



**Forest
Practices
Board**

Audit of Forest Planning and Practices

*Lowell A. Johnson Consultants Ltd.
Forest Licence A70026*

FPB/ARC/182

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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 2015 compliance audit program, the Board randomly selected the Skeena Stikine Resource District for the location of a full scope compliance audit. Within the district, the Board selected Forest Licence A70026, held by Lowell A. Johnson Consultants Ltd. (LAJ), for audit.¹

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



View from a Lowell A. Johnson Consultants Ltd. cutblock towards the Babine Mountains

Background

Forest licence A70026 provides LAJ with an allowable annual cut of 14,250 cubic metres of timber from the Bulkley timber supply area (TSA). The operating area is located approximately 35 kilometres east of Smithers, south of Chapman Lake. A map of the audit area appears on page 2.

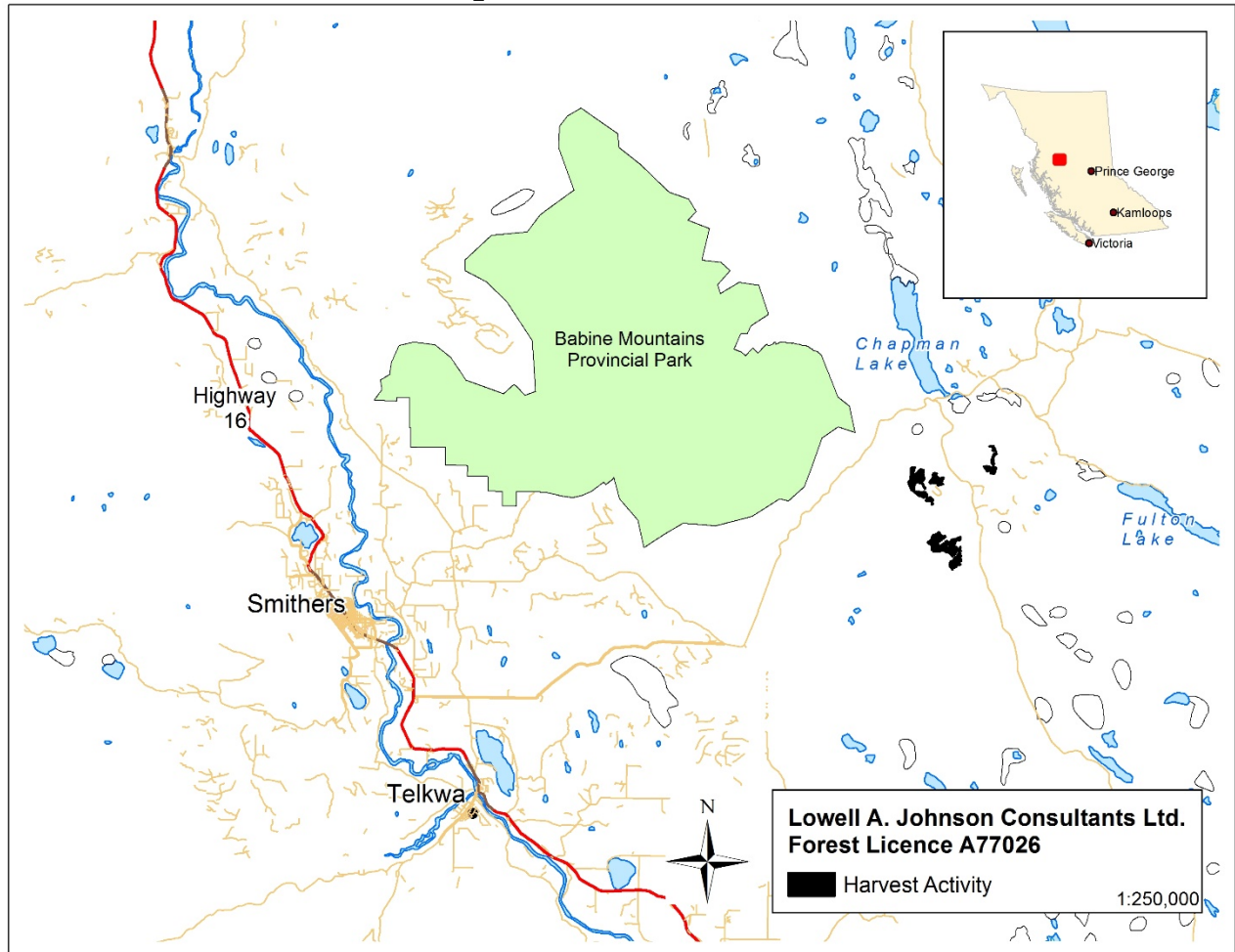
The TSA provides habitat for many wildlife species including deer, moose and grizzly bear. Fish include coho, sockeye, pink and chinook salmon and rainbow and steelhead trout. Smithers promotes itself as the Steelhead Capital of the World. The main tree species are pine, spruce and balsam.

Although there is steep terrain in the area, including the adjacent Babine Mountains Provincial Park, LAJ's operating area is relatively flat.

¹ The Board also selected Lowell A. Johnson Consultants Ltd.'s non-replaceable forest licence A90554 for audit. This licence was awarded in May 2013, but there was no activity as of October 9, 2015. As a result, this licence was not audited.

