



**Forest
Practices
Board**

Audit of Forest Planning and Practices

*Weyerhaeuser Company Limited
Forest Licence A18698*

FPB/ARC/134

February 2012

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Audit Results

Background

As part of the Forest Practices Board's 2011 compliance audit program, Weyerhaeuser Company Limited's forest licence A18698 in the Cascades forest district was selected for audit. The forest licence lies within the Merritt timber supply area (TSA), and nearby communities include Princeton, Tulameen and Hedley. A map of the Merritt TSA appears on page 2.

Terrain in the TSA varies from mountainous in the west to rolling in the east. The predominant tree species is lodgepole pine, which is susceptible to mountain pine beetle infestations.



Princeton, BC.

The predominant tree species is lodgepole pine, which is susceptible to mountain pine beetle infestations.

Weyerhaeuser has an allowable annual cut of 484 000 cubic metres and virtually all harvesting during the audit period was aimed at salvaging lodgepole pine trees attacked by the mountain pine beetle.

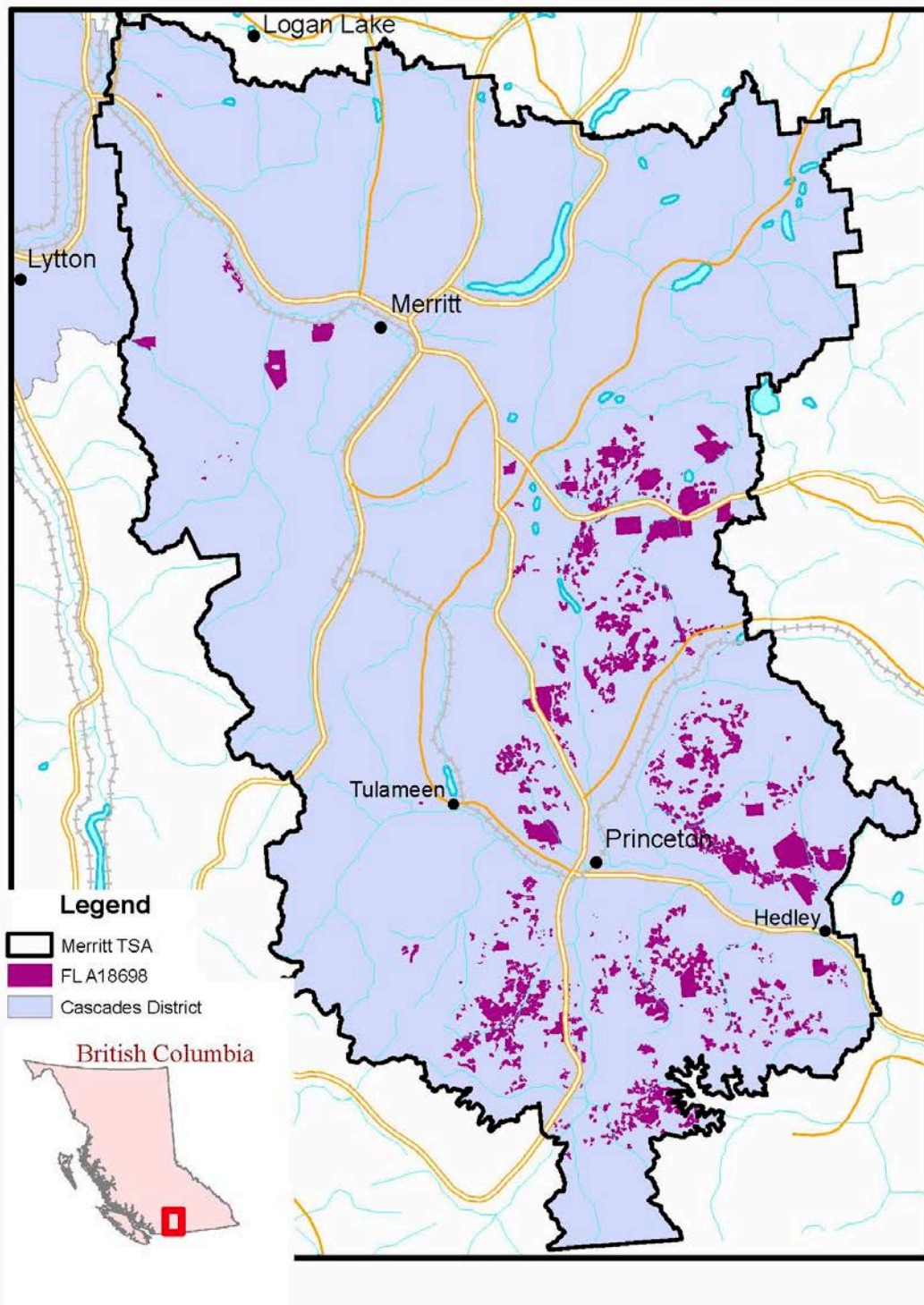
The Board's audit fieldwork took place from October 17 to 20, 2011.

