



**Forest
Practices
Board**

Audit of Road and Bridge Maintenance and Silviculture Activities and Obligations

*Canadian Forest Products Ltd.
Forest Licence A17007*

FPB/ARC/214

June 2018

Table of Contents

Audit Results1

 Introduction.....1

 Background1

 Audit Approach and Scope2

 Planning and Practices Examined3

 Audit Findings.....3

 Audit Opinion5

Appendix 1: Forest Practices Board Compliance Audit Process.....6

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).

As part of its 2017 compliance audit program, the Board randomly selected the Fort Nelson Natural Resource District as the location for a compliance audit. Within the district, the Board selected forest licence A17007, held by Canadian Forest Products Ltd. (Canfor), for audit.

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



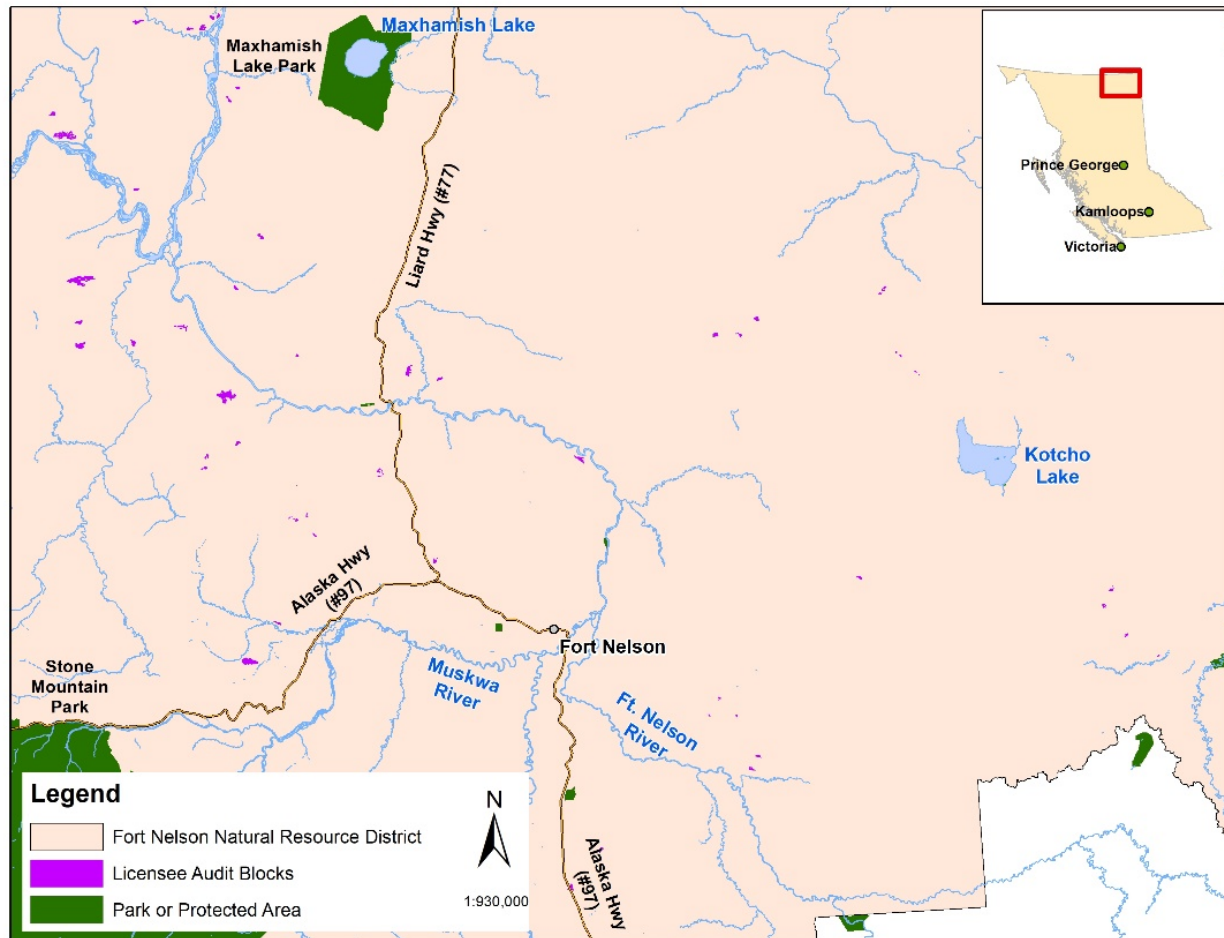
Typical terrain with a regenerated mixed-wood stand.

