



**Forest
Practices
Board**

Audit of Forest Planning and Practices

*Pebble Creek Timber Ltd.
Forest Licence A19218*

FPB/ARC/170

December 2014

Table of Contents

Audit Results.....	1
Introduction	1
Background.....	1
Audit Approach and Scope	2
Planning and Practices Examined.....	2
Audit Opinion	4
Appendix 1: Forest Practices Board Compliance Audit Process.....	5

Audit Results

Introduction

The Forest Practices Board is the public's watchdog for sound forest practices in British Columbia. One of the Board's roles is to audit practices of the forest industry to ensure compliance with the *Forest and Range Practices Act* and the *Wildfire Act*.

As part of its 2014 compliance audit program, the Forest Practices Board selected Pebble Creek Timber Limited's (Pebble Creek) forest licence A19218 for audit. Pebble Creek operates in the Sea to Sky Resource District in the Joffre Creek, upper Lillooet River, and Meager Creek areas. A map of the audit area appears on page 2.

This report explains what the Board audited and the findings. Detailed information about the Board's compliance audit process is provided in Appendix 1.

Background

In July 2010, Pebble Creek Timber Limited bought the assets of C.R.B. Logging, including forest licence A19218. The allowable annual cut for the licence is approximately 20 000 cubic metres.

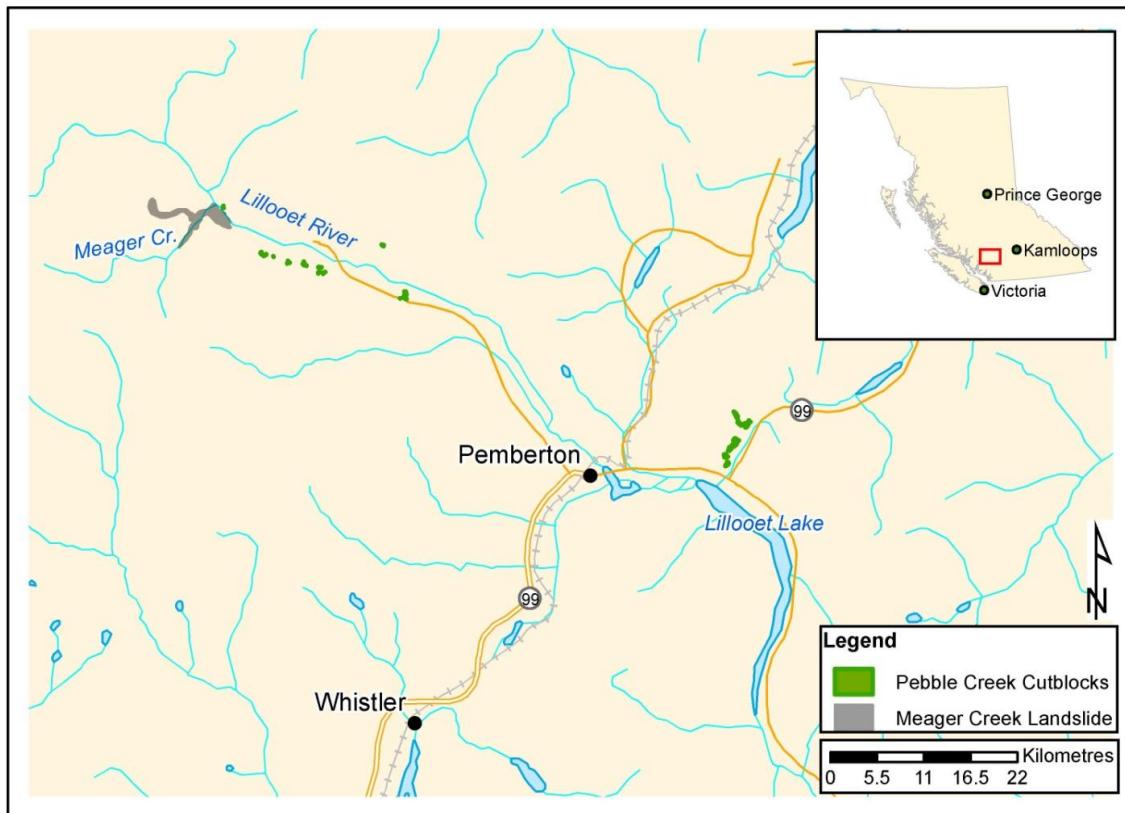
A few weeks later, on August 6, 2010, the Meager Creek landslide occurred, depositing an estimated 46.5 million cubic metres of material into Capricorn Creek, Meager Creek and the Lillooet River. Five pieces of Pebble Creek equipment were buried by the landslide, never to be seen again. The landslide wiped out bridges and roads, cut off access to the Meager Creek operating area and stranded an excavator. Recently, Pebble Creek decided that it is feasible to build a new road from the south into the Meager Creek operating area once again.

The Sea to Sky corridor is a recreational playground for both residents and international visitors. The rugged and spectacular terrain provides ample opportunity for mountain biking, skiing, hiking, mountain climbing, wind surfing, camping, hunting and fishing. Highway 99, the Sea to Sky highway, is a designated scenic corridor and forestry activities must respect visual quality objectives set by government.



Debris from the Meager Creek landslide fills the Lillooet River. The landslide started at Capricorn Creek (centre-top), flowed down into Meager Creek (centre of photo) and then out into the Lillooet River (foreground.). Pebble Creek's new road accessing the Meager operating area is visible on the left hillside.

