such

¹⁰ CAN/CSA-Z809, p.1

¹¹ CAN/CSA-Z808-96, p.v-vi

as thresholds, ranges of variability, restrictions, etc) makes this impossible. Without meaningful on-the-ground performance requirements the standard cannot offer any assurance of standardized performance levels (other than compliance with the law) and is therefore not an acceptable performance standard.”¹²

The Alberta Wilderness Association resigned in December 2001. In its letter of resignation it stated that the standard “does not meet AWA’s (or any other Canadian ENGO’s) minimum requirements for forest protection.... I believe that CSA’s approach with significant local public involvement could work provided it had some minimum targets and reasonable guidance on key issues such as protected areas.”¹³

The National Aboriginal Forestry Association, which had been involved from the beginning including endorsement of the original standard, resigned in April 2002. “NAFA is of the view that these standards do not advance the concepts of sustainable forest management as they do not accommodate the unique position that Aboriginal people have in Canada nor do they respect the significance of Aboriginal or treaty rights within forest management.... The CSA standards offer Aboriginal people nothing more than a promise to comply with what is already an insufficient approach to addressing Aboriginal rights... This will result in the continued exclusion of Aboriginal people in forest management as per the status quo.”¹⁴

The standard was developed in a balanced and open way. The CSA and the Technical Committee made genuine efforts to resolve conflicts that arose. The failure to address the concerns of environmental and Aboriginal representatives on the Technical Committee was not due to an unfair or imbalanced process, but rather to a fundamental disagreement about what a performance-based forestry standard should include in its scope.

The claim in the standard that the Technical Committee included “strengthened conservation representation” may be technically correct but it disingenuously omits the relevant information that this “strengthened representation” existed in the past tense only, and that the groups resigned from the Technical Committee because of their concerns with what they perceived to be weaknesses in the standard. Listing organizations that are not part of that “strengthened representation” contingent is clearly designed to mislead the reader. Such willful deception does a disservice to the CSA’s reputation for evenhandedness and integrity in environmental standards-setting. It would have been more accurate to say that “for a period of time the Technical Committee had strengthened conservation representation, but the CSA was unable to adequately address the concerns of these organizations.”

¹² Letter from Martin von Mirbach, Sierra Club of Canada, to Katie Altoft, CSA, October 17, 2001

¹³ Letter from Cliff Wallis, Alberta Wilderness Association, to Peter Murphy, CSA SFM Technical Committee, December 3, 2001

¹⁴ Letter from Lorraine Reckman, National Aboriginal Forestry Association, to Katie Altoft, CSA, April 25, 2002.

4. Application of the standard

This section reviews how the standard is applied, including how auditors assess conformity with the standard and how organizations have addressed certification requirements in their management plans.

4.1 Certification process

Certification must be done by an accredited registrar. At this time there are two registrars that are accredited to certify to the SFM standard – QMI (a division of CSA) and KPMG. PricewaterhouseCoopers is in the process of applying for accreditation.

The certification process follows the following steps:

- a) The organization files a formal application with the certifier.
- b) A preliminary audit is done to assess the organization's state of preparedness for the upcoming certification audit. The preliminary audit is a combination of a field (forest) audit, interviews with employees and document review.
- c) The certification audit ascertains whether or not the organization meets the standard, with a high proportion of audit time spent in the field.
- d) The certificate of registration is awarded.
- e) Annual surveillance audits are done at least once a year.
- f) A full re-certification must be done after three years.

During the certification audit the certifier determines whether each of the 17 SFM elements identified in the standard has been addressed by the public participation process and implemented by the applicant organization. The auditor confirms that each element has been addressed, meaning that it has one or more objectives, indicators and targets associated with it, and these are being implemented.

Major non-conformances (which preclude certification) include any one or combination of the following:

- a) one or more requirements of the standard have not been addressed;
- b) one or more requirements of the standard have not been implemented; or
- c) several minor non-conformances exist that, taken together, lead the auditor to conclude that one or more requirements have not been addressed.¹⁵

The International Accreditation Forum has developed guidelines for certification of Environmental Management Systems. Those guidelines state:

“Non-conformity is the absence of, or the failure to implement and maintain, one or more environmental management system requirements, or a situation which would, on the basis of objective evidence, raise significant doubt as to the capability of the EMS to achieve the policy and objectives of the organization.”¹⁶

¹⁵ CAN/CSA-Z809-02, Annex A, A.1.

¹⁶ IAF Guidance on the Application of ISO/IEC Guide 66: General Requirements for Bodies Operating Assessment and Certification/registration of Environmental Management Systems (EMS), International Accreditation Forum, November 2003, p.7.

A representative of the Standards Council of Canada interpreted the above guideline as follows:

“The auditor also is required to assess whether or not a valid indicator has been chosen for each element and if the associated objectives and targets, if implemented, will in fact provide a high degree of assurance that the requirement is actually met or will be for longer term targets. An auditor must note and report any weaknesses in the link(s) between a requirement and its associated objectives and targets.”¹⁷

As shall be seen in Section 4.3 below, all five of the SFM plans reviewed for this report are demonstrably in violation of this requirement, at least in the interpretation provided by the Standards Council of Canada. This suggests three possibilities:

- a) the plans are not really in violation, because “non-conformity” need not be interpreted as the Standards Council of Canada describes it;*
- b) the plans are in violation, but the auditor is required only to “note and report” any weakness in the link between a requirement and its associated objectives and targets; or*
- c) the weakness in the links have been overlooked by the certifier.*

Whatever the eventual explanation, it undermines the claim by CSA that CAN/CSA-Z809—02 is a “performance standard”

4.2 Appeals process

Appeals regarding the standard are to be initially addressed to the CSA (if it pertains to the standard) or to the registrar (if it pertains to a certified client). If the matter is not resolved by these agencies then the Standards Council of Canada should be approached.

In July 2001 three environmental organizations in Alberta (Albertans for a Wild Chinchaga, Canadian Parks and Wilderness Society – Edmonton Chapter and the Alberta Wilderness Association) registered complaints with QMI (in reference to Weldwood’s Hinton SFM certificate) and KPMG (in reference to Canfor’s Grande Prairie certificate). In both cases the complainants alleged that the measures described in the management plan were insufficient to adequately address a number of goals, including protecting rare ecological sites, maintaining sufficient habitat for woodland caribou and conserving soil and water resources.¹⁸ In responding to the complaints neither QMI nor KPMG addressed the substance of the complaints. Instead, QMI responded that the public participation process requirements had been met, that “over 250 letters of invitation” had been sent, and that the complainants had had the opportunity to participate but had chosen not to. QMI proposed that the issues raised in the complaint be referred to Weldwood’s public advisory group.¹⁹ KPMG responded that the public involvement process met all of the standard’s requirements, and that KPMG agreed with Canfor that the specific objectives in the plan were “reasonable in the circumstances”, without

¹⁷ Stefan Janhager, Standards Council of Canada, pers. comm., Dec. 2, 2003.

¹⁸ H. Walsh, S. Gunsch and J. Tamblyn, submissions to QMI and KPMG, July 4, 2001.