Background

The Fort Nelson Natural Resource District is in the northeastern corner of British Columbia and covers more than 9.8 million hectares, bordering Alberta to the east and the Northwest Territories and the Yukon Territory to the north. The topography forms a gradient of increasing relief from east to west, encompassing parts of the Alberta plateau, the Rocky Mountain Foothills, the Liard Plateau, the Liard Plain, the Kechika River Valley and a portion of the Cassiar Mountains. Forests mainly consist of old and mature stands of spruce, pine, aspen, cottonwood, and birch.

Canfor's forest licence A17007 has an allowable annual cut of approximately 550 000 cubic metres, however, there has been no active harvesting under the licence since 2008.

Map of the Audit Area



Audit Approach and Scope

This was a limited scope compliance audit with a one-year timeframe. As this licence is not currently active, only road and bridge maintenance and silviculture activities and obligations carried out between September 1, 2016, and September 13, 2017, were subject to audit.

Auditors assessed roads and bridges, silviculture and associated planning for compliance with FRPA and applicable regulations. Auditors' work involved interviewing Canfor staff, reviewing the forest stewardship plan and other applicable plans, assessing silviculture records, and field visits. Field sites were accessed by truck and 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*.

A forest professional, a forest professional/geoscientist-in-training and a chartered professional accountant made up the audit team. The audit team was in the field with Canfor staff from September 11 to 13, 2017.

Planning and Practices Examined

Road and Bridge Maintenance

During the audit period, Canfor had not constructed or deactivated any roads or bridges, but did have maintenance obligations. The road maintenance population was challenging to identify due to the predominance of winter roads and the overlapping oil and gas activity in the area. Prior to 2013,¹ the oil and gas industry and forestry had two parallel road tenure systems, one under the government ministry responsible for forests and one under the ministry responsible for oil and gas. The two systems used different definitions of road segments and therefore what was tenured under one system did not completely match what was tenured in the other system. Auditors estimated that Canfor holds the maintenance obligations for 1724 kilometres of road, with the majority being winter roads.² Canfor also has maintenance obligations for 10 bridges.

Auditors examined approximately 415 kilometres of the maintained road and all 10 bridges.

Silviculture Activities and Obligations

During the audit period, Canfor planted 3 cutblocks, brushed 43 cutblocks and free growing was due or declared on 157 cutblocks.

Auditors examined the 3 planted cutblocks, 12 brushed cutblocks and 51 cutblocks where free growing was due or declared.

Audit Findings

The auditors found that the bridge maintenance practices carried out by Canfor on FL A17007 did not comply in all significant respects with the requirements of FRPA and related regulations, as of September 2017. This is an adverse opinionⁱⁱ for these activities and is discussed below.

Auditors found that Canfor's road maintenance and silviculture activities complied with FRPA.

Bridge Maintenance

Canfor has ongoing maintenance obligations on 10 bridges. In assessing these 10 bridges, auditors noted that the as-built drawings, pile driving records and other relevant records were missing for all 10 bridges. Section 77ⁱⁱⁱ of the *Forest Planning and Practices Regulation (FPPR)* requires that these documents be retained. Therefore, this is a non-compliance.

Canfor completed bridge inspections for all 10 structures in 2016. The inspections identified structural deficiencies with each bridge and did not identify the maximum load capacity of the bridges. The audit found that there were no signs posted for the maximum load capacity of the deficient bridges and access was not restricted. Two of the bridges were on a section of road used by two oil and gas companies under road use agreements. In addition, four other bridges were also accessible by pickup truck.

This is non-compliance with two sections of the FPPR. Section 75^{iv} says that if a structural defect or deficiency occurs on a bridge, the person must take one or more steps to repair, close, restrict access

¹ In 2013, the Road Regulation for the Oil and Gas Commission was approved, which does not allow overlapping tenures.

² Winter roads are roads built during freezing conditions so there is little to no evidence of the road being constructed once the ground thaws.

or place load limit signs on the bridge, which was not done for the six bridges noted above. Section 72^v of the FPPR requires that a person who maintains a road must ensure it is safe for industrial users, which was not the case for the two bridges being used by oil and gas companies.

