



**Forest
Practices
Board**

Audit of Forest Planning and Practices

*Lakeside Pacific Forest Products Ltd.
Forest Licence A19207*

FPB/ARC/208

December 2017

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Audit Results

Introduction

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

As part of its 2017 compliance audit program, the Board randomly selected the Chilliwack Natural Resource District for the location of a full scope compliance audit. Within the district, the Board selected forest licence A19207, held by Lakeside Pacific Forest Products Ltd. (Lakeside), for audit. A map of the audit area appears on page 2.

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

Background

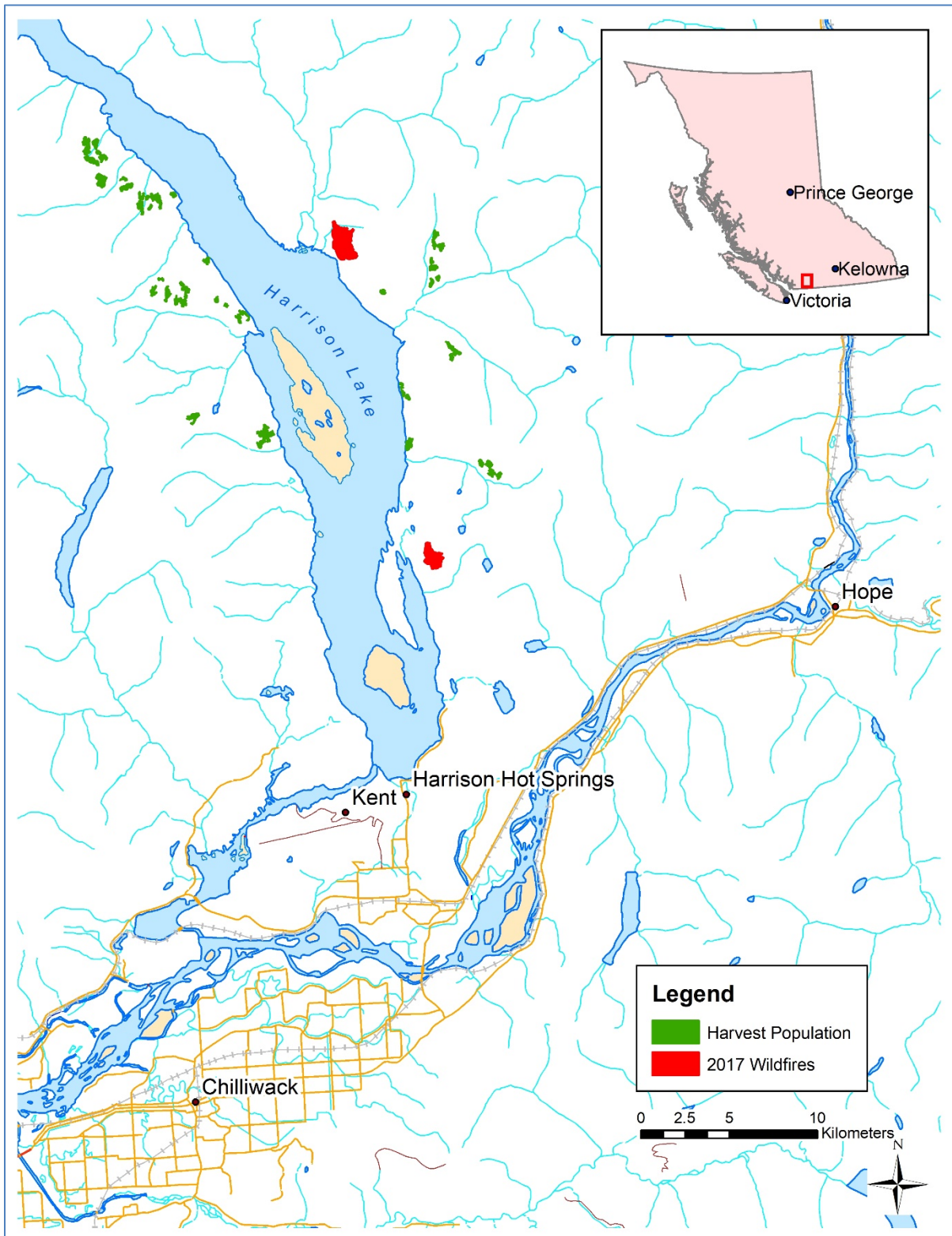
Lakeside is based in Chilliwack, BC, and employs 50 people. Lakeside has held forest licence A19207 since April 2000 and is permitted to harvest 125 484 cubic metres each year. The company has traditionally operated on the east and west sides of Harrison Lake.