Audit Approach and Scope

The Board conducted a full scope compliance audit, in which all harvesting, roads, silviculture, protection activities and associated planning done between October 1, 2010 and October 20, 2011 were included in the audit. These activities and associated planning were assessed for compliance with the *Forest and Range Practices Act* (FRPA) and the *Wildfire Act* (WA), and related regulations.

The Board's *Compliance Audit Reference Manual, Version 6.0, May 2003*, and the addendum to the manual for the 2011 audit season set out the standards and procedures that were used to carry out this audit. Further details about the audit process appear in Appendix 1.

Map of FL A18698 in the Merritt Timber Supply Area



Planning and Practices Examined

Operational Planning

Weyerhaeuser planned activities in its 2007-2012 forest stewardship plan (FSP).ⁱ The FSP and stand-level plans (site plans) were examined to ensure that they were consistent with legislated requirements. Site plans were also evaluated to ensure that they accurately identified site conditions, through harvesting, road and silviculture field sampling.

Timber Harvesting

Fifty-nine cutblocks covering 2377 hectares were harvested during the audit period and 39 cutblocks totalling 1910 hectares, were sampled as part of the audit.



Harvesting 12 kilometres east of Tulameen.

Road Construction, Maintenance, Deactivation

Auditors examined 11 of the 28 kilometres of new road built during the audit period; 1 of 5 kilometres deactivated; and 300 of the 1596 kilometres of road Weyerhaeuser is required to maintain.

Weyerhaeuser is responsible for maintaining 4 bridges on forest service roads and 28 bridges on roads under permit. Auditors examined 2 forest service road and 24 road permit bridges.

Silviculture Activities and Obligations

Weyerhaeuser site prepared 72 blocks and planted 2.2 million seedlings on 79 blocks during the audit period. Auditors examined 13 site preparation blocks and 17 planting blocks.

Fifty cutblocks were required to be regenerated and 92 were required to be free growing by the end of the audit period. Auditors examined 29 cutblocks due for regeneration and 18 due to be free growing.

Fire Protection

Hazard assessment and abatement activities were examined on 39 cutblocks in conjunction with harvest auditing. Auditors examined fire preparedness on four active sites encountered in the field – one road construction operation and three harvest sites.

Findings

The audit found the planning and forest activities undertaken by Weyerhaeuser complied in all significant respects with the requirements of FRPA, WA and related regulations, as of October 2011.

Bridge Maintenance

Auditors noted a bridge deck maintenance practice that requires improvement. Weyerhaeuser had covered a number of bridge decks with a layer of gravel. The practice may have been introduced in the past to address rancher's complaints that cattle would not cross bare bridge decks. The issue is that this practice may increase the potential for sand and gravel to enter a stream during grading. A total of 17 structures had gravel over the bridge deck. Auditors consider this an unsound practice that needs improvement, as a small amount of sediment was introduced into streams. The practice also makes it difficult to fully inspect bridge decks.

