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As part of Canfor's commitment to sustainable forest management and independent forest certification, an audit team from KPMG Performance Registrar Inc. completed a registration assessment of Canfor's Prince George woodlands operations occurring within the Fort St. James defined forest area (DFA) to the Canadian Standards Association's standard for Sustainable Forest Management Systems (CSA-SFM) in November 2005. These operations had previously been certified under the Sustainable Forestry Initiative® (SFI®) Standard since 2002.

The registration assessment determined that the sustainable forest management system established and implemented by Canfor on its Fort St. James DFA meets the requirements of the CSA-SFM standard.

The CSA-SFM registration, in combination with the existing certification to the ISO 14001 standard for Environmental Management Systems (EMS), demonstrates a strong commitment to sustainable forest management on the Fort St. James DFA and is a significant achievement for Canfor. The Fort St. James DFA applies to approximately 676,000 hectares within the Fort St. James Forest District (District), where Canfor is the primary operator. The DFA is part of the area under the plan for the Fort St. James SFM plan, a multi-licencee initiative to implement the requirements of the CSA-SFM standard across the majority of the District. As the District and the DFA are part of the broader Prince George Timber Supply Area (TSA) they do not have their own Allowable Annual Cut (AAC) as this is set at the TSA level. The actual amount cut on the DFA at the current time is approximately 475,000 cubic meters.



The Audit

- *Background* The CSA Z809 standard requires an initial registration assessment by an accredited Registrar to assess the operation's conformance with the requirements of the standard.
- Audit Team The audit was conducted by a two person audit team (a BC Registered Professional Forester and a BC Registered Professional Biologist), both of whom are accredited SFM auditors.
- **Document Review** An off-site document review was completed prior to the initiation of the final field audit in order to assess the SFM plan, including a comprehensive review of SFM values, objectives, indicators and targets.
- *Field Audit* The on-site field audit included interviews with a sample of staff, contractors and Public Advisory Group (PAG) members and examination of EMS and SFM system records, monitoring information and public involvement information. The November 2005 field audit also builds on fieldwork conducted in June 2005 as part of the Prince George woodlands ISO 14001 field assessment (as part of the corporate-wide ISO 14001 reregistration assessment) and the re-verification of Prince George woodlands operations to the SFI® standard. The team conducted field assessments during the June and November field audits of 17 sites to assess the operation's planning, harvesting, silviculture and road construction, maintenance and deactivation practices.







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Good Practices

- Our registration assessment determined that the SFM system was effectively implemented by the operation over its DFA.
- The management unit planning program currently under development is backed by Woodstock Stanley and is an impressive approach to managing multiple timber and non-timber objectives.
- The development of new phase I Vegetation Resources Inventory (VRI) and Predictive Ecosystem Mapping for the Prince George Timber Supply Area will significantly enhance the quality of available inventories.
- Strong performance was noted in tracking and meeting regulatory reforestation objectives.
- The regulatory framework provides a strong ecological basis for the species mix planted.
- EMS inspection and monitoring processes were effective in minimizing site disturbance.
- A GIS based risk ranking of existing road networks is in place to drive road maintenance priorities.
- The operation demonstrated strong performance in management of riparian areas, including the application of a conservative classification process and good use of block boundaries and Wildlife Tree Patches to provide additional stream channel protection.
- Effective use and deactivation of portable bridges on within-block roads was observed during the audit.
- There is an excellent record over the last 3 years of identifying and making improvements in landscape level biodiversity programs based on new research and coordination between licencees and government (e.g., Old growth, patch and interior requirements are all based on better research and are now in place).
- Significant improvements have been made in Canfor's field guide for managing Species at Risk.
- Ongoing development of a spatial planning capability significantly enhances the ability to demonstrate implementation of landscape level biodiversity objectives over time.
- Visual quality objectives are established and implemented across the operating area.
- The operation has a "Creating Opportunities" process for gathering public input relevant to its forest management planning, including the identification of visually sensitive areas that are additional to those identified by regulatory agencies.
- Field operators are well aware of processes to follow when previously unidentified special sites are encountered during operations.
- Overall, there was a generally high level of utilization with little merchantable waste.

CSA-SFM and ISO 14001 Re-registration Assessment Findings

Major nonconformities	0
Minor nonconformities	3
Opportunities for improvement	15

Types of audit findings

Major nonconformities:

Are pervasive or critical to the achievement of the SFM Objectives.

Major nonconformities must be addressed immediately or certification cannot be achieved / maintained.