¹⁹ P. Johnson, QMI, letter to H. Walsh, S. Gunsch and J. Tamblyn, Sep. 29, 2001.

explaining why (or what circumstances were being referred to), acknowledging only that SFM is “not an exact science”.²⁰

4.3 Review of objectives and targets

The true test of any forestry standard rests first of all in the quality and consistency of the management plans developed under that standard, and secondly with the actual impacts on the ground. It is outside the scope of this study to review on-the-ground impacts, but we have endeavoured to provide an overview of how the standard’s requirements are reflected in the SFM plans. We have not attempted to review all of the objectives, indicators and targets of all seventeen elements in all 27 SFM certificates currently issued, which would be an enormous dataset. Instead, in Appendix B there is a summary of the objectives and targets for six elements, listed for five management plans. We have chosen one Element from each of the six Criteria, in order to sample the breadth of issues covered in the standard. We’ve used the same elements listed in Table 2 above. We chose five SFM plans, each one from a different company and province, in order to get as much diversity as possible in the sample. The size of each Designated Forest Area ranges from a low of 550,000 ha to Weyerhaeuser’s Saskatchewan Forestlands, which at 4.9 million ha is by far the largest CSA certified forest. The table in Appendix B lists the relevant objectives and targets, with some minor editing for conciseness.

Ecosystem Diversity: Conserve ecosystem diversity at the landscape level by maintaining the variety of plant communities and ecosystems that naturally occur in the DFA (Requirement 1.1)

- *Four plans (Abitibi-Consolidated, Canfor, Weldwood and Stora Enso) deal in some way with the need to maintain mature forests, with some reference to natural disturbance regimes and/or range of natural variability.*
- *Weyerhaeuser increases the amount of younger forest.*

Comment: *The first four may or may not be adequate; the Weyerhaeuser target would require closer scrutiny to determine whether their proposal to increase the amount of younger forest is a valid way to conserve ecosystem diversity.*

Forest Ecosystem Resilience: Conserve ecosystem resilience by maintaining both ecosystem processes and ecosystem conditions (Requirement 2.1)

- *Abitibi-Consolidated will carry out monitoring; the only target is to avoid “unsustainable harvest levels.”*
- *Canfor aims to put out anthropogenic fires and salvage timber killed in natural disturbances*
- *Weldwood plans to control insect and fire outbreaks*
- *Stora Enso plans to increase the use of alternatives to clearcutting*
- *Weyerhaeuser focuses on regeneration and retention.*

Comment: *There is no consistency whatsoever in how companies address this requirement. Most targets are questionable in their efficacy in meeting the requirement, and several seem to be counterproductive.*

²⁰ M. Alexander, KPMG, letter to H. Walsh, S. Gunsch and J. Tamblyn, July 25, 2001.

Water Quantity and Quality: Conserve water resources by maintaining water quantity and quality (Requirement 3.2)

- *Abitibi-Consolidated plans to “minimize” adverse effects, with no quantitative target*
- *Canfor plans to meet or exceed provincial requirements and put a priority on repairing erosion hazards on old roads*
- *Weldwood plans to comply with regulatory requirements*
- *Stora Enso plans to meet or exceed provincial regulations, and avoid “regular” harvesting on steep slopes*
- *Weyerhaeuser will avoid having more than 30% of watersheds in recent disturbed condition, targets zero spills of hazardous materials or continuing significant ponding, and no statistically significant downstream reduction of benthic macro-invertebrates.*

Comment: *Canfor’s commitment to road repair is noteworthy, but with the exception of Weyerhaeuser’s water quality targets it is hard to assess whether or not the water quality targets are likely to achieve the requirement, short of evaluating all relevant provincial requirements.*

Forest Land Conversion: Protect forestlands from deforestation or conversion to non-forests (Requirement 4.2)

- *Abitibi-Consolidated will keep roads-related deforestation below 2%; Stora Enso below 4%*
- *Canfor will adhere to site degradation objectives*
- *Weldwood will maintain the AAC at its current level*
- *Weyerhaeuser will rehabilitate 100% of temporary roads and landings, and will finalize a road reduction strategy*

Comment: *Four of the company targets may or may not be adequate; Weldwood’s target is irrelevant to the requirement.*

Fair Distribution of Benefits and Costs: Promote the fair distribution of timber and non-timber benefits and costs (Requirement 5.3)

- *Abitibi-Consolidated plans to meet this requirement by paying stumpage fees and building roads*
- *Canfor will establish management zones around First Nations cultural features, maintain the 8 campsites on the DFA, inspect and maintain interpretive trails, manage for areas of suitable black bear denning habitat, conform with visual quality objectives and several other actions.*
- *Weldwood will maintain public access on roads, review and update its Recreation Plan, continue a recreation user survey and monitor and report on use of roads.*
- *Stora Enso will increase the harvested volume per tree by 25% by 2020.*
- *Weyerhaeuser will list opportunities for consultation, endeavour to meet with each Aboriginal community once every two years, and reduce the number of unanticipated harvesting moves.*

Comment: *Abitibi-Consolidated delegates the responsibility for fair distribution of benefits to the provincial government, to whom it pays stumpage fees which the government may distribute as fairly as it chooses. Abitibi-Consolidated, Weldwood and*

Stora-Enso all take credit for coincidental benefits accruing as a result of road building and/or productivity increases. This amounts to a claim by the companies in question that these “trickle-down” benefits are equivalent to “fair distribution.”

Aboriginal and Treaty Rights: Recognize and respect Aboriginal and treaty rights (Requirement 6.1)

- *All five companies commit to actions that relate to consultations with Aboriginal communities and maintaining good working relations.*
- *Abitibi-Consolidated will maintain or increase economic opportunities for Aboriginals*

Comment: *The commitments of forest companies to ‘consider’ and ‘respect’ Aboriginal rights, and to seek involvement, develop strategies, hold meetings and report on concerns ultimately defers the responsibility for respecting Aboriginal rights to government. None of the targets promise to address Aboriginal concerns to the satisfaction of Aboriginal communities, such as by obtaining agreement with Aboriginal communities that their interests and concerns are clearly and adequately incorporated into the forest management plan.*

Summary: *Based on this survey of five companies and six CSA requirements, there does not seem to be enough consistency in how the requirements are addressed to warrant the claim that the standard actually addresses these performance requirements. The only truly standardized aspect of these plans is the public participation process that was used to develop them.*

Additional research suggests that the variability between companies in these plans is equaled by the variability between the SFM plans of different management units within the same company. Table 4 compares the stated targets for one key requirement as set out in two SFM plans developed by Abitibi-Consolidated, one in Ontario and one in Newfoundland.

Table 4: Comparison of targets from two Abitibi-Consolidated certifications

	Fort Frances, Ontario	Newfoundland woodlands ²¹
Requirement: Conserve ecosystem diversity at the landscape level by maintaining the variety of communities and ecosystems that naturally occur in the Designated Forest Area.	<ul style="list-style-type: none"> - Ensure that the changes in forest composition are consistent with the Bounds of Natural Variation in the future. -Ensure the presence of older age classes on the forest, consistent with the Bounds of Natural Variation. -Establish harvest disturbance patches on the forest in a manner which is consistent with the historic size class and frequency distribution trend shown in the Fire Analysis Results. 	Maintain a minimum of 15% representation of each forest age class across the Designated Forest Area, for age classes (0-20), (20-40), (40-60) and (60-80)

²¹ Available at [http://www.abitibiconsolidated.com/aciwebsitev3.nsf/Site/en/images/pdf/aci_nf_appendixb.pdf/\\$file/aci_nf_appendixb.pdf](http://www.abitibiconsolidated.com/aciwebsitev3.nsf/Site/en/images/pdf/aci_nf_appendixb.pdf/$file/aci_nf_appendixb.pdf)

<i>Comment</i>	<i>These targets are reasonably progressive, although without quantified targets it is difficult to be sure how effectively they will be implemented.</i>	<i>This target fails to acknowledge the need to maintain <u>any</u> old growth forest in the Designated Forest Area.</i>
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The targets for the Fort Frances SFM plan lay out a performance standard for ecosystem diversity. The Newfoundland SFM plan, on the other hand does not. The lack of consistency between the two plans is intrinsic to the CSA standard, which leaves the determination of targets to the applicant, with an opportunity for input from the members of the public participation process.