Once this issue was identified, the licensee took immediate action and cleaned the bridge decks to ensure that sediment would no longer enter streams during grading. The licensee has also updated its environmental management system so that it now provides direction on bridge deck maintenance to eliminate this practice.

Operational Planning

Weyerhaeuser incorporated FRPA objectives into the FSP, and site plans and forest practices met the measurable results and strategies set out in the FSP. The FSP was consistent with legislated requirements and planning at the landscape and stand levels was consistent both with the FSP and legislated requirements.

Weyerhaeuser addressed site specific resources in the site plans by accurately identifying and prescribing practices for resource features, including streams and wetlands, sensitive or unstable soils, wildlife habitat, old growth management areas, visually sensitive areas, and recreation trails.

Timber Harvesting

Harvesting practices were consistent with site level plans. Soil disturbance was well managed and within FRPA limits, and natural drainage patterns were maintained. There was only one in-block fish stream examined during in the audit and Weyerhaeuser demonstrated good practices by installing and removing a temporary bridge and leaving the stream and channel undisturbed.

Wildlife tree patches were retained as planned and were situated to protect more sensitive on-site resources such as streams and sensitive soils.

In summary, harvesting practices conformed to both plans and legislated requirements.

Road and Bridge construction, maintenance and deactivation

No concerns were identified with road construction, maintenance or deactivation. Regular road inspections were carried out according to Weyerhaeuser's risk rating process. Roads were stable and stream crossings were well maintained and in good condition.

Except for the item noted above, bridges were well maintained and inspected regularly.

Silviculture Activities and Obligations

There were no issues identified with brushing, planting, site preparation, and regeneration or free to grow obligations during the audit. Weyerhaeuser maintained accurate silviculture records and conducted timely silviculture activities. Weyerhaeuser also met government seed transfer requirements as well as free to grow and regeneration obligations within the required time frames.

Fire Protection Activities

The licensee's contractors were prepared for a fire. Adequate fire tools were available on all active sites and operations were conducted in accordance with the *Wildfire Regulation*. No concerns were identified with respect to hazard assessment and abatement.

Audit Opinion

In my opinion, the operational planning; timber harvesting; road construction, maintenance and deactivation; silviculture; and fire protection activities carried out by Weyerhaeuser Company Limited on Forest Licence A18698 between October 1, 2010, and October 20, 2011, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations as of October 2011.

In reference to compliance, the term “in all significant respects” recognizes that there may be minor instances of non-compliance that either may not be detected by the audit, or that are detected but not considered worthy of inclusion in the audit report.

Without qualifying my opinion, I draw attention to the *Bridge Maintenance* section of this report, which describes an area requiring improvement.

The *Audit Approach and Scope* and the *Planning and Practices Examined* sections of this report describe the basis of the audit work performed in reaching the above conclusion. The audit was conducted in accordance with the auditing standards of the Forest Practices Board. Such an audit includes examining sufficient forest planning and practices to support an overall evaluation of compliance with FRPA and WA.



Christopher R. Mosher CA, EP(EMSLA)
Director, Audits

Victoria, British Columbia
January 30, 2012

ⁱ A forest stewardship plan (FSP) is a key planning element in the FRPA framework and the only plan subject to public review and comment and government approval. In FSPs licensees are required to identify results and/or strategies consistent with government objectives for values such as water, wildlife and soils. These results and strategies must be measurable and once approved are subject to government enforcement. FSPs identify areas within which road construction and harvesting will occur but are not required to show the specific locations of future roads and cutblocks. FSPs can have a term of up to five years.

Appendix 1: Forest Practices Board Compliance Audit Process

Background

The Forest Practices Board conducts audits of government and agreement-holders under the *Forest and Range Practices Act* (FRPA), section 122, and the *Wildfire Act* (WA). Compliance audits examine forest or range planning and practices to determine whether or not they meet FRPA and/or WA requirements. (The transitional provisions of FRPA state that the Code continues to apply to forest practices carried out under a forest development plan, until there is an approved forest or range stewardship plan, at which point the requirements of FRPA apply.)