The Harrison Lake area is easily accessible from the lower Mainland and it sees a significant amount of recreational use. Camping and offroading are popular activities. During the summer of 2017, two human-caused wildfires burned close to the operating area. The 202-hectare Harrison Lake East fire was discovered on July 1, 2017, just north of the operating area. The 95-hectare Slollicum Creek fire was discovered on August 19, 2017, just south of the operating area. These fires and the extreme fire danger impacted Lakeside's operations into the fall.



A view across Harrison Lake from Bear Creek.

Map of Audit Area



Audit Approach and Scope

This was a full scope compliance audit with a two-year timeframe. All activities carried out between October 1, 2015, and October 18, 2017, were subject to audit. These activities included operational planning (involving preparation of forest stewardship plans (FSP)ⁱ and site plans) silviculture activities, timber harvesting, fire protection, major structureⁱⁱ construction and maintenance, and road construction, maintenance and deactivation.

Auditors assessed these activities for compliance with FRPA, the WA, and applicable regulations. This work included interviewing licensee staff, reviewing the FSP and site plans, assessing silviculture records and visiting sites to review field practices. Sites were accessed by truck and by helicopter.

The standards and procedures used to carry out this audit are set out in the Board's *Compliance Audit Reference Manual, Version 7.1, July 2016*.

Two forest professionals, one professional engineer, and a chartered professional accountant made up the audit team. The team was in the field from October 16-18, 2017. During that time, an intense storm system dropped 141 millimetres of rain on the operating area.

Planning and Practices Examined

Operational Planning

Lakeside's FSP was approved on May 12, 2005, and extended for five years on May 17, 2010, and again for five years on June 15, 2015. Auditors examined the FSP and stand-level site plans for consistency with legal requirements and government orders regarding old growth and wildlife. Auditors also confirmed whether site plans accurately identified site conditions during field sampling.

Timber Harvesting

Lakeside harvested 32 cutblocks, totalling 458 hectares, during the audit period. Auditors examined 31 of those cutblocks, totalling 414 hectares.

Roads and Bridges: Construction, Maintenance, and Deactivation

The road and bridge activities population and sample are presented in Table 1.

Table 1. Road Activities Population and Sample

ACTIVITY	POPULATION	SAMPLE
Road permit road construction	148 km	113 km
Road permit road maintenance	452 km	126 km
Road permit road deactivation	0.2 km	0.2 km
Road permit road structures built	2 bridges	2 bridges
Road permit road structures maintained	4 bridges	4 bridges
Forest service roads maintained	114 km	97 km
Forest service roads structures maintained	20 bridges	13 bridges

Silviculture Obligations and Activities

Lakeside planted 50 cutblocks and brushed 56 cutblocks during the audit period. Regeneration obligations were due or declared on 42 cutblocks and free-growing obligations were due or declared on 39 cutblocks. Auditors examined 10 planted cutblocks, 11 brushed cutblocks, 10 cutblocks with regeneration obligations, and 19 cutblocks with free-growing obligations.

Wildfire Protection

Auditors encountered one active work site and examined licensee compliance with WA requirements for fire preparedness. The WA requires licensees to assess the fire hazard at specified intervals, including an assessment of the fuel hazard and its associated risk of a fire starting or spreading. If the assessment identifies a hazard, it must be abated. Auditors examined fire hazard and assessment obligations on all of the cutblocks in the harvest population.

Findings

Operational Planning

There is no land use plan for the Chilliwack area. Instead, there are a number of legal orders covering goat and deer winter range, habitat for species at risk, and visual quality. Wildlife habitat areas for spotted owl have been established and site plans specified retention of trees to provide owl habitat in accordance with the government order.

The FSP met legal content requirements and addressed the legal orders that apply to forest practices in the audit area. Lakeside addressed site specific resources, such as riparian features in the site plans, by accurately identifying them and prescribing appropriate practices.