The CSA has responded to this criticism by arguing that the targets alone should not be used in isolation for evaluation purposes; rather, all of the targets, the whole Sustainable Forest Management Plan and even provincial policy should be taken into account to assess if CSA's objectives are met.

While it is likely true that a company might have more management directives for meeting an objective to, for example, maintain ecological diversity than it has listed in its VOIT table, the fact that the VOIT table does not provide assurance that CSA objectives are met re-emphasizes the observations detailed above: that, as the standard does not have consistent thresholds or performance requirements to ensure that ecological objectives are met, if the targets themselves cannot be relied upon for this assessment, the standard cannot be used as a reference for ensuring forestry practices that meet CSA's stated environmental objectives.

5. General Conclusions

5.1 Is the CSA SFM standard a performance standard?

To begin with it may be helpful to cite in full the CSA's answer to this question, which is stated in the standard itself:

“This Standard is more than a system standard. It is also a performance standard. The Standard deals with performance at two levels. First, it prescribes use of a mandatory set of CCFM SFM criteria and CSA SFM elements. Second, it gives the public the opportunity to assist in setting specific values, objectives, indicators and targets at the local forest level for each of the CSA SFM elements. The Standard requires a public participation process to set locally appropriate targets (including thresholds and limits). Moreover, this Standard sets specific requirements for the public participation process. This approach to performance not only respects government-recognized criteria for SFM but also allows the public to participate in the interpretation of the CCFM SFM criteria and CSA SFM elements for the local forest.

The concept of performance-based Standards is still evolving. There is not an internationally accepted or recognized definition of performance-based standards for any application, including SFM. The strength of this Standard rests in its

combination of public participation, performance requirements, and management system requirements.”²²

Let us examine in turn the claims made in the above statement.

1. It prescribes use of a mandatory set of CCFM SFM criteria and CSA SFM elements. Yes, but these elements are not detailed enough to be interpretable in the field (see the examples in Table 2 above, with a complete list in Appendix A). They require many other intermediary steps (values, objectives, indicators and targets) before they can be assessed. It is these intermediary steps that are audited by the certifier, rather than the extent to which these steps credibly and reliably achieve specific standardized results.

2. It gives the public the opportunity to assist in setting specific values, objectives, indicators and targets at the local forest level for each of the CSA SFM elements. True, but not relevant to the question of whether or not it is a performance standard. The standard itself offers little guidance towards achieving standardized objectives, indicators and targets. Indeed, it encourages applicants to come up with their own locally relevant (i.e., non-standardized) elaboration of the SFM elements.

3. It sets specific requirements for the public participation process. True, and in this sense it can be considered to be a performance standard pertaining to public participation. But that does not make it a performance standard with respect to forest management.

4. There is not an internationally accepted or recognized definition of performance-based standards for any application, including SFM. Not true. There is a good international guideline for performance standards, compiled for ProForest by consultants with experience in several different forest standards. It states that “Performance standards specify the level of performance or results which must be achieved in a forest, but do not specify how this should be done.”²³ The authors contrast performance standards with system standards (which “specify the management systems which must be in place within an organization to ensure that they are managing quality, environment or even social performance consistently”), and offer the following:

“In practice, most standards applied to forestry are a combination of systems and performance requirements. ... Standards developed specifically for forestry range from the Canadian Standards Association (CSA) SFM standard which is predominantly a system standard, but includes some guidance on performance areas where objectives and targets must be set, to the Forest Stewardship Council (FSC) standard which consists predominantly of performance requirements but also recognizes the importance of some systems elements (e.g. management planning and monitoring) and requires that these are in place.”²⁴

²² CAN/CSA-Z809-02, Section 0.4

²³ R. Nussbaum, S. Jennings and M. Garforth, “Assessing forest certification schemes: A practical guide” Proforest, January 2002, p. 16. Available at www.proforest.net

²⁴ Ibid, pp.16-17.

This assessment was done of the original CSA SFM standard. The revised standard adds seventeen normative statements that describe results to be achieved, and might be said to move the CSA standard more in the direction of a performance standard. These statements are very broad, however, and don't have sufficient detail to give guidance to auditors to assess whether or not the desired results are actually being achieved. Without this guidance it appears that certifiers assess only whether the proper procedures have been carried out, and not whether the desired results are achieved. Section 4.3 above shows that the actual management plans consistently fail to describe actions that offer credible assurance that the desired results will be achieved.

If the CSA SFM standard is a performance standard, then it is either a very weak performance standard, or else one that has a large number of unwarranted certifications associated with it. Since both of these alternatives undermine the credibility of the Canadian Standards Association it would be preferable and more generous to conclude that the CSA SFM standard is a management system standard with a detailed framework for the development of performance requirements by the applicant in consultation with affected publics.

Strengths of the CSA SFM standard

- *It was approved unanimously by a Technical Committee comprising a diversity of interests*
- *It has strong requirements for public participation*
- *It has excellent provisions for tracking Chain of Custody*
- *It has outstanding requirements for transparency*

The CSA SFM standard is a good tool for a forestry company to foster better relations within affected communities

Limitations of the CSA SFM standard

- *The Technical Committee that approved the standard lacked representation from Aboriginal organizations or from environmental organizations involved in active public campaigns to highlight negative forestry practices.*
- *It is, at present, a difficult standard for managers of small forests to implement.*
- *The appeals process has not been effective in resolving concerns about the standard.*
- *The standard lacks detailed performance requirements, and as a result cannot provide adequate assurances of rigour.*
- *The performance requirements that do exist are not being consistently implemented (at least as evident from company targets to meet CSA objectives).*

The limitations inherent in the CSA SFM standard make it inadequate for use in influencing purchasing decisions made by green consumers or retailers.

Credits and Acknowledgements

This report was written by Martin von Mirbach, National Conservation Director, Sierra Club of Canada. He is a former member of the CSA SFM Technical Committee, as well as a former member of the FSC Canada Working Group. He continues to serve as a

member of the CSA Strategic Steering Committee on the Environment, as well as FSC Canada's Boreal Coordinating Committee.

Research and editing assistance was provided by Rachel Plotkin, the Sierra Club of Canada's Director of Forest and Biodiversity Campaigns.

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Annex A (normative)

Summary of Requirements of Z809

Note: This Annex is a mandatory part of this Standard.

4. Sustainable Forest Management Requirements

4.1 General Requirements

The organization shall meet the SFM requirements of this Standard, which include but are not limited to

- a) compliance with relevant legislation on the DFA;
- b) appropriate values, objectives, indicators, and targets that clearly address the CCFM SFM criteria and CSA SFM elements in this Standard;
- c) ongoing and meaningful public participation;
- d) progress towards or achievement of performance targets; and
- e) continual improvement in performance.

4.2 Required Activities

To meet all the SFM requirements of this Standard, the organization shall meet the

- a) public participation requirements described in Clause 5;
- b) performance requirements described in Clause 6; and
- c) system requirements described in Clause 7.

5. Public Participation Requirements

5.1 Basic Requirements

The organization shall establish and implement a public participation process by either

- a) starting a new process;
- b) building on an existing process; or
- c) reviving a previous process.