Canadian Forest Products Limited's Houston operation (Canfor) manages the forest licence on behalf of LAJ. This means that Canfor conducted the planning and forestry activities on the ground. LAJ, however, remains ultimately responsible for all aspects of the licence.

Map of the 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, 2013, and October 9, 2015, were subject to audit, including harvesting, roads, silviculture, wildfire protection and associated planning.

Auditors assessed these activities for compliance with the *Forest and Range Practices Act*, the *Wildfire Act* 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*.

A forest professional, a professional engineer and a chartered professional accountant made up the audit team. Field work was carried out on October 8, 2015.

Planning and Practices Examined

Operational Planning

LAJ's Forest Licence A70026 is part of a multi-licensee forest stewardship plan² (FSP) that includes Canadian Forest Products Ltd.'s Houston operations and Dungate Community Forest Limited Partnership. The FSP was approved in 2007 and has since been extended until 2017.

An Order establishing land use objectives for the Bulkley TSA made under the *Land Act* came into effect on November 6, 2006, and it applies to the operating area. The order sets objectives for biodiversity (including ecosystem representation), wildlife, fish habitat, timber and outdoor recreation. These objectives must be respected when conducting forest and range practices. The objectives have been incorporated into the FSP.

Auditors reviewed the FSP and stand-level site plans to ensure that they met legislative requirements and the land use order. Auditors also considered site plans during harvesting, road and silviculture field sampling to ensure that they accurately identified site conditions.

Timber Harvesting

Eleven cutblocks were harvested during the audit period and auditors examined all of them.

Road Construction and Maintenance

LAJ built 18.4 kilometres of road permit road and 5.7 kilometres of in-block roads to access timber. Auditors examined all new road construction.

LAJ is responsible for maintaining 43.5 kilometres³ of road permit roads and auditors examined 22.4 kilometres of this amount. No roads had been deactivated.

Bridge Maintenance and Deactivation

LAJ was responsible for the maintenance of three bridges and it also removed one bridge during the audit period. Auditors examined the three existing structures, as well as the site of the removed structure. No new structures had been built.

Silviculture Activities and Obligations

LAJ planted 10 cutblocks and site prepared portions of 2 cutblocks for planting. Auditors examined all of these sites.

Auditors examined the sole cutblock declared free-growing during the audit period.

Wildfire Protection

As there were no active operations during audit fieldwork, auditors could not assess compliance with WA fire preparedness requirements, such as having adequate fire-fighting

² 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 cut blocks. FSPs can have a term of up to five years.

³ This figure includes the 18.4 kilometres of new road construction.

tools on site. However, auditors examined fire hazard assessment and abatement activities and obligations on the 11 cutblocks in the harvest sample.

Findings

The audit found that LAJ's planning and activities complied with FRPA and the WA as of October 2015.

Operational Planning

The FSP contained the legally required information and addressed the Order establishing land use objectives for the Bulkley TSA. The site plans accurately identified resource features and specified how they should be protected. Archaeological field reviews were completed for blocks in the harvest population with the appropriate First Nation. There were no concerns identified with operational planning.

Harvesting

Harvesting was done using feller-bunchers between the months of November and March and soil disturbance was minimal. Temporary crossings were removed after harvest and natural drainage patterns were maintained. Wildlife tree patches and reserves around wetlands and streams were intact and managed as prescribed. Retention of non-merchantable trees within cutblocks was very good.

Harvesting operations were consistent with requirements.

Road Construction, Maintenance and Deactivation

Road Construction

Both the road permit roads and the in-block roads were built with a minimal footprint. While the road permit roads remain drivable, the in-block roads were essentially winter use only.

Road Maintenance

LAJ's roads were stable and natural surface drainage patterns were maintained. No road maintenance issues were identified.

Bridge Maintenance

The three intact bridges were adequately maintained. The licensee recently inspected the bridges and recognized that decking will need to be replaced before they are used for industrial activities in the future. Auditors had no concerns with bridge maintenance.

Bridge Deactivation

The bridge deactivation site was stable, the banks were protected and there were no concerns with sedimentation.

In summary, no road or bridge related compliance issues were noted during the audit.

Silviculture Activities and Obligations

LAJ planted its cutblocks with pine and spruce seedlings. All planted stock in the cutblocks examined met the chief forester's standards for seed use. There are no blocks overdue for regeneration or for the establishment of a free-growing stand.

There were no concerns with planting, regeneration obligations, or free-growing obligations.

Wildfire Protection

LAJ has chosen to use the Defined Hazard Assessment and Abatement Strategy (DHAAS) provided in government's "Guide to Fuel Hazard Assessment and Abatement in British Columbia."⁴ All cutblock hazard assessments indicated that the hazard must be abated. LAJ piles and burns slash on completed cutblocks in a timely manner.

There were no issues with hazard assessment or abatement.

Audit Opinion

In my opinion, the operational planning, timber harvesting, road construction, maintenance and deactivation, silviculture, and fire protection activities carried out by Lowell A. Johnson Consultants Ltd. on Forest Licence A70026, between October 1, 2013, and October 9, 2015, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations, as of October 2015.

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. 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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Director, Audits

Victoria, British Columbia
November 2, 2015

⁴ The guide to fuel hazard assessment and abatement in BC is available at:
http://bcwildfire.ca/Industry_Stakeholders/industry/Hazard%20Assess%20%20Abate%20Guidance%20Doc%20FINAL%20with%20all%20Links%20April%202012.pdf

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.

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

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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