Timber Harvesting

Harvesting was conducted in accordance with the requirements of legislation and site plans. Soil disturbance was well managed and minimized, and natural drainage patterns were maintained. Riparian and cultural heritage features were accurately identified and protected. No harvesting concerns were noted.

Roads and Bridges: Construction, Maintenance, and Deactivation

Road Construction

Road construction difficulty varied, with terrain ranging from flat, low risk terrain to a few areas of steeper, but not unstable terrain. Construction reflected specific construction techniques recommended by a terrain specialist. Drainage patterns were well maintained with adequate culvert sizing and placement. No issues were noted with road construction.

Road Maintenance

Lakeside maintains electronic road ledgers that indicate risk levels for each road system and recommended inspection periods and required maintenance. Roads were well maintained. Most in-block roads were seasonally deactivated in preparation for the winter storms. The heavy rains that fell during the audit fieldwork demonstrated the effectiveness of the seasonal deactivation work. Overall, water management was well done.

Road Deactivation

Lakeside deactivated a 218-metre section of road in the North Fork area of Cogburn Creek by pulling back the fill slope to ensure the road was stable. There were no concerns with this short section of deactivation.

Bridge Construction

Both new bridges were well built and all required documentation was accurate and complete. One of the structures had not been opened for industrial use at the time of the audit, as some minor realignment of an approach was necessary.

Bridge Maintenance

There were no concerns with the maintenance of Lakeside's bridges or the FSR bridges it is required to maintain under road use permit.

Silviculture Activities and Obligations

Planting

Lakeside promptly plants harvested areas with at least two species, usually Douglas-fir and western red cedar. Planting densities are resulting in adequate stocking. All sampled cutblocks met the seed transfer guidelines for seed zone, elevation and geographic position.

Brushing

Lakeside uses manual and chemical treatments to brush cutblocks. Field sampling confirmed that Lakeside has a well-organized and effective brushing program. Record keeping associated with silvicultural activities was up-to-date.

Obligations

Lakeside is up-to-date on its regeneration and free-growing obligations. It regenerates its cutblocks promptly and within the required time period. For free-growing obligations, all sampled blocks clearly met free-growing criteria and juvenile tree performance was good.

In summary, there were no concerns with silvicultural activities or obligations.

Wildfire Protection

Fire Preparedness

One active work site was encountered during field auditing. The operation was well-prepared for wildfire and all activities met the requirements of the *Wildfire Regulation*. The licensee maintains rain gauges in each operating area to supplement available weather information and to determine danger class. There were no concerns with fire preparedness.

Fire Hazard Assessment

Lakeside has completed fire hazard assessments for its cutblocks using the Defined Hazard Assessment and Abatement Strategy provided in the *BC Wildfire Service's 2012 Guide to Fuel Hazard Assessment and Abatement in British Columbia*. There are no concerns with the content of the fire hazard assessments.

Fire Hazard Abatement

Slash was either piled or piled and burned on completed cutblocks. Lakeside assesses the success of pile burning and re-burns when necessary. There were no concerns with fire hazard abatement.

Audit Opinion

In my opinion, the operational planning, timber harvesting, road construction, deactivation and maintenance, silviculture, and fire protection activities carried out by Lakeside Pacific Forest Products Ltd. in the Chilliwack Natural Resource District, between October 1, 2015, and October 18, 2017, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations, as of October 2017.

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.

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, including adherence to the auditor independence standards and the ethical requirements, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Such an audit includes examining sufficient forest planning and practices to support an overall evaluation of compliance with FRPA, and WA.



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Victoria, British Columbia
December 6, 2017

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 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 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 from 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.

Unsound Practice – where the auditor identifies a significant practice that, although found to be in compliance with FRPA or WA, is not considered to be sound management.

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, Natural Resource Operations and Rural Development.

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.

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 its FSP, BCTS is 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.

ⁱⁱ Major structure includes bridges and major culverts.

- Bridge means a temporary or permanent crossing structure with a span length equal to or greater than 6 metres or an abutment height of 4 metres or greater.
- Major culvert has a pipe diameter of 2 metres or greater or is a pipe or open bottom arch with a span greater than 2.13 metres.

http://www.for.gov.bc.ca/hth/engineering/documents/publications_guidebooks/manuals_standards/Eng-Manual.pdf



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