5.2 Interested Parties

The organization shall

- a) openly seek representation from a broad range of interested parties, including DFA-related workers, and invite them to participate in developing the public participation process;
- b) provide interested parties with relevant background information;
- c) demonstrate through documentation that efforts were made to contact Aboriginal forest users and communities affected by or interested in forest management in the DFA;
- d) demonstrate through documentation that efforts were made to encourage Aboriginal forest users and communities to become involved in identifying and addressing SFM values;
- e) recognize Aboriginal and treaty rights and agree that Aboriginal participation in the public participation process will not prejudice those rights; and
- f) establish and maintain a list of interested parties, including those that chose to participate, those that decided not to participate, and those that were unable to participate. The list shall contain names and contact information, as well as any links to the organization.

5.3 Process

5.3.1 Basic Operating Rules

The organization shall demonstrate that

- a) the public participation process works according to clearly defined operating rules that contain provisions on
 - i) content;

- ii) goals;
 - iii) timelines;
 - iv) internal and external communication;
 - v) resources (including human, physical, financial, information, and technological, as necessary and reasonable);
 - vi) roles, responsibilities, and obligations of participants and their organizations;
 - vii) conflict of interest;
 - viii) decision-making methods;
 - ix) authority for decisions;
 - x) mechanisms to adjust the process as needed;
 - xi) access to information (including this Standard);
 - xii) the participation of experts, other interests, and government; and
 - xiii) a dispute-resolution mechanism; and
- b) the participants have agreed to the public participation process operating rules.

5.4 Content

- a) In the public participation process, interested parties shall have opportunities to work with the organization and interact to
- i) identify and select values, objectives, indicators, and targets, based on the CSA SFM elements and any other elements of relevance to the DFA;
 - ii) develop alternative strategies to be assessed;
 - iii) assess alternative strategies and select the preferred one;
 - iv) review the SFM plan;
 - v) design monitoring programs, evaluate results, and recommend improvements; and
 - vi) discuss and resolve any issues relevant to SFM on the DFA; and
- b) The organization and the public participation process shall ensure that the values, objectives, indicators, and targets are consistent with relevant government legislation, regulations, and policies.

5.5 Communication

The organization shall

- a) provide access to information about the DFA and the SFM requirements;
- b) provide information to a broader public about the progress being made in the implementation of this Standard;
- c) make allowances for different linguistic, cultural, geographic, or informational needs of interested parties;
- d) demonstrate that there is ongoing public communication about the DFA, including the public participation process; and
- e) demonstrate that all input is considered, and responses are provided.

6. SFM Performance Requirements: CCFM SFM Criteria and CSA SFM Elements

The organization, in conformance with the public participation process requirements set out in Clause 5, shall identify DFA-specific values, objectives, indicators, and targets for each of the CSA SFM elements described in Clause 6, as well as any other values associated with the DFA.

CCFM Criterion 1 — Conservation of Biological Diversity

Conserve biological diversity by maintaining integrity, function, and diversity of living organisms and the complexes of which they are part.

CSA SFM Element 1.1 Ecosystem Diversity

Conserve ecosystem diversity at the landscape level by maintaining the variety of communities and ecosystems that naturally occur in the DFA.

CSA SFM Element 1.2 Species Diversity

Conserve species diversity by ensuring that habitats for the native species found in the DFA are maintained through time.

CSA SFM Element 1.3 Genetic Diversity

Conserve genetic diversity by maintaining the variation of genes within species.

CSA SFM Element 1.4 Protected Areas and Sites of Special Biological Significance

Respect protected areas identified through government processes. Identify sites of special biological significance within the DFA and implement management strategies appropriate to their long-term maintenance.

CCFM Criterion 2 — Maintenance and Enhancement of Forest Ecosystem Condition and Productivity

Conserve forest ecosystem condition and productivity by maintaining the health, vitality, and rates of biological production.

CSA SFM Element 2.1 Forest Ecosystem Resilience

Conserve ecosystem resilience by maintaining both ecosystem processes and ecosystem conditions.

CSA SFM Element 2.2 Forest Ecosystem Productivity

Conserve forest ecosystem productivity and productive capacity by maintaining ecosystem conditions that are capable of supporting naturally occurring species.

CCFM Criterion 3 — Conservation of Soil and Water Resources

Conserve soil and water resources by maintaining their quantity and quality in forest ecosystems.

CSA SFM Element 3.1 Soil Quality and Quantity

Conserve soil resources by maintaining soil quality and quantity.

CSA SFM Element 3.2 Water Quality and Quantity

Conserve water resources by maintaining water quality and quantity.

CCFM Criterion 4 — Forest Ecosystem Contributions to Global Ecological Cycles

Maintain forest conditions and management activities that contribute to the health of global ecological cycles.

CSA SFM Element 4.1 Carbon Uptake and Storage

Maintain the processes that take carbon from the atmosphere and store it in forest ecosystems.

CSA SFM Element 4.2 Forest Land Conversion

Protect forestlands from deforestation or conversion to non-forests.

CCFM Criterion 5 — Multiple Benefits to Society

Sustain flows of forest benefits for current and future generations by providing multiple goods and services.

CSA SFM Element 5.1 Timber and Non-Timber Benefits

Manage the forest sustainably to produce an acceptable and feasible mix of both timber and non-timber benefits.

CSA SFM Element 5.2 Communities and Sustainability

Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and to participate in their use and management.

CSA SFM Element 5.3 Fair Distribution of Benefits and Costs

Promote the fair distribution of timber and non-timber benefits and costs.

CCFM Criterion 6 — Accepting Society's Responsibility for Sustainable Development

Society's responsibility for sustainable forest management requires that fair, equitable, and effective forest management decisions are made.

CSA SFM Element 6.1 Aboriginal and Treaty Rights

Recognize and respect Aboriginal and treaty rights.

CSA SFM Element 6.2 Respect for Aboriginal Forest Values, Knowledge, and Uses

Respect traditional Aboriginal forest values and uses identified through the Aboriginal input process.

CSA SFM Element 6.3 Public Participation

Demonstrate that the SFM public participation process is designed and functioning to the satisfaction of the participants.

CSA SFM Element 6.4 Information for Decision-Making

Provide relevant information to interested parties to support their involvement in the public participation process, and increase knowledge of ecosystem processes and human interactions with forest ecosystems.

7. SFM System Requirements: The Continual Improvement Loop

7.1 General

The organization shall establish and maintain an SFM system, as described in Clause 7.

7.2 SFM Policy

The top management shall define and maintain the organization's SFM commitment through policy statements and/or other documented public statements.

The statement(s) shall contain a commitment to

- a) achieve and maintain SFM;
- b) meet or exceed all relevant legislation, regulations, policies, and other requirements to which the organization subscribes;
- c) respect Aboriginal and treaty rights;
- d) provide for public participation;
- e) provide participation opportunities for Aboriginal peoples with respect to their rights and interests in SFM;
- f) provide conditions and safeguards for the health and safety of DFA-related workers and the public;
- g) improve knowledge about the forest and SFM and to monitor advances in SFM science and technology and incorporate them where applicable; and
- h) demonstrate continual improvement in SFM.

The statement(s) shall be documented, communicated, and made readily available.

7.3 Planning

7.3.1 Defined Forest Area (DFA)

The organization shall designate a clearly defined forest area to which this Standard applies. The organization shall define the geographic extent and the respective ownership and management responsibilities for the DFA.

7.3.2 Ownership Rights and Responsibilities

The organization shall respect the legal rights and responsibilities of other parties in the DFA that are not part of the registration applicant.

7.3.3 Shared Responsibilities

7.3.3.1 General

The organization shall ensure that all parties necessary to address the CSA SFM elements for the DFA are involved in the process. The organization shall clearly describe the respective roles and responsibilities of the parties involved.

