



**Forest  
Practices  
Board**

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

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*Lil'wat Forestry Ventures  
Forest Licence A83925*

*and*

*Lil'wat Construction Enterprises  
Non-Replaceable Forest Licence A82250*

**FPB/ARC/172**

December 2014

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# Audit Results

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## 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 the forest 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 Board selected Lil'wat Forestry Ventures' forest licence A83925 and Lil'wat Construction Enterprises' non-replaceable forest licence A82250 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.



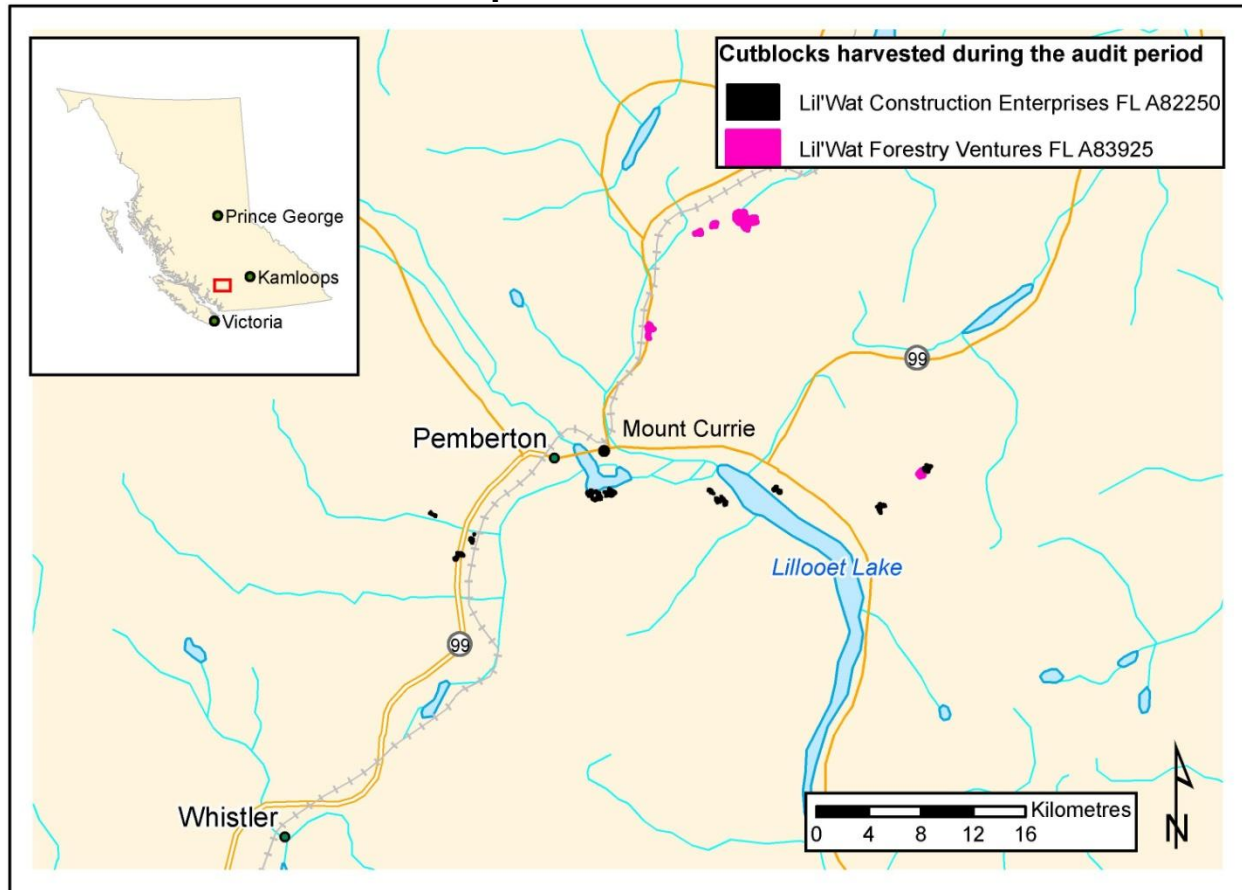
*Looking across Lillooet Lake toward Highway 99.*

## Background

The Lil'wat First Nation (Lil'wat) is based in Mt. Currie, near Pemberton. The Lil'wat hold forest licence A83925, non-replaceable forest licence A82250, and two woodlot licences. The woodlot licences are not part of this audit. In the future, the Lil'wat plan to amalgamate all licences into one First Nations woodland licence.

