

**Audit of Road and
Timber Harvesting Practices**

**Forest Licence A18157
Plateau Forest Products Ltd.
(Slocan Group)**



December 1998

FPB/ARC/11

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Report from the Board

A. Report from the Board

This is the Board's report on a compliance audit¹ of Forest License A18157² held by Plateau Forest Products Ltd. (Slocan Group) (referred to in this report as Plateau). The main operating area of this licence is located south west of Vanderhoof between the Blackwater and Nechako Rivers. A much smaller operating area is located near Takla Lake north west of Fort St. James (see attached map).

The audit examined Plateau's timber harvesting and road practices, and related operational plans, for the period August 1, 1996 to August 11, 1997, to assess compliance with the *Forest Practices Code of British Columbia Act* and related regulations (the Code).

The Board's conclusions are based on an audit of the following practices:

- harvesting of 80 cutblocks
- construction of approximately 142 kilometres of road
- maintenance of approximately 556 kilometres of road
- deactivation of approximately 25 kilometres of road and temporary roads within the 80 cutblocks
- operational plans related to the harvesting and road practices

Prior to completing this report, the Board considered written representations from Plateau, as required by section 182 of the Act.

Conclusions and Recommendations

Plateau's timber harvesting and road construction, maintenance and deactivation practices generally complied with Code requirements. Several small streams were not correctly classified in accordance with Code requirements.

Most of the misclassifications involved small, low gradient streams that should have been classified as fish streams. Plateau classified them as non-fish streams but, in the absence of a fish inventory, the Code requires that

Stream classification: under the Code, streams must be classified based on the width of the stream and the presence or absence of fish. There are six classes of streams defined in the Code. The class of the stream determines the size of the riparian management area, the need for a riparian reserve zone, and the practices that may occur in the area beside the stream.

¹ Part B of this document provides background information on the Board's audit program and the process followed by the Board in preparing its report.

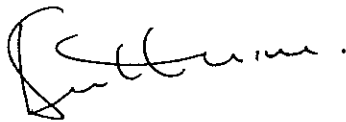
² The report from the auditor (Part C of this document) provides specifics about the operating areas of Forest License A18157 and the forest planning and field activities of Plateau Forest Products Ltd. (Slocan Group) that were the subject of this audit and the audit results.

they be considered fish streams. On one misclassified stream, Plateau provided more protection than required by the Code.

Correct classification is important because it determines the extent and location of required riparian management areas and the practices that may occur there. Misclassification increases the risk that adequate protection will not be provided to fish, wildlife and biodiversity values associated with streams and their riparian areas.

Plateau has informed the Board that these streams were classified during the early months of Code implementation. Plateau also advised the Board that, since the audit, it has developed a number of internal recommendations to improve stream classification.

The Board recommends that Plateau continue to monitor its operating procedures to ensure that riparian classification and practices near streams comply with Code requirements.

A handwritten signature in black ink, appearing to read "Keith Moore", with a small dot at the end of the line.

Keith Moore
Chair

November 25, 1998

Forest Practices Board Compliance Audit Process

B. Forest Practices Board Compliance Audit Process

Background

The Forest Practices Board conducts audits of government's and agreement holder's compliance with the *Forest Practices Code of British Columbia Act* and regulations (the Code). The Board is given the authority to conduct these periodic independent audits by section 176 of the Act. Compliance audits examine forest planning and practices to determine whether or not they meet Code requirements.

The Board undertakes both "limited scope" and "full scope" compliance audits. A limited scope audit involves the examination of selected forest practices (e.g. roads, or timber harvesting, or silviculture) and the related operational planning activities. A full scope audit examines all operational planning activities and forest practