CSA sustainable forest management systems: Getting ready¹

by Eric Rawlinson²

The changes being contemplated by many forestry companies in a rapidly changing forestry environment include the proposed Canadian Standards Association Sustainable Forest Management System. During the past year several companies have begun the process of complying with the draft standards by initiating a review of their operations with the intent of identifying gaps in their operations relative to the CSA criteria. The following article identifies some of the key areas where companies will need to develop strategies to bridge those gaps.

Key words: sustainable forestry, Canadian forest management standards, forest certification

Les nouveaux éléments envisagés par plusieurs compagnies forestières dans un environnement forestier connaissant de rapides changements, comprennent les normes proposées d'aménagement durable des forêts établies par l'Association canadienne de normalisation. Au cours de la dernière année, plusieurs compagnies ont entrepris d'évaluer leur conformité aux normes préliminaires au moyen d'une révision de leurs opérations dans le but d'identifier les lacunes existantes en fonction des critères de la CSA. Le présent article identifie certains des principaux domaines où les compagnies devront élaborer des stratégies pour combler ces lacunes.

Mots clés: foresterie durable, normes canadiennes d'aménagement forestier, certification forestière

Introduction

Great strides have been made by the forest industry in Canada during the last few years in moving from managing the trees to managing the forest. But how far have companies come and how far do they need to go to meet the demands of customers, employees, government and the community at large?

In order to establish a standard as to how companies should be judged in their management of the forest, the Canadian Standards Association's (CSA) Technical Committee on Sustainable Forest Management (SFM) systems has developed documents Z808 and Z809.

The "Future State" Column (Fig. 1) describes, in point form, the standards set in Z808 and Z809, while the current state column describes, in general terms, where many forest operations may be today. The "Initiatives" column presents the headings where improvements will have to be made in order to arrive at the future state. The focus of this article will be on the "Initiatives" column, that is, what are the gaps between what companies are doing today and what they need to do to be registered under the CSA standard?

The gaps can be categorized into five general areas:

- Planning
- Feedback loops
- Commitment
- Training
- Documentation

Planning

Planning in the CSA context involves a great many aspects of forest management, not just the timber management which has typically been the focus of forest management planning in the past. The key components of planning where gaps have been identified are:

- Public Participation
- Values, Goals and Objectives
- Indicators
- Inventory

Public Participation

The key role of public participation in the planning process is the integration of a diverse range of public interests to determine localized values and objectives for the forest unit. We witnessed several different methods used by companies to incorporate public interests:

- formal committee structure with minutes, motions and rules of procedure
- direct one-on-one consultation with affected parties
- regular communication with interested parties
- no public consultation at all

The method chosen in many of these cases was dependent on the nature of land ownership and the density of the population surrounding the forest unit. In cases where the company owned the land directly, the consultation process tended to be one of direct consultation with interested parties. If the land was provincially owned, a more formal process using a committee structure tended to be adopted. In some cases, the public consultation process faced some significant challenges. These challenges included a sparse and widespread population and public ambivalence.

Our experience showed that where companies had set up some form of public consultation it was well received and appreciated by the public, irrespective of the structure chosen. The CSA does not specify the format of the consultation that must take place, only that the consultations be used to determine localized values. To do this forest managers will need to involve the public much earlier in the planning stage. Typically, the public was consulted after the bulk of planning for the yearly operations or the five year plan was completed. If significant areas are subsequently identified as requiring protection, this may result in late changes to the management plan or current operations.

We did find several areas where the public was not interested in the detail of the planning process. This presents an interesting problem for a company seeking CSA registration. If the general

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population does not have an interest in participating in forest management or does not have the time and resources to get involved, what does the manager need to do in order to qualify for CSA registration? The CSA framework envisions the public being actively involved in the development of the forest management plan, the implementation of the plan and the review of operations against the plan. However, we sometimes found that the public was only marginally interested in participating in the process, or where they were interested, it was only in one very specific aspect of the plan. Once they were satisfied their particular concern was addressed, they were generally less concerned about the balance of the plan.