7.3.4 Rights and Regulations

The organization shall

- a) demonstrate that relevant legislation and regulatory requirements that relate to ownership, tenures, and rights and responsibilities in the DFA have been identified and complied with;
- b) demonstrate that Aboriginal and treaty rights have been identified and respected;
- c) demonstrate that the legal and constitutional rights, and the health and safety of DFA-related workers, are respected and their contributions to SFM are encouraged;
- d) demonstrate that the acquired and legal rights of private woodlot owners to set their own values, objectives, indicators, and targets relating to their properties are respected; and
- e) establish and maintain procedures to identify and have access to all legal and other requirements to which the organization subscribes that are applicable to the DFA. This includes requirements that relate to ownership tenures, rights, and responsibilities in the DFA.

7.3.5 Incorporation of Public Participation Requirements

The public participation requirements set out in Clause 5 of this Standard shall be incorporated into the SFM system.

7.3.6 Setting DFA-Specific Performance Requirements

7.3.6.1 General

The organization, working with interested parties in the public participation process at each stage, shall establish DFA-specific performance requirements that address all the CSA SFM elements in Clause 6. The work shall be recorded in the SFM plan and shall be summarized in accordance with the example in Annex C.

For each element, one or more DFA-specific values shall be identified.

For each value, one or more objectives shall be set.

For each value, one or more indicators shall be identified. Indicators shall be quantitative where feasible.

For each indicator, data on the current status shall be provided, and one target shall be set. Each target shall specify acceptable levels of variance for the indicator and clear time frames for achievement.

Alternative strategies shall be identified and elaborated.

Forecasts shall be prepared for the expected responses of each indicator to each alternative strategy. Assumptions and analytical methods used for making each forecast shall be described.

During plan implementation, measurements shall be taken for each indicator at appropriate times and places. Measurement results shall be interpreted in the context of the forecasts in the SFM plan. See Clauses 7.5.1 and 7.6 for the continuation of the adaptive management process.

7.3.7 SFM Plan

The organization shall document, maintain, and make publicly available an SFM plan for the DFA. The SFM plan for each DFA shall include

- a) a comprehensive description of the DFA;
- b) a summary of the most recent forest management plan and the management outcomes, including the conclusions drawn in the management review;
- c) a statement of values, objectives, indicators, and targets;
- d) current status and forecasts for each indicator, including a description of the assumptions and analytical methods used for forecasting;
- e) a description of the chosen strategy, including all significant actions to be undertaken and their associated implementation schedule;
- f) a description of the monitoring program;
- g) a comparative analysis of the actual and expected outcomes; and
- h) a demonstration of the links between short-term operational plans and the SFM plan.

7.4 Implementation and Operation

7.4.1 Structure and Responsibility

Roles, responsibilities, and authorities required to implement and maintain conformance with the SFM requirements shall be defined, documented, and communicated within the organization.

The organization shall provide resources essential to the implementation and control of the SFM requirements. Resources include human resources and specialized skills, technology, and financial resources.

The organization shall appoint a specific management representative(s) who shall have defined roles, responsibilities, and authority for

- a) ensuring that the SFM requirements are established and maintained in accordance with this Standard; and
- b) reporting on the SFM requirements to top management for review and as a basis for continual improvement.

7.4.2 Training, Awareness, Qualifications, and Knowledge

The organization shall identify training needs. It shall also ensure that personnel receive training related to the impact of their work upon the DFA and to their ability to ensure that the SFM requirements are met.

The organization shall establish and maintain procedures to make its personnel at each relevant function and level aware of

- a) the importance of conformance with the SFM policy and with the SFM requirements;
- b) the environmental impacts, actual or potential, of their work and the benefits of achieving the SFM requirements;
- c) their roles and responsibilities in achieving conformance with the SFM policy and with the SFM requirements, including emergency preparedness and response requirements; and
- d) the potential consequences of deviations from specified operating procedures.

The organization shall ensure that its personnel are qualified on the basis of appropriate training and/or work experience and have opportunities to gain new knowledge. The organization shall also require contractors working on its behalf to demonstrate that their personnel have the requisite training and awareness levels.

The organization shall improve knowledge about the DFA and SFM and shall monitor advances in SFM science and technology and incorporate them where and when applicable.

7.4.3 Communication

7.4.3.1 General

The organization shall

- a) establish and maintain procedures for internal communication between its various levels and functions;

- b) establish and maintain procedures for receiving, documenting, and responding to relevant communication from external interested parties;
- c) make the SFM plan publicly available;
- d) make an annual report on its performance in meeting and maintaining the SFM requirements publicly available; and
- e) make the results of independent certification and surveillance audit reports publicly available.

7.4.4 SFM Documentation

7.4.4.1 General

The organization shall establish and maintain information, in paper or electronic form, to

- a) describe the SFM requirements and their interaction; and
- b) provide direction to related documentation.

Organizations shall ensure that DFA-related workers and contractors have access to documentation relevant to their responsibilities and tasks.

7.4.5 Document Control

The organization shall establish and maintain procedures for controlling all documents (paper or electronic) required by this Standard to ensure that

- a) they can be readily located;
- b) they are periodically reviewed, revised as necessary, and approved for adequacy by authorized personnel;
- c) the current versions of relevant documents are available at all locations where operations essential to the fulfillment of the SFM requirements and the SFM plan are performed;
- d) obsolete documents are promptly removed from all points of issue and use, or otherwise assured against unintended use;
- e) any obsolete documents retained for legal and/or knowledge preservation purposes are suitably identified.

Documentation shall be legible, dated (with dates of revision), readily identifiable, maintained in an orderly manner, and retained for a specified period.

Procedures and responsibilities for the creation and modification of the various types of documents shall be established and maintained.

7.4.6 Operational Procedures and Control

The organization shall

- a) identify the operational procedures and controls needed to meet the SFM requirements;
- b) establish and maintain documented procedures to cover situations where the absence of such procedures could lead to deviations from the SFM requirements;
- c) stipulate operating criteria, including maintenance and calibration requirements;
- d) communicate relevant procedures, controls, and requirements to suppliers and contractors; and
- e) ensure that contractors working on behalf of the organization have the necessary operational procedures and controls.

7.4.7 Emergency Preparedness and Response

The organization shall

- a) establish and maintain procedures to identify the potential for and to respond to accidents and emergencies on the DFA;
- b) establish and maintain procedures to prevent and mitigate the impacts that may be associated with accidents and emergencies;
- c) review and revise, where necessary, its emergency preparedness and response procedures, in particular, after the occurrence of accidents or emergencies; and
- d) where practicable, periodically test procedures.

7.5 Checking and Corrective Action

7.5.1 Monitoring and Measurement

7.5.1.1 General

The organization shall

- a) establish and maintain documented procedures to monitor, on a regular basis, the key characteristics of its operations and activities that demonstrate progress towards SFM in the DFA. This shall include the recording of performance levels, relevant operational controls, and conformance with the SFM requirements;
- b) monitor the indicators for comparison against the forecasts; and
- c) establish and maintain a documented procedure for periodically evaluating compliance with relevant legislation and regulations, and conformance with relevant policies applying to the DFA. If non-compliances or nonconformances are found, the organization shall address these through the corrective and preventive action process.

7.5.2 Corrective and Preventive Action

The organization shall establish and maintain procedures for

- a) defining responsibility and authority for identifying and investigating nonconformance;
- b) taking action to mitigate any impacts caused; and
- c) initiating and completing corrective and preventive action.

Any corrective or preventive action taken to eliminate the causes of actual and potential nonconformances shall be appropriate to the magnitude of the problem and commensurate with the impact encountered.