Map of the Audit Area



Audit Approach and Scope

This was a full scope compliance audit with a two-year timeframe. All harvesting, road, silviculture, and protection activities carried out between July 1, 2012, and July 23, 2014, were included in the audit. All associated planning was also examined. Auditors assessed these activities for compliance with the *Forest and Range Practices Act* (FRPA), the *Wildfire Act* (WA), and applicable regulations.

The standards and procedures used to carry out this audit are set out in the Board's *Compliance Audit Reference Manual, Version 7.0*, (September 2012).

Two professional foresters, a professional engineer and a chartered accountant made up the audit team. Fieldwork took place between July 21-23, 2014.

Planning and Practices Examined

The following describes the activities audited and the findings.

Operational Planning

Pebble Creek planned its activities in its 2012–2017 forest stewardship plan¹ (FSP). Auditors reviewed the FSP to ensure it met FRPA requirements and reflected government objectives for

¹ 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.

wildlife habitat, old growth, and visual objectives for the scenic Highway 99 corridor, among others.

Through office reviews and fieldwork, the team evaluated site plans to ensure that they accurately identified site conditions and met legal requirements.

Pebble Creek's FSP and site plans were consistent with FRPA requirements. Eleven cutblocks were in scenic areas and all met government's established visual quality objectives. There were no concerns with operational planning.

Timber Harvesting

Pebble Creek harvested timber from 21 cutblocks, covering 166 hectares, during the audit period. Auditors examined all of those cutblocks. Seven of the cutblocks were yarded by helicopter while ground-based systems were used for the remainder.

Harvesting was conducted in accordance with requirements of legislation and site plans. Soil disturbance was well managed and within FRPA limits, and natural drainage patterns were maintained. Wildlife tree patches were retained as planned and were situated to protect resources such as streams.

Road Construction and Maintenance

Pebble Creek built 10 kilometres of road and was responsible for the maintenance of 68 kilometres of road permit roads during the audit period. Auditors examined all of these roads. Pebble Creek did not deactivate any roads, construct bridges or maintain any bridges during the audit period.

No concerns were identified with road construction or maintenance. Construction activities were generally conducted over low to moderate risk terrain with the exception of the new South Meager Main. That section was being built to access the operating area cut off by the Meager Creek landslide. The route traverses the south side of Meager Creek and the alignment involves high cuts with long sections exceeding six metres in height and numerous sections of full benching and end hauling. The licensee has employed a professional geoscientist to assess any hazards associated with the new road to reduce the associated risks with the construction.

Silviculture Activities and Obligations

Pebble Creek planted 113 hectares and brushed 19 hectares of cutblocks during the audit period. Thirty-six hectares were due to be, or declared, regenerated and 113 hectares were due to be, or declared, free growing. Auditors examined all of these activities and obligations. Pebble Creek is very aggressive with its planting, with most blocks planted at the first opportunity following harvest.

There were no issues with brushing or planting activities or with the achievement of regeneration or free-to-grow obligations.

Wildfire Protection

Auditors encountered one active harvesting operation and examined fire preparedness. Workers were adequately prepared with the appropriate equipment for a wildfire and met the requirements of the WA.

Auditors examined fire hazard assessment and abatement activities on the 21 cutblocks in the harvesting population. Pebble Creek does not conduct formal fire hazard assessments. Its standard practice is to pile and burn roadside slash to abate any fire hazard.

The WA, however, requires licensees to assess the fire hazard, including an assessment of the fuel hazard and its associated risk of a fire starting or spreading.² Furthermore, the licensee must provide a copy of a fire hazard assessment to an official when requested.

In this case, the licensee is abating the hazard as a standard practice. However it cannot demonstrate that it has been diligent in assessing the hazard, which could be an issue in the future if a fire were to start in a Pebble Creek cutblock. As a result, this is an area requiring improvement.

Audit Opinion

In my opinion, the operational planning, timber harvesting, road construction, maintenance and deactivation, silviculture, and fire protection activities carried out by Pebble Creek Timber Limited on forest licence A19218 between July 1, 2012, and July 23, 2014, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations, as of July 2014. No opinion is expressed regarding road deactivation.

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 *Wildfire Protection* section of this report, which describes an area requiring improvement regarding fire hazard assessment.

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(CEA)
Director, Audits

Victoria, British Columbia
November 12, 2014

² **Wildfire Act: Hazard assessment and abatement**

- 7 (1) In prescribed circumstances and at prescribed intervals, a person carrying out an industrial activity or a prescribed activity on forest land or grass land or within 1 km of forest land or grass land must conduct fire hazard assessments.
- (2) A person, other than a person who is in a prescribed class of persons referred to in subsection (2.1), carrying out an industrial activity or a prescribed activity, must, within a prescribed time period and to the prescribed extent, abate a fire hazard of which the person is aware or ought reasonably to be aware.

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.

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 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 2010, the Board randomly selected the Mackenzie district as a location for an audit. After assessing the activities within that area, we discovered that a large licensee 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, and we knew that some of the licence area is very remote, the new licence holder was selected for audit.

For BCTS audits, a 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 Canadian 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 week in the field.

Evaluating the Results

The Board recognizes that compliance with the many requirements of 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 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 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.



**Forest
Practices
Board**

PO Box 9905 Stn Prov Govt

Victoria, BC V8X 9R1 Canada

Tel. 250.213.4700 | Fax 250.213.4725 | Toll Free 1.800.994.5899

For more information on the Board, please visit our website at: www.bcfpb.ca