



**Forest  
Practices  
Board**

## **Audit of Forest Planning and Practices**

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*Quesnel Forest District*

- *Woodlot Licence W0512*
- *Woodlot Licence W1516*

**FPB/ARC/112**

November 2009

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## Board Commentary

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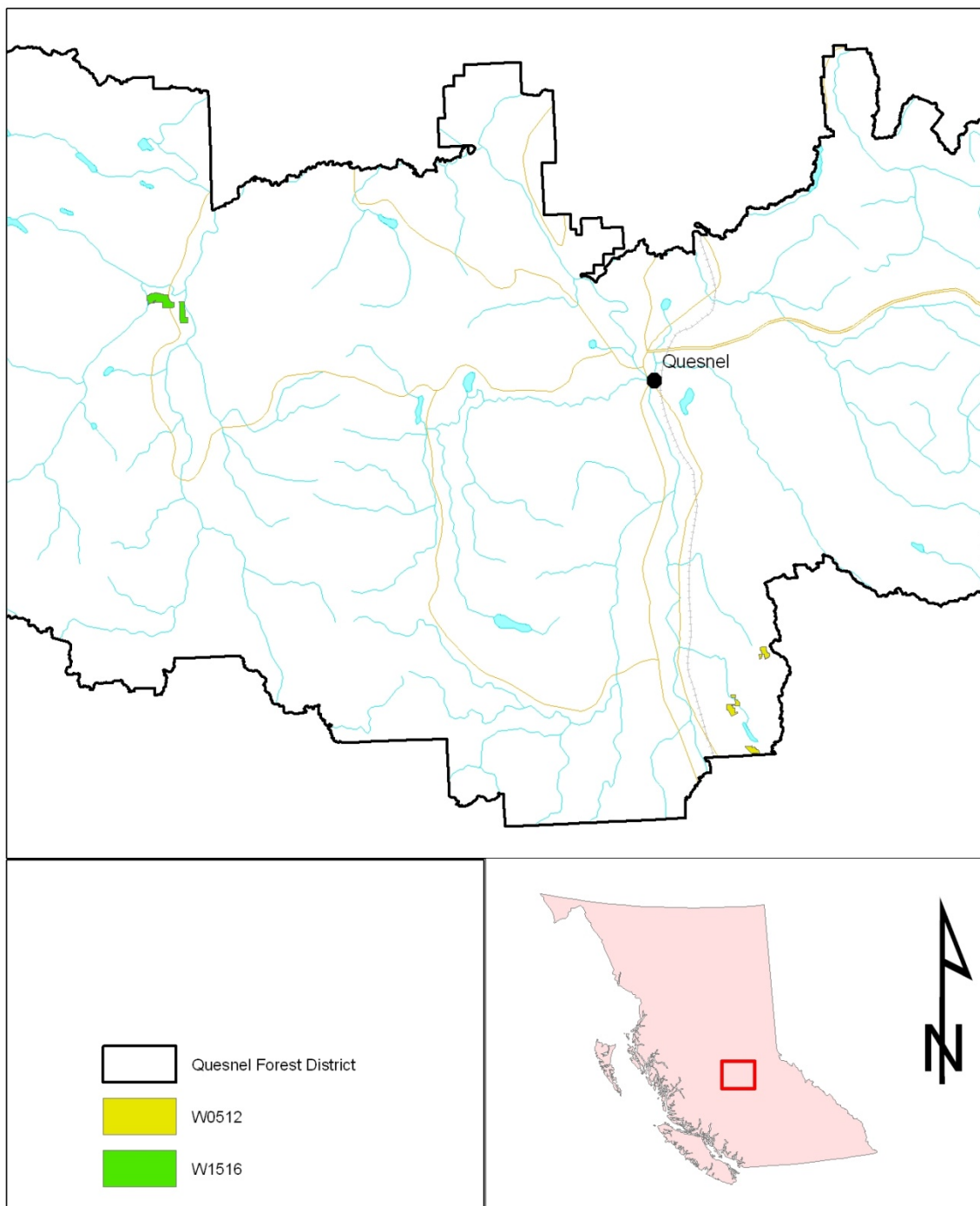
In June 2009, the Board conducted a full-scope compliance audit of forest planning and practices on woodlot licences W0512 and W1516 in the Quesnel Forest District. Both of these woodlots are located within two hours' driving distance of Quesnel (see map on page 2).

The audit assessed over 60 cutblocks, more than 30 kilometres of road activities and obligations, as well as operational planning.

The Board is pleased to note that, the holders of woodlot licences W0512 and W1516 complied with legislative requirements in all significant respects.

The Board also notes that, in these two woodlots, the auditors found several cutblocks where the seedlings planted exceeded the seed transfer limits as stated in the chief forester's seed transfer guidelines. Since exceeding the transfer limits may decrease productivity or increase the susceptibility to frost, insects or disease, the Board encourages these woodlot licensees to continue to periodically monitor the condition of these cutblocks, and to ensure that future planting is consistent with the chief forester's seed transfer guidelines.