We also noted that in some cases where a formal committee structure was adopted, the committee became too dependent or dominated by one person or a small group of people. This served to slant the focus of the committee in one direction. As well, the time commitment and technical ability of public participants may be limited.

Generally speaking, the public is interested in gaining an increased level of knowledge of forest operations on local units. While some members of the public want to be active participants on local advisory committees, others simply prefer attending an open house meeting where specific issues of concern, such as road access, aerial spraying, or clear cutting, can be discussed.

Since the CSA does not specify the method a forest manager must choose as the public consultation process, the process should recognize the inherent characteristics of the unit and be flexible to incorporate changing attitudes.

Values, Goals and Objectives

One of the specific aims of public consultation is the development of localized values, goals and objectives for the forest unit. Often the goal for the forest unit has been defined in terms of fibre yield from the area. While this remains as one of the primary goals of any forest management plan, other goals and values must be addressed. These may be as simple as maintaining adequate public access to fishing lakes, or more complex such as maintaining a diverse range of flora and fauna in an area. Indicators (see section below), used to report on the status or trend of a goal, and objectives related to the goals must then be developed and quantified.

Once values, goals and objectives have been identified through the public consultation phase, a new element of documentation must take place. Currently management alternatives to achieve a particular objective are developed internally and the best alternative is selected as the one to be documented in the forest management plan. However, the CSA requires a rigorous and defensible analysis of a variety of options and their ability to meet the targeted objectives. For most companies, this will simply be an exercise of documenting a process that already happens.

Indicators

The requirement to establish indicators for the six national CCFM criteria is probably one of the most nebulous elements of the CSA criteria for forest managers. Generally, we found that no forest managers had begun to develop indicators for any of the six national criteria and very few had indicators for any

localized values. We did find, however, that many of the forest operations currently conducted, protected certain elements of the six national indicators, though the intent of the practice had not been to specifically support the national criteria. The practice was followed because it was an environmentally sound forestry practice. For instance, the maintenance of stream-side protection supports the conservation of soil and water resources. Or perhaps, the conservation of biological diversity may be supported by the preservation of the stand composition through silvicultural practices. We saw many innovative and forward thinking forest practices being adopted in the field without specific reference to any indicators. Examples of these are:

- Irregular cut edges
- Nesting snags and/or islands
- Clearcut areas designed for moose or caribou habitat
- Understory protection
- Larger stump heights around cut edges for small mammals

Many of these practices would qualify as practices conducted to support a particular indicator; however, they have not been specified as such and have not been tracked in any significant way that would lend itself to being a quantifiable measurement of achievement. Forest managers will need to assess their current operations to identify current practices that support the national criteria and then document these in the management plan. Thereafter, managers will be required to document the trends in all indicators through time and show how the trends meet the objectives for the unit which were co-developed with participation of the public.

Inventory

The information base required to develop indicators and to support a broader scope of forest planning, including the integration of public values, will be much more extensive than is currently used by planners. A forester's ability to track indicators through time and document successes or failure will depend on the baseline information and the ease with which information can be gathered to track the indicators.

One example where we found companies will need to supplement their current planning process in light of CSA requirements is in the development of a detailed forest inventory. Where a forest inventory might previously have consisted mainly of fibre composition of the forest on a stand-by-stand basis, the CSA requires more inventory data relative to other forest values such as wildlife, other non-timber flora (e.g. rare or endangered plant) and fish stocks. Many companies do not currently maintain these types of databases. If a forest manager is to comply with the intent of the CSA, he/she needs to have a detailed forest inventory that includes not only timber information, but also wildlife habitat, soil classifications, rare or endangered flora and fauna and areas of specific value to the public. We found that forest managers generally had the capability to integrate this type of data into the planning cycle by using layered GIS maps; but, the level of detail did not exist in the primary database. Where this type of information was available, it usually fell under the responsibility of the province. With governments facing increasing budgetary pressures, the extent of services provided in this area are likely to diminish, shifting responsibility to the companies to develop these databases.