7.5.3 Records

The organization shall establish and maintain procedures for the identification, maintenance, and disposition of SFM requirement records. These records shall include training records and the results of audits and reviews.

SFM requirement records shall be legible, identifiable, and traceable to the activity involved. SFM requirement records shall be stored and maintained in such a way that they are readily retrievable and protected against damage, deterioration, or loss. Their retention times shall be established and recorded.

Records shall be maintained, in a manner appropriate to the system and to the organization, to demonstrate conformance to the requirements of this Standard.

7.5.4 Internal Audits to the SFM Requirements

The organization shall

- a) establish and maintain procedures for annual internal audits to ensure that it conforms to the SFM requirements set out in this Standard; and
- b) provide information on the results of these internal audits to top management.

The organization's internal audit program, including any schedules, shall be based on the importance of the specific SFM activity and the results of previous audits.

To be comprehensive, the audit procedures shall cover the audit scope, frequency, and methods, as well as the responsibilities and requirements for conducting audits, auditor qualifications, and reporting results.

7.6 Management Review

The organization's top management shall, at least annually, review the SFM requirements to ensure that progress towards SFM continues to be suitable, adequate, and effective. The management review process shall ensure that the information necessary to allow top management to carry out this evaluation is collected. This review shall be documented.

In order to be adaptive, the management review shall address the possible need for changes to policy, targets, and other SFM requirements, in light of audit results, changing circumstances, and the commitment to continual improvement.

Appendix B Matrix of Performance Requirements and Targets.

Forest Company and Woodland	Abitibi Consolidated Fort Frances, ON ¹	Canfor Nimpkish Tree Farm, BC ²	Weldwood Hinton, AB ³	Stora Enso Port Hawksbury's Woodlands, NS ⁴	Weyerhaeuser Saskatchewan Forestlands, SK ⁵
<i>Criterion/Element</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>
<p>1. Conservation of Biological Diversity; 1.1: Ecosystem Diversity.</p> <p>Requirement; Conserve ecosystem diversity at the landscape level by maintaining the variety of communities and ecosystems that naturally occur in the DFA.</p>	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - To provide for a forest composition that is representative of the forest condition under a natural disturbance regime -To provide an age class structure on the forest that is representative of the forest condition under a natural disturbance regime, within the bounds of natural variation. -To create a range of harvest disturbance patches across the landscape that is consistent with size frequency distribution and shape of patches created under a natural fire regime. <p>TARGETS</p> <ul style="list-style-type: none"> - To ensure that the changes in forest composition are consistent with the Bounds of Natural Variation in the future. -To ensure the presence of older age classes on the forest, consistent with the Bounds of Natural Variation. -To establish harvest disturbance patches on the forest in a manner which is consistent with the historic size class and frequency distribution trend shown in the Fire Analysis Results. 	<p>OBJECTIVES (stated as goal) - Manage forests to conserve ecosystem diversity throughout the DFA.</p> <p>TARGETS (stated as objectives)</p> <ul style="list-style-type: none"> -Submit for government review, old growth management areas by LU and BEC variant -Maintain variable percentages (+/- 5%) as representative wildlife tree areas by LU and BEC subzone -Achieve seral stage representation objectives (+/- 10% of targets) by LU and BEC variant as detailed in the SFM plan, within three rotations, with focus on old 	<p>OBJECTIVES (stated as goal):</p> <ul style="list-style-type: none"> -Conserve natural diversity, patterns, and stages of forest ecosystems over time. -Protect rare ecological sites and special landscape features. <p>TARGETS (stated as Indicator Descriptions)</p> <ul style="list-style-type: none"> -Maintain all seral stage amounts by major forest type and landbase scale within the Range of Natural Variation according to the 1999 FMP analysis. -Protect area by category, within the FMA perimeter. 	<p>OBJECTIVES (stated as goal)</p> <ul style="list-style-type: none"> - Maintain Ecological landscapes <p>TARGETS (called objective statements):</p> <ul style="list-style-type: none"> -Develop and maintain areas of mature forest and cover type distributions consistent with EPU specific natural disturbance regimes. -Maintain a minimum of 15% area reserved from harvest under a protected areas strategy. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> -Maintenance of a full range of forest ages and types that naturally occur on the Defined Forest Area. -Retention of vegetative structure (mature and/or immature trees) within harvested blocks. -Have protected areas that can be used for bench marking Defined Forest Area. -Report the average residual merchantable wood left in harvest blocks against twenty year plan commitments. <p>TARGETS:</p> <ul style="list-style-type: none"> -Increase the proportion of younger age classes (0-40 years) for all forest types as defined for harvest in Twenty Year Plans by at least 10% in the year 2020. To be calculated every five years -Complete an analysis of current [old] forest patch size distribution by 2005. -Maximum of 20% of the timber productive landbase disturbed (harvested and/or burned) during a 5-year period from the anniversary date of each Twenty-year plan. -Expand the range of harvest

		<p>seral until Jan. 2004.</p> <ul style="list-style-type: none">-Maintain variable percentages of the forest that is in < (or equal to) 20 yrs old in variable patch sizes by LU.-Achieve forest influence objectives detailed in the SFM plan, by ecosystem management unit. Objectives will be met over a 5 year period on 90% (5% variance) of the total area under prescription by ecosystem management unit.-Achieve objectives for number of individual trees per ha as detailed in the SFM plan, by ecosystem management unit.-Achieve objectives for internal patch percent as detailed in SFM plan, by ecosystem management unit.			<p>block sizes by 2005.</p> <ul style="list-style-type: none">-An average of 3% of harvested area within the Defined Forest Area left in islands and clumps, varying between 0 and 10% for individual blocks
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Forest Company and Woodlot	Abitibi Consolidated Fort Frances, ON	Canfor Nimpkish Tree Farm, BC	Weldwood Hinton, AB	Stora Enso Port Hawksbury's Woodlands, NS	Weyerhaeuser Saskatchewan Forestlands, SK
<i>Criterion/Element</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>
<p>2. Maintenance and Enhancement of Forest Ecosystem Condition and Productivity; Criterion 2.1, Forest Ecosystem Resilience.</p> <p>Requirement: Conserve ecosystem resilience by maintaining both ecosystem processes and ecosystem conditions</p>	<p>OBJECTIVES -Monitor and manage incidents of natural forest disturbance in order to maintain the long-term health of forest ecosystems</p>	<p>OBJECTIVES -Minimize the impact on forest resources resulting from uncontrolled fire - Minimize the impact on forest resources resulting from uncontrolled disease - Minimize the impact on forest resources resulting from uncontrolled insect outbreaks - Minimize the impact on forest resources resulting from windthrow losses -Minimize timber losses due to flooding -Maintain ecosystem diversity -Maintain resilient forest ecosystems -Minimize forest regeneration failure</p>	<p>OBJECTIVES -Manage to support ecological resilience</p>	<p>OBJECTIVES -Protect forest from fire, insect and disease -Promote natural regeneration</p>	<p>OBJECTIVES -Forest Management activities do not compromise forest ecosystems ability to recover -Ensure that forest areas are successfully regenerated after harvesting (green tree and salvage) -Retention of vegetative structure within harvested blocks -Have adequate protected forest areas within and adjacent to Defined Forest Area</p>
	<p>TARGETS -Natural disturbance levels will be monitored annually during the 2002-2007 term, to ensure that assumptions made during Available Harvest Area calculations do not result in unsustainable harvest levels.</p>	<p>TARGETS -100% of timber is salvaged from severe insect outbreak where economically and ecologically appropriate. -100% of cutblocks in compliance with disease control measures in SPs. -All accidental industrial and recreational fires extinguished or under control by 10am the day after the fire started (20% variance allowed). -100% of timber is salvaged from severe windthrow events - 100% of timber is salvaged</p>	<p>TARGETS - Limit combined annual loss to fire and epidemic insect/disease outbreaks to a maximum of 0.1% of the FMA contributing landbase (based on a 20 year rolling average) -Measure of merchantable timber salvaged compared to volume and area damaged.</p>	<p>TARGETS - Increase non-clearcut treatments in appropriate ecoregions to represent 40% of total harvest by 2015 and 50% of total harvest by 2025. -Naturally regenerate a minimum of 50% of total annual reforestation area</p>	<p>TARGETS - 100% of completed harvest blocks have regeneration initiated within two years for Weyerhaeuser blocks, within 5 years for third party blocks -Meet currently approved regeneration standards -An average of 3% of the harvested area within the DFA left in islands and clumps, varying between 0 and 10% for individual blocks -Report the average residual merchantable wood left in harvest blocks against 20 year plan</p>