Minor nonconformities:

Are isolated incidents that are noncritical to the achievement of SFM Objectives.

All nonconformities require the development of a corrective action plan within 30 days of the audit, which must be fully implemented by the operation within 3 months.

Opportunities for Improvement:

Are not nonconformities but are comments on specific areas of the SFM System where improvements can be made.





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- Good examples of changes to planning were noted resulting from recent research related to landscape level biodiversity management.
- The Forest Management System includes comprehensive action plan development and tracking requirements to facilitate continual improvement in relation to identified non-conformances.
- The new Community of Natural Resources Committee's PlanScapes newsletter and website provides a good vehicle to improve public access to public land SFM planning processes.
- The management unit planning approach being adopted by Canfor for managing multiple timber and non-timber objectives provides an improved avenue for gathering public comment over previous regulatory mechanisms.

Key Areas of Nonconformity

- The required Forest Management System records could not be retrieved for two completed harvest blocks reviewed during the audit (i.e., completed prework for a portion of one of the blocks and a completed inspection record for the other block).
- The CSA-SFM Element 4.2 requires participants to protect forestlands from deforestation or conversion to non-forests. Indicator #23 is designed to address this element through the establishment of a target of 5% for the percentage of cutblock area occupied by total permanent access structures. Our assessment determined that this indicator is not an appropriate indicator because the target (1) is too high for the type of terrain in which the participants operate in and is significantly higher than current practice, (2) does not address off-block road construction and (3) does not consider existing access levels.
- The CSA-SFM standard requires the SFM plan to include descriptions of the assumptions and analytical methods used for forecasting and a description of the chosen strategy. Our assessment found that while forecasting was completed and the strategies, assumptions and analytical methods discussed with the Public Advisory Group (PAG), the SFM plan text does not appropriately disclose the alternative scenarios applied, the underlying forecasting assumptions or the resulting harvest level volumes.

Key Opportunities for Improvement

- Our assessment of the appropriateness of indicators and targets under CCFM SFM Criterion 1 (Conservation of Biological Diversity) noted the following opportunities for improvement:
 - SFM plan Indicator #4 establishes targets for young patch size distribution. Because the criteria for these targets were not part of the modeling constraints applied during forecasting, the 2025 future forecast condition shows that for most of the categories there is a trend away from the targets over time (particularly in relation to larger openings). While it is recognized that the final design of patches is an operational planning issue rather than a long term modeling exercise there is a clear opportunity to improve or amend the modeling process to better reflect intentions or to better demonstrate how future operational plans are addressing this issue.





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- While landscape level planning has progressed significantly, the necessary research to address stand level planning has yet to be completed for a large scale salvage operation. Elements yet to be addressed include (1) the measurement of internal stand level retention targets based on the location and quality of retention at the patch level and (2) the provision of post-natural disturbance stand conditions within completed harvest unit.
- The SFM plan text for Indicators #18 and #19, (which describe targets around sites of biological significance) does not clearly describe the current status for these indicators and the linkage between the target dates specified for identified site-specific strategies and the completion of mapping is illogical.
- The current target ranges for SFM plan Indicator #23 relating to coarse woody debris retention are extremely broad, thus limiting the usefulness of the targets (although it is recognized that the operation is working on narrowing the ranges).
- SFM plan Indicator #10 describes an indicator and targets for management strategies for specified wildlife and plant species. However, the text associated with the indicator contains information inconsistent with the indicator as it refers only to plant communities and not to plant species.
- Our assessment concluded that while the PAG was made aware of the majority of targets relating to Canfor, the PAG did not see a Canfor-specific target for Indicator #48 (Percentage of operational forestry contract value in dollars within the DFA serviced by north central British Columbia) as the indicator was a weighted average for all participants within the Fort St. James SFM plan.
- Our assessment found that while indicators and targets have been documented in the SFM plan, there were a number of opportunities to improve the clarity and effectiveness of indicators and their related text, as follows:
 - The current data for Indicator #40 (Percent of blocks and roads harvested that are consistent with recommendations contained in site level archeological assessments) is presented for cutblocks harvested but not for roads.
 - Indicator #53 (The proportion of aboriginal individuals who have expressed an identified interest in forest planning are communicated with) is presented in the matrix but is not included in the SFM plan.
 - Indicator #51 (*Annually, licensees will encourage employees to shop local*) provides little contribution to the identified value and objective.
 - While Indicator #49 (Percentage of advertised employment opportunities published in the local paper) measures advertising effort, it does not measure the effectiveness of that effort, limiting its usefulness as a social measure. In addition, the current status of this indicator is not currently reliable as some licensees are unable to track the data for this indicator.
 - The current status for Indicator #44 (*Annual personal notification to every "known" non-timber licensed tenure holder*) for the SFM plan as a whole is 61%, implying that the target of 100% is currently too high at the overall SFM plan level.