Selection of Auditees

The Board conducts about eight or nine compliance audits annually. Most of these are audits of agreement holders. The Board also audits the government's BC Timber Sales Program (BCTS). This section describes the process for selecting agreement holders to audit.

To begin with, auditors randomly select an area of the Province, such as a forest district. Then the auditors review the forest resources, geographic features, operating conditions and other factors in the area selected. These are considered in conjunction with Board strategic priorities (updated annually), and the type of audit is determined. At this stage, we choose the auditee(s) that best suits the selected risk and priorities. The audit selections are not based on past performance.

For example, in 2007, the Board randomly selected the Robson Valley Timber Supply Area as a location for an audit. After assessing the activities within that area, we discovered that two licensees had recently closed operations due to financial problems. As the Board has expressed concern in the past about financially strapped companies failing to meet outstanding obligations, such as reforestation, and road maintenance, the audit focused on the status of the outstanding obligations of these two licences.

For BCTS audits, a forest district within one of the 12 business areas within the province is selected randomly for audit.

Audit Standards

Audits by the Board are conducted in accordance with the auditing standards developed by the Board. These standards are consistent with generally accepted auditing standards. The standards for compliance audits are described in the Board's *Compliance Audit Reference Manual*.

Audit Process

Conducting the Audit

Once the Board randomly selects an area or district and determines the scope of audit to be conducted and the licensee(s) to be audited, all activities carried out during the period subject to audit are identified (such as harvesting or replanting, and road construction or deactivation activities). Items that make up each forest activity are referred to as a population. For example, all sites harvested form the timber harvesting population and all road sections constructed form the road construction population.

A separate sample is then selected for each population (e.g., the cutblocks selected for auditing timber harvesting). Within each population, more audit effort (i.e., more audit sampling) is allocated to areas where the risk of non-compliance is greater.

Audit field work includes assessments of features using helicopters and ground procedures, such as measuring specific features like riparian reserve zone width. The audit teams generally spend one to two weeks in the field.

Evaluating the Results

The Board recognizes that compliance with the many requirements of the Code, FRPA and WA, is more a matter of degree than absolute adherence. Determining compliance, and assessing the significance of non-compliance, requires the exercise of professional judgment within the direction provided by the Board.

The audit team, composed of professionals and technical experts, first determines whether forest practices comply with legislated requirements. For those practices considered to not be in compliance, the audit team then evaluates the significance of the non-compliance, based on a number of criteria, including the magnitude of the event, the frequency of its occurrence and the severity of the consequences.

Auditors categorize their findings into the following levels of compliance:

Compliance – where the auditor finds that practices meet Code, FRPA and WA requirements.

Not significant non-compliance – where the auditor, upon reaching a non-compliance conclusion, determines that one or more non-compliance event(s) is not significant and not generally worthy of reporting. However, in certain circumstances, events that are considered not significant non-compliance may be reported as an area requiring improvement.

Significant non-compliance – where the auditor determines a non-compliance event(s) or condition(s) is or has the potential to be significant, and is considered worthy of reporting.

Significant breach – where the auditor finds that significant harm has occurred, or is beginning to occur, to persons or the environment as a result of one or many non-compliance events.

If it is determined that a significant breach has occurred, the auditor is required by the *Forest Practices Board Regulation* to immediately advise the Board, the party being audited, and the Minister of Forests, Lands and Natural Resource Operations.

Reporting

Based on the above evaluation, the auditor then prepares a draft audit report. The party being audited is given a draft of the report for review and comment before it is submitted to the Board.

Once the auditor submits the draft report, the Board reviews it and determines if the audit findings may adversely affect any party or person. If so, the party or person must be given an opportunity to make representations before the Board decides the matter and issues a final report. The representations allow parties that may potentially be adversely affected to present their views to the Board.

The Board then reviews the auditor's draft report and the representations from parties that may potentially be adversely affected before preparing its final report. Once the representations have been completed, the report is finalized and released: first to the auditee and then to the public and government.



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