		<p>from severe flooding events.</p> <ul style="list-style-type: none">-Regeneration success on greater to or equal than 95% (plus or minus 5%) of cutblocks-100% of cutblocks will achieve free growing status within the free growing assessment period specified in SPs.-See targets for Indicator 1a.			<p>commitments</p> <ul style="list-style-type: none">-Report percentage and extent of protected areas in the overall landscape, within and adjacent to the DFA.
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Forest Company and Woodlot	Abitibi Consolidated Fort Frances, ON	Canfor Nimpkish Tree Farm, BC	Weldwood Hinton, AB	Stora Enso Port Hawksbury's Woodlands, NS	Weyerhaeuser Saskatchewan Forestlands, SK
<i>Criterion/Element</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>
<p>3. Conservation of Soil and Water Resources; 3.2 Water Quality and Quantity</p> <p>Requirement: Conserve water resources by maintaining water quality and quantity.</p>	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - To minimize the adverse effects of forest practices on water quality 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> -Minimize the effects that Canfor's activities have on water quality and quantity within lakes, streams and wetlands on the DFA. -Minimize the effects that Canfor's activities have on water quality and quantity flowing through karst features -Minimize chance of contaminant spills -Use forest management practices that will minimize impacts on natural seasonal flows. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - Protect Water quality -Keep changes to quantity and timing of water yields within reasonable limits 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> -Maintain watershed quality 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> -Manage Weyerhaeuser's activities to protect and maintain water quality and quantity within lakes, rivers and streams.
	<p>TARGETS</p> <ul style="list-style-type: none"> - Forest practices on all sites must minimize adverse effects on water quality and fish habitat. 	<p>TARGETS</p> <ul style="list-style-type: none"> -100% of cutblocks adjacent to streams, lakes and/or wetlands must meet or exceed regulatory requirements for riparian management unless the District Manager approves a variance -Fix significant erosion hazards on pre-1995 roads on a priority basis. Critical hazards to be fixed within one week of discovery or as soon as seasonal conditions permit. -Establish management areas for cave and karst features -Zero reportable contaminant spills that enter a waterbody 	<p>TARGETS</p> <ul style="list-style-type: none"> - All new road construction and watercourse crossings to be in compliance with regulatory requirements and follow established Operating Ground Rules and Standard Operating Procedures to protect water quality. -Record of point source occurrences and their remediation. -All watershed basins to be within acceptable impact thresholds as per the 1999 FMP—Hydrology Assessment Model analysis 	<p>TARGETS</p> <ul style="list-style-type: none"> -Meet recent guidelines for 100% of identified watersheds. -Meet or exceed provincial riparian zone management regulations. -No regular harvesting in identified steep slope areas 	<p>TARGETS</p> <ul style="list-style-type: none"> - Not more than 30% of upland forest area within defined watershed is in recently disturbed (harvested or burned) condition. -Zero spills of hazardous materials reaching water bodies resulting from Weyerhaeuser activities. -Zero occurrences of continuing significant ponding. -No statistically significant reduction in abundance and diversity of benthic macro-invertebrates downstream of harvested sites, due to forest management activities -Zero non-compliances with established standards

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<i>Criterion/Element</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>
<p>4. Forest Ecosystem Contributions to Global Ecological Cycles; 4.2: Forest Land Conversion</p> <p>Requirement: Protect forestlands from deforestation or conversion to non-forests</p>	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - To minimize the conversion of forested Crown land to non-forested land. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - Maintain the forest land base -Minimize impacts of other forest developments where possible -Ensure that forests are regenerated on harvested and disturbed sites. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - Sustainable use of biological resources 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - none given 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - Maintain a healthy productive land base
	<p>TARGETS</p> <ul style="list-style-type: none"> - The total non-forested managed Crown land area on the Crossroute's DFA should remain less than 2% of the total managed Crown Forest Area over the next 100 years. 	<p>TARGETS</p> <ul style="list-style-type: none"> - 100% of the cutblocks are reforested and are regenerated with preferred and acceptable species as specified within SPs -100% of cutblocks in compliance with site degradation objectives specified in SPs -In all referrals that have potential to remove significant land from the DFA, stress the minimization of losses to the forest land base. 	<p>TARGETS</p> <ul style="list-style-type: none"> - Maintain the AAC at current levels: AAC = 1,936,067 m³/year deciduous (as determined in 1999 FMP Analysis Report) 	<p>TARGETS</p> <ul style="list-style-type: none"> - Maintain Stora Enso road right-of-way below 4% of the defined forest area 	<p>TARGETS</p> <ul style="list-style-type: none"> - 100% of blocks in which in-block (temporary) roads and landings are rehabilitated are returned to productive forest within two years of the completion of forestry activity. -Finalize strategies to reduce initial amounts of roads and landings by the end of 2002. -Implement approved strategies and timelines to reduce initial amount of roads and landings created.

Forest Company and Woodlot	Abitibi Consolidated Fort Frances, ON	Canfor Nimpkish Tree Farm, BC	Weldwood Hinton, AB	Stora Enso Port Hawksbury's Woodlands, NS	Weyerhaeuser Saskatchewan Forestlands, SK
<i>Criterion/Element</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>
<p>5. Multiple Benefits to Society; 5.3 Fair Distribution of Benefits and Costs</p> <p>Requirement: Promote the fair distribution of timber and non-timber benefits and costs.</p>	<p>OBJECTIVES</p> <ul style="list-style-type: none"> -To generate stumpage revenues for the provincial government, for the benefit of the citizens of Ontario. -To plan and implement the construction of forest access roads in a manner that considers the diversity of social, cultural and environmental values present on the forest, in order to provide all users and citizens with the opportunity to benefit from the forest. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> -Management practices that recognize cultural features and values -Manage the full spectrum of outdoor recreation opportunities within the DFA -Maintain the existing level of opportunities for guiding, trapping, hunting and wildlife viewing. -Maintain or enhance aquatic habitat -Facilitate and integrate the use of and harvest of botanical products in Canfor's forest development plans. -Maintain known scenic areas. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> -Provide opportunity for a mix of market and non-market goods and services from the FMA -Provide and protect recreational opportunities on the FMA -Contribute to the economic and social health of the region -Balance the management and use of timber and other resources -Support the coordination of industrial and commercial activities on the FMA. -Identify and protect cultural and heritage resource values, including those that have special significance to aboriginal people. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - none given 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - Opportunity and access to the forest resources for a variety of commercial, non-commercial and traditional users. -Ensure all those who may be affected by activities of Weyerhaeuser Forestlands have the opportunity to be involved in forest management planning in a meaningful way before irreversible decisions are made. -Tailor stakeholder consultation and involvement to appropriate levels of interest (individual, local, and FMA-wide). -Explore opportunities for integrating resource management priorities of Aboriginal communities with forest planning and operations. -Safeguard heritage and cultural resources. -Endeavor to meet on regular basis with Aboriginal communities with an interest in the DFA to: <ul style="list-style-type: none"> 1. discuss the most appropriate manner to consult with the community 2. share knowledge and perspectives on the forest, and 3. discuss and follow-up on forest management issues of importance to the community. -Be prepared to meet in the Aboriginal communities.