The Lil'wat operate in the Sea to Sky corridor, which is a recreational destination for both residents and international visitors. The rugged and spectacular terrain provides ample opportunity for a variety of outdoor activities. Highway 99, the Sea to Sky Highway, is a scenic corridor and forestry activities must respect visual quality objectives set by government. The operating area also includes habitat for spotted owl, which is an endangered species requiring special management.

## 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 conducted between July 1, 2012, and September 5, 2014, were included in the audit. Associated planning was also examined. Auditors assessed these items 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 from September 2 to 5, 2014.

## Planning and Practices Examined

The following describes the activities audited and the results.

## Operational Planning

Lil'wat planned its activities in its 2012–2017 forest stewardship plan (FSP).<sup>1</sup> Auditors reviewed the FSP to ensure it met FRPA requirements and reflected government objectives for wildlife habitat, and visual objectives for the scenic Highway 99 corridor, among other objectives.

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

Fifteen cutblocks were in scenic areas and all met government's established visual quality objectives. The FSP and site plans were consistent with FRPA requirements and there were no concerns with operational planning.

## Timber Harvesting

Lil'wat harvested timber from 24 cutblocks covering 294 hectares during the audit period. Auditors examined all of the cutblocks.

Eight of these cutblocks were within wildlife habitat areas for spotted owl. In these areas, designated as "managed future habitat areas," logging is permitted. However, in an effort to encourage the creation of suitable future habitat, 40 of the largest 80 trees per hectare must be retained, and no point within the block should be further than 40 metres from a retained tree.

To ensure consistency with the spotted owl requirements and to ensure even distribution of leave trees across the block, the licensee analysed the cruise data to pick 40 of the largest 80 trees and then measured, recorded and marked the leave trees at both breast height and on the base of the tree. This is a good system to ensure that leave trees are retained during harvesting and our fieldwork confirmed that they were.

In addition to retaining larger trees, Lil'wat also processed trees in the block with the goal of retaining at least 75 cubic metres of coarse woody debris on site to create habitat for owl prey. This is consistent with best management practices for managing spotted owl habitat.

Lil'wat conducted its harvesting in accordance with requirements of legislation and site plans. Soil disturbance was well managed and within FRPA limits and natural drainage patterns were maintained. There were no concerns with harvesting.

## Road Activities

Lil'wat built approximately 15 kilometres of road and was responsible for the maintenance of 102 kilometres of road permit roads and 24 kilometres of forest service road during the audit period. Auditors examined all of the new



*These retained trees will provide future owl habitat*

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<sup>1</sup> 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.

construction and forest service road maintenance, and 68 kilometres of the road permit road maintenance.

Lil'wat built four bridges during the audit period and all were examined. The licensee did not deactivate any roads, with the exception of in-block roads.

There were no issues with road maintenance, deactivation or bridges. Deactivation measures consisted of cross ditching and water bars. Natural drainage patterns were maintained and well-managed. No concerns were identified with road construction or maintenance.

## **Silviculture Activities and Obligations**

Lil'wat planted 321 hectares during the audit period and 65 hectares were due to be regenerated. Auditors examined all of the planting and assessed all obligations and determined that suitable planting stock was used for all sites.

There were no issues with planting activities or with the regeneration obligations.

## **Wildfire Protection**

Auditors encountered one active road construction operation and one site where logs were being loaded onto a logging truck. Auditors assessed fire preparedness at these two sites. Workers were adequately prepared with the appropriate equipment for fighting a wildfire and met the requirements of the WA.

Auditors also examined fire hazard assessment and abatement activities on the 24 blocks in the harvesting population. Lil'wat does not formally document its post-harvest fire hazard assessments. Its usual practice is to pile and burn roadside slash to abate any fire hazard. Some piling is also done within blocks. The WA,<sup>2</sup> 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. A licensee must also provide a copy of a fire hazard assessment to an official when requested. If an assessment identifies a hazard, it must be abated.

Without documenting the fire hazard assessment, the licensee cannot demonstrate that it has been diligent in identifying a hazard. This is particularly important when processing trees in the cutblock to retain large woody debris on site, as the requirement to create future spotted owl prey habitat must be balanced against hazard abatement requirements. As a result, fire hazard assessment is an area requiring improvement.

Subsequent to the audit, Lil'wat states it now has a system in place to track assessments and treatments.

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<sup>2</sup> **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.

## Audit Opinion

In my opinion, the operational planning, timber harvesting, road construction, deactivation and maintenance, silviculture, and fire protection activities carried out by Lil'wat on forest licence A83925 and non-replaceable forest licence A82250 between July 1, 2012, and September 5, 2014, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations as of September 2014.

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(EMSLA)  
Director, Audits

Victoria, British Columbia  
December 3, 2014



# 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.

### 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.



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