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- Indicator #26 (Percent of road related soil erosion events that introduce sediment into a stream identified in annual road inspections that are addressed) is constrained to data from annual road inspections and thus limited in effectiveness.
- Indicator #16 (Percent of harvest activities that are within protected areas or parks) does not add the value of the SFM plan.
- CSA-SFM Element 5.3 requires participants to promote the fair distribution of timber and non-timber benefits and costs and the CSA-SFM standard 7.2 f) requires a policy commitment to "promote conditions and safeguards for the health and safety of DFA-related workers and the public". Our review of the SFM plan indicated that there are no targets in relation to safety of DFArelated workers.
- A risk assessment matrix has been developed as part of the DFA process to identify where the critical risks of failure to meet targets are in relation to the DFA as a whole (including non-participants). However, internal audits have not to date (1) assessed the extent to which the detail in the matrix is accurate or (2) included evidence within the scope of the audit relating to external parties performance that may impact the applicants' ability to achieve DFA level targets (except in relation to biodiversity).
- The SFM plan incorrectly includes in its description of the DFA some volume cut by Canfor on another licencee's area located outside of the DFA.
- Our assessment of the SFM plan indicates that a "one size fits all" approach was generally applied when determining SFM targets, with the majority of targets being set for the licencee group as a whole but at levels that are at or below current performance levels for Canfor. This has resulted in indicators and targets being set around practices that do not provide a strong basis for continual improvement in the operation's SFM performance requirement of the CSA-SFM standard. However, it is recognized that there is considerable value to the initiation of a multi-licencee SFM process and that there is no expectation of a reduction in current program levels.
- Although the operation undertook an internal audit of the current status data used in the SFM plan as well as of related field activities, the operation did not conduct an internal audit of the new SFM plan.
- SFM plan Indicator #35 sets a target around the percent of watersheds achieving baseline targets for peak flow index (PFI) to address CSA-SFM Element 5.3, which requires participants to conserve water resources by maintaining water quality and quantity. Our assessment determined that because licencees other than Canfor have not yet set baseline PFIs the only PFIs currently being measured are in those Canfor areas under the plan that occupy greater than 50% of a watershed. In addition, the potential impact of PFIs on the selected strategy has not been assessed as PFIs have yet to be modeled.
- The operation has used a number of methods to encourage the participation of First Nations in the PAG and to communicate SFM matters to bands with an interest in the DFA (e.g., formal letter of invitation, follow-up telephone calls, distribution of Planscapes newsletter, provision of PAG minutes, agendas and SFM plan documents, etc.). Despite these efforts however, there remains a lack of representation from First Nations in the SFM plan and, consequently,





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there is further opportunity to encourage First Nations involvement in SFM planning through participation in the PAG or by other means.

- While PAG record and interview evidence indicates that meetings were carried out in accordance with the terms of reference developed and approved by the PAG there remain a number of PAG members with significant concerns with aspects of the process. There is a significant opportunity to review existing PAG processes to address the concerns of PAG members and re-engage them in the process.
- Although the Licensee Steering Committee attempted to solicit broad representation within the PAG, a review of PAG records and interviews with PAG members indicated that participation has been declining and most PAG members interviewed indicated that they have other priority commitments to attend to. With declining interest amongst PAG members and no alternate members designated to attend meetings in their absence, there is an opportunity to review the PAG membership and process to broaden the membership base and encourage participation.
- There is an opportunity to better differentiate between implementation monitoring and effectiveness monitoring strategies in the SFM plan so that the plan can demonstrate a process to monitor conformance to targets (implementation) as well as a process to assess over time whether conformance to targets is delivering the expected SFM result (effectiveness).
- The operation has developed a risk matrix to assess the risk of entities not participating in the SFM plan undermining the achievement of Canfor's SFM targets. There is an opportunity to re-evaluate risk in relation to the achievement of SFM objectives for the DFA as a whole, rather than limiting the assessment to Canfor-specific targets.
- Review of the public participation process identified an opportunity to improve PAG record keeping in relation to contact information and the written communications with PAG members and interested parties.