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<p>5. Multiple Benefits to Society; 5.3 Fair Distribution of Benefits and Costs</p> <p>Requirement: Promote the fair distribution of timber and non-timber benefits and costs.</p>	<p>TARGETS</p> <ul style="list-style-type: none"> - The forecasted annual Crown stumpage revenues from the Crossroute Forest are \$10,093 M. -A total of 25.4 kms of primary road, and 140.7 kms of secondary road are planned for construction during the 2002-2007 term on the Crossroute DFA. 	<p>TARGETS</p> <ul style="list-style-type: none"> - In consultation with First Nations, establish management zones around cultural features as they are located, and where worker safety is not compromised (ie zero known CMTs accidentally harvested). -Maintain the eight campsites located on the DFA -Inspect three interpretive trails on the DFA annually. Maintain as required. -Establish management areas for recreational features, as the DM identifies them. -Maintain greater to or equal than 6,000 ha as winter range for ungulates -Identify and manage areas of high and moderately high suitability for black bear denning habitat and seasonal foraging habitat. -Zero known archaeological sites damaged as a result of Canfor's harvesting activities, unless approved through permit process. -Determine the classification of 1,032 km of unclassified strategic streams on Canfor's operational base by December 31, 2003. -Provide sage access to forest through routine maintenance of roads in the DFA required for harvesting. 	<p>TARGETS</p> <ul style="list-style-type: none"> -Maintain public access on Weldwood roads consistent with access constraints defined. -Annually review and update all Long Term Access Plans. -Implement the action plan for year one of the current Recreation Plan. -Continue the recreation user survey to establish a participation baseline and evaluate the Weldwood recreation program. -Report annually on the contributions to economic and social health of the region. -Monitor and report on annual use by category of selected Company Roads. -Continue the recreation user survey to establish a participation baseline and evaluate the Weldwood recreation program. 	<p>TARGETS</p> <ul style="list-style-type: none"> - Increase the harvested volume per tree by 25% by 2020. -Increase the area of hardwood management to 430 ha by 2015 -Meet recent cut guidelines for 100% of viewshed areas identified. -Meet recent cut guidelines for all recreational areas. 	<p>TARGETS</p> <ul style="list-style-type: none"> -List the types of forums and opportunities provided for effective and meaningful public and stakeholder consultation with parties who would be affected by proposed management activities, tailored to appropriate levels of planning, operations, and interests, such as: <ul style="list-style-type: none"> ☞ Individual stakeholder contacts ☞ Local Stakeholder Advisory Committees and Co-management boards ☞ Annual Plan Open Houses and meetings with communities ☞ Meeting with resource users and environmental organizations ☞ Forest Management Advisory Committees. -Report on the number of instances where road plans are changed or jointly developed with other stakeholders, to consider other users concerns as recorded in annual operating plans. -Reduce the number of unanticipated harvesting moves in a year due to short-term shifts in mill requirements and other factors. Endeavor to meet with or meet in each Aboriginal community at least once every two years, in a

		-Block layout is 100% in conformance with recommended visual quality classes as identified in SPS. (plus other targets already cited)			manner which is acceptable to them. -100% of known concerns receive a response -100% of identified high potential heritage resource areas (including natural and cultural) are protected from unacceptable disturbance as defined by provincial Department of Culture, Youth and Recreation, Heritage Unit.
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<i>Criterion/Element</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>	<i>Objective/Target</i>
6. Accepting Society's Responsibility for Sustainable Development: 6.1: Aboriginal and Treaty Rights Requirement: Recognize and respect Aboriginal and treaty rights.	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - Consideration of Aboriginal and treaty rights as related to forest management – continued involvement from Aboriginal communities in the planning process. -To continue to provide opportunities for local employment, including First Nation communities, in resource sectors that are dependent on the use of forest resources. <p>TARGETS</p> <ul style="list-style-type: none"> - Maintain or increase forest-related economic opportunities on the Crossroute Forest for Aboriginals over the next 100 years. -Abitibi-Consolidated will continue to seek involvement from all eleven Aboriginal communities associated with the DFA in the planning process. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - Coordinate and manage activities to avoid infringement of Aboriginal rights. <p>TARGETS</p> <ul style="list-style-type: none"> -100% of Forest Development plans and Management Plans are accessible for review by local First Nations. -100% opportunity for the three local FNs participation in the NWAC. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - Respect and accommodate the special and unique rights and needs of aboriginal peoples in forest management decisions. <p>TARGETS</p> <ul style="list-style-type: none"> - Develop and implement a strategy for relationships with aboriginal communities on the FMA by April 1, 2003. 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - Define role of first nations in resource utilization. <p>TARGETS</p> <ul style="list-style-type: none"> - Hold four meetings per year with first nations representatives. -Ensure meaningful First Nations participation in FAC 	<p>OBJECTIVES</p> <ul style="list-style-type: none"> - Understand and respect Aboriginal (First Nations, Metis) and treaty rights as they pertain to Forestlands activities. -Aboriginal and treaty rights are understood and respected in forest management planning and operations. -Assist where possible the outcome of treaty land entitlement negotiations between Aboriginal Peoples and the Crown. <p>TARGETS</p> <ul style="list-style-type: none"> - 100% of known concerns about aboriginal (First Nations, Metis) and treaty rights receive a response -Report on land withdrawn from the DFA for Treaty Land Entitlements -100% of appropriate Forestlands staff have participated in aboriginal and treaty awareness sessions by the end of 2003.

¹ certified by QMI, in December 2002. Total area: 1,600,000 ha. For more information:

[http://www.abitibiconsolidated.com/aciwebsitev3.nsf/Site/en/images/pdf/ff_SFM_Plan_apr30.pdf/\\$file/ff_SFM_Plan_apr30.pdf](http://www.abitibiconsolidated.com/aciwebsitev3.nsf/Site/en/images/pdf/ff_SFM_Plan_apr30.pdf/$file/ff_SFM_Plan_apr30.pdf)

² certified by KPMG in July 2000. Total area: 200,000 ha. For more information:

http://www.canfor.com/resources/4000/SFM_PDF/TFL37_SFM_Plan.pdf

³ certified by QMI in July 2000. Total area: 1,000,000 ha. For more information:

<http://www.weldwood.com/wwinet/internet/weldwood.nsf/mainForestry!OpenFrameSet>

⁴ certified by QMI in December 2001. Total area: 630,000 ha. For more information:

<http://www.storaenso.com/CDAvgn/showDocument/0.,.2309.00.pdf>

⁵ certified by QMI in December, 2002. Total area: 4,940,000 ha. For more information:

http://www.weyerhaeuser.com/environment/practsustainforest/saskcsa/process/newPDFs/final_seed_document.pdf *Note: the

Saskatchewan Forestlands Values, Objectives, Indicators and Targets document is referred to as a 'Seed Document,' but it is the most recent document that the researchers were able to find on the Weyerhaeuser website.