These combined significant non-compliances identified during the audit are of sufficient magnitude to warrant an overall negative conclusion for bridge maintenance.

Subsequent to the audit, Canfor staff have located records for three of the bridges, removed one bridge and limited access for seven of the bridges by re-establishing cross ditches and posting new signs. Site inspections, including load rating assessments, are planned for 2018. In addition, both oil and gas company road use agreements have expired and have not been renewed. Therefore, there are currently no active industrial road users under road use agreement using the bridges.

Road Maintenance

The majority of roads under permit are winter roads. No concerns were noted on any of the winter roads.

There were three tenured, all-season road systems. One road system had been completely deactivated and one was deactivated and signed at the start of the road. Both roads had been deactivated prior to the audit period. The third road system was still active, with portions under road use agreements with oil and gas tenure holders.

There were no concerns noted with road maintenance.

Silviculture Activities and Obligations

Despite the period of inactivity on the forest licence and access limitations, Canfor has been actively managing its silviculture obligations. Canfor planted the three cutblocks with suitable tree species and stock. All planted stock met the chief forester's seed transfer guidelines. Canfor has an active brushing program to ensure planted sites achieve their planned species composition and densities. Reporting obligations were complete, correct and timely.

There were no issues with silviculture activities or obligations.

Audit Opinion

In my opinion, the bridge maintenance activities carried out by Canadian Forest Products Ltd. on Forest Licence A17007 between September 1, 2016, and September 13, 2017, did not comply in all significant respects with the requirements of the *Forest and Range Practices Act* and related regulations, as of September 2017.

As described in the *Bridge Maintenance* section of this report, the concerns identified regarding bridge maintenance activities are representative of the activities audited and the activities are found to not be in compliance with FRPA.

In my opinion, the road maintenance and silviculture activities and obligations and associated planning carried out by Canadian Forest Products Ltd. on Forest Licence A17007 between September 1, 2016, and September 13, 2017, complied in all significant respects with the requirements of the *Forest and Range Practices Act* and related regulations, as of September 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.



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April 26, 2018

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 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.

ENDNOTES

- 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 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.
- ii An “adverse opinion” is an overall negative conclusion, which is appropriate when significant non-compliance is individually or collectively of sufficient magnitude to warrant an overall negative opinion.
(CARM – version 7.1, July 2016 – page 26)
- iii **Section 77 of the Forest Planning and Practices Regulation:**
Retaining information
77 (1) A person who builds a bridge or major culvert for the purpose of constructing or maintaining a road must do all of the following:
(a) prepare or obtain
(i) pile driving records,
(ii) for new materials used to build the bridge or major culvert, mill test certificates, in-plant steel fabrication drawings, and concrete test results,
(iii) soil compaction results, and
(iv) other relevant field and construction data;
(b) prepare as-built drawings of the bridge or major culvert;
(c) retain the information referred to in paragraphs (a) and (b) until the earlier of the date that
(i) the bridge or major culvert is removed, and
(ii) the person is no longer required to maintain the road.
(2) Subject to subsection (3), a person responsible for maintaining a road must retain a copy of inspection records for a bridge or major culvert associated with the road for at least one year after the bridge or major culvert is removed from the site.
(3) Unless the road has been deactivated, a person must submit to the district manager or the timber sales manager, as applicable, the documents, drawings and records described in subsections (1) and (2) in respect of a road if the person is no longer required to maintain the road because the district manager or timber sales manager
(a) cancelled the road permit, road use permit or special use permit for the road, and
(b) does not require the road to be deactivated.
- iv **Section 75 of the Forest Planning and Practices Regulation:**
Structural Defects
75 A person who maintains a road must do one or more of the following if a structural defect or deficiency occurs on a bridge that is part of that road:
(a) correct the defect or deficiency to the extent necessary to protect
(i) industrial users of the bridge, and
(ii) downstream property, improvements or forest resources that could be affected if the bridge fails;
(b) close, remove or replace the bridge;
(c) restrict traffic loads to a safe level;
(d) place a sign, on each bridge approach, stating the maximum load capacity of the bridge.
- v **Section 72 of the Forest Planning and Practices Regulation:**
Roads and associated structures
72 A person who constructs or maintains a road must ensure that the road and the bridges, culverts, fords and other structures associated with the road are structurally sound and safe for use by industrial users.



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