Inventory requirements must be assessed relative to the indicators required for the assessment of sustainability. While a lot of information would be helpful, it may not all be essential

to determine sustainability. These inventory requirements will also be different depending on the region and the localized values developed. One drawback to the inventory process is that it is dependent on the indicators chosen, while indicators can only be useful if good information is available to assess their applicability. Until indicators are developed and inventory information is collected and assembled, this catch-22 situation will continue to exist.

Feedback Loops

An essential element of the entire CSA SFM system is the periodic review of operations combined with an assessment by the company of its performance through time.

Our audits by their very nature were part of this review process. The audit process looked at actual results vs. planned actions in the five-year forest management plans. Often there were slight deviations from planned activities but these were generally justified in the circumstances and adequately documented. There did not tend to be any formal schedule to initiate reviews of operations as is required by the CSA SFM system standards. Reviews tended to concentrate on compliance with provincial regulations and not measurements of actual vs. planned operations or any review against projected results or objectives. Where reviews or audits were completed, it seemed that management had not been assessed subsequently on its ability to integrate the results of these reviews into current operations.

Commitment

The general principle of the CSA Commitment criteria is that a company must have a clearly defined set of policy statements which express and define its commitment to sustainable forestry.

It was our experience that companies were following good forestry practices in the field. People conducting forest operations were aware of environmental concerns, made efforts to minimize the impact of their operations and attempted to integrate new forest management alternatives into the field. However, some firms did not have a set of policy statements approved by the Board of Directors that defined how all operations of the company were to be conducted. If policy statements did exist, they did not fully integrate the concepts expressed in the CSA criteria and/or there was no clear link between the policies, forest management plans and field operations.

The level of commitment is a concept that must be prevalent in all aspects of forest operations, not just embodied in a set of policy statements. As noted above, many forest operations already have a high level of commitment to aspects of sustainable forestry. For them, the commitment needs to be expressed in policy statements, and throughout all phases of the forest management plans, a documentation process. For those companies that have developed policy statements, the task will be to integrate these statements into the field operations. Either process will require changes in attitude and procedures.

Training

Training in the CSA context incorporates not only the direct employees of the company but also the contractors and operators working on the unit. CSA registration is not on a company basis but rather from a forest unit basis. For this reason all workers on a forest unit must be included in the training umbrella. Again, portions of the training requirement relate to a documentation process whereby a registrant company would

be required to track the training taken by its own employees and employees of contractors.

A sample of typical training would include environmental awareness, hazardous materials handling and CPR training. We found that many companies had trained their own employees in safety, CPR, and some had incorporated new forestry techniques, but this was largely done in compliance with provincial health and safety regulations. These should be considered the minimum standards for CSA registration. As well, companies will need to include contractors and operators in their training programs. This may simply mean specifying in the contract that a contractor's employees satisfy a certain minimum level of training and that the company be provided with the relevant details.

Documentation

Like any system, the CSA process is dependent on a large amount of documentation that may not have been required before and may seem to add little value to the forest manager. Whether this documentation is in the form of a database of training records for employees or an inventory of other forest values, one thing is inherent in all aspects of the CSA standards — paperwork.

However, we found that in many cases identifying the areas that require more work and moving through the process

of documentation will focus managers' attention on areas that may have been ignored for some time. This forces managers to re-think and document current processes. The result can be a new streamlined process with time savings and improved procedures.

Conclusion

It was our experience in conducting these gap analysis audits that many companies are going in the right direction. Indeed, the process of subjecting their operations to an outside third-party audit indicates a commitment to change and to moving forward. The areas we have identified will require some significant changes to the process of forest management planning and will require resources be allocated to these changes. This may become increasingly difficult as provincial governments cut back even more. However, as companies go through this process and re-evaluate their processes and procedures, they may find that operations can be streamlined and improved. The changes required to implement sustainable forest management will not only allow for CSA registration and any associated market advantages but also shift the focus of forestry companies towards a broader social focus.