# Audit of Quesnel Woodlots



# Audit Results

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## Background

As part of the Forest Practices Board's 2009 compliance audit program, the Board selected five woodlot licences in the Quesnel Forest District (the licences) for audit. This is the audit report for woodlot licences W0512 and W1516. Results for the other three woodlot licences are provided in separate audit reports.

The Board randomly selected the Quesnel Forest District and from the population of licences within the forest district, noted that woodlot licences within the district had not been audited in recent years. However, while the forest district was selected randomly, the individual woodlot licences were selected based on the level of harvest activity occurring between January 2007 and April 2009, and not on performance or geographic location.

The two licences profiled in this report are located in the Southern Interior Forest Region and are situated within two hours' driving distance from Quesnel.

- Woodlot licence W0512 was issued in 1987. The woodlot is located approximately 80 kilometres south of Quesnel, near McLeese Lake and Cuisson Lake, and in the upper James Mountain Road area. The licence area is comprised of five separate management blocks (A through E), totalling 603 hectares, and has an allowable annual cut of 850 cubic metres. Access to the woodlot is by way of Highway #97, the Cuisson Lake Road, Gibraltar Mines Road, and the James Mountain Forest Service Road (FSR).
- Woodlot licence W1516 was awarded to the licence holder in 1999 and includes 130 hectares of private land and 600 hectares of Crown land. The licence is located approximately 95 kilometres west of Quesnel, near the confluence of the Blackwater and Nazko Rivers. Access to the licence area is by way of the Nazko Highway and the Harrington Forest Service Road (FSR). The woodlot has an allowable annual cut of 1,946 cubic metres.



A fawn resting on woodlot 0512.



A reforested cutblock on woodlot 1516.

The topography in the two woodlots is a configuration of lower, mid- and upper slopes and benches. Soils are generally stable and well drained, with W1516 located on esker<sup>1</sup> ridges with very well drained soils. Elevations of the licences range from 650 to 1,280 metres and both licences lie within subzone variants of the sub-boreal spruce biogeoclimatic zone. The area has a climate of

hot, dry summers and cold winters with shallow snow packs. A mix of tree species typical to the areas includes lodgepole pine, white spruce, Douglas fir and trembling aspen.

The Board's audit fieldwork for these two woodlots took place on June 17 and 19, 2009.

## Audit Approach and Scope

The audit examined each woodlot licence's planning, field activities and obligations in the areas of:

- operational planning (including forest development plans<sup>ii</sup>, site plans<sup>iii</sup> and woodlot licence plans<sup>iv</sup>);
- timber harvesting;
- road construction, maintenance and deactivation;
- silviculture activities and obligations; and
- fire protection at active work sites.

These activities were assessed for compliance with the *Forest and Range Practices Act* (FRPA<sup>v</sup>), the *Wildfire Act* (WA); and related regulations (in particular, the *Woodlot Licence Forest Management Regulation* (WLFMR) and the *Woodlot Licence Planning and Practices Regulation* (WLPPR)) and applicable transitional elements of the *Forest Practices Code of British Columbia Act* (the Code). All activities, planning and obligations for the period January 1, 2007, to the day of the field audit in June 2009, were included in the scope of the audit.

The Board's audit reference manual, *Compliance Audit Reference Manual, Version 6.0, May 2003*, and the addendum to the manual for the 2009 audit season, set out the standards and procedures that were used to carry out this audit.

## Planning and Practices Examined

### Higher Level Plans

The Quesnel Forest District covers a large geographic area under the Cariboo-Chilcotin Land Use Plan (CCLUP). In January 1996, parts of the CCLUP were declared a higher level plan under the Code. CCLUP commitments are extensive, but most of these commitments relate to the achievement of an objective over a broad landbase and have limited application for a specific woodlot. Where applicable, the audit found that site-level requirements identified in the plan, such as meeting a visual quality objective, were appropriately addressed by the woodlot licensees' forest planning and practices.

The aim of the draft Quesnel sustainable resource management plan (SRMP) was to combine public knowledge and collaborative consultation in a local plan that meets region-wide direction outlined in the CCLUP. The final draft Quesnel SRMP was completed and submitted to the Cariboo Managers' Committee in February 2007, but still has not been approved. Until approved, it contains only non-legal guidance on the application of objectives and strategies from the CCLUP.

## Operational Planning

During the audit period, the holder of licence W0512 conducted harvesting authorized by a forest development plan (FDP), an FDP amendment approved in December 2007, and cutting permits 'CC' and 'Y'. A site plan was prepared for some of the cutblocks in these cutting permits and the remainder of the cutblocks were site plan exempt.

An FDP amendment approved in November 2005, and cutting permits 'D', 'E', and 'GG' authorized harvesting undertaken on W1516. Site plans for the each of the cutblocks in these cutting permits were prepared and approved.

## Practices

The audit work for each woodlot included an evaluation of records and plans, and on the ground inspections of roads and cutblocks. No aerial assessments were undertaken.

The holder of woodlot licence W0512 harvested 7 cutblocks, constructed 4.5 kilometres of road and maintained 13 kilometres of road. All the cutblocks, 3.5 kilometres of new road and 7.8 kilometres of existing road were audited. With respect to silviculture, auditors assessed all three planted blocks. There were no active work sites and no deactivated roads.

The holder of woodlot licence W1516 harvested 8 cutblocks, constructed 0.7 kilometres of new road and maintained 14 kilometres of road. Six of the cutblocks, all new road and 11.4 kilometres of existing road were audited. With respect to silviculture, auditors assessed all 21 blocks that had regeneration obligations due, plus all 22 planted blocks. There were no active work sites and no deactivated roads.

## Findings

The audit found that the planning and field activities undertaken by the holders of woodlot licences W0512 and W1516 complied in all significant respects with the requirements of FRPA, WA and related regulations, and applicable transitional elements of the Code, as of June 2009.

## Reforestation

Woodlot licence holders are responsible for ensuring that harvested areas are replanted with a sufficient number of well-spaced and desirable seedlings, grown from suitable genetic sources, in accordance with the regulations (WLFMR and WLPPR). The chief forester of BC provides standards for seed use, including transfer limits for seedlings.

Seed transfer limits identify specific areas for seed use based on seed planning zones, elevation, latitude and longitude. The purpose of transfer limits is to quantify a match of seedlings with environments where the seedlings are suitably adapted so that the trees planted can perform optimally within environmental limits of climate, weather and soil. Planting trees outside identified seed transfer zones may have biological implications; trees may grow at a slower rate or be more susceptible to insects, disease, and weather events.

In woodlots W0512 and W1516, the audit found several cutblocks where the seedlings planted did not comply with the *Chief Forester's Standards for Seed Use* (April 1, 2009).

These findings are not considered individually or cumulatively significant due to the relatively small number of offsite seedlings in W0512 and the proximity of the offsite seedlings in W1516 to the seed planning zone boundary. However, for both woodlot licences, this is an area requiring improvement.

## Audit Opinion

In my opinion, the operational planning, timber harvesting, road construction, road maintenance and silviculture carried out at woodlot licences W0512 and W1516 complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations, as well as applicable transitional elements of the *Forest Practices Code of British Columbia Act*, as of June 2009. No opinion is provided regarding road deactivation and fire protection activities.

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 *Reforestation* section of this report, which describes silviculture practices 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, WA and the Code.



Christopher R. Mosher CA, CEA(SFM)  
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Victoria, British Columbia  
October 6, 2009



# Appendix 1: Forest Practices Board Compliance Audit Process

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## 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 8 or 9 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 fieldwork 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 worthy of reporting. Therefore, this category of events will not be included in audit reports.

***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 and Range.

## **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 draft report from the auditor 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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<sup>i</sup> An esker is a long winding ridge of stratified sand and gravel. Most eskers are believed to form in ice-walled tunnels by streams which flowed within (englacial) and under (subglacial) glaciers. After the retaining ice walls melt away, stream deposits remain as long winding ridges.

<sup>ii</sup> A forest development plan is an operational plan that provides the public and government agencies with information about the location of proposed roads and cutblocks for harvesting timber over a period of at least five years. The plan must specify measures that will be carried out to protect certain forest resources prescribed by regulation. It must also be consistent with any higher-level plans. Site-specific plans are required to be consistent with the forest development plan.

<sup>iii</sup> A site plan is a site-specific plan that is required in place of a silviculture prescription as of December 17, 2002, except where there is already an existing silviculture prescription. The site plan contains many of the same elements as a silviculture prescription and is designed to identify resource values and define what a free-growing stand will be on that site. However, it is not an operational plan under the Code and does not require review or approval by government to be implemented.

<sup>iv</sup> Under the *Forest and Range Practices Act* (FRPA), a woodlot licence plan replaces the woodlot forest development plan and site plans. The woodlot licence plan must be consistent with government's objectives for values such as water, soils, and cultural heritage resources. The woodlot licence plan must address the entire woodlot licence area; and performance requirements such as the obligation to reforest a site after logging, and the requirements set out in the *Woodlot Licence Planning and Practices Regulation 21/2004* (WLPPR). The term of a woodlot licence plan is ten years.

<sup>v</sup> Most of the *Forest Practices Code of British Columbia Act* (the Code) was repealed on January 31, 2004 and replaced with the *Forest and Range Practices Act* (FRPA). The transitional provisions of FRPA state that the Code continues to apply to forest practices carried out under a forest development plan. This continues until there is an approved woodlot licence plan, at which point, the requirements of FRPA apply. Therefore, although FRPA came into effect prior to the audit period, the legislated forest practices requirements that applied to three of the five auditees were the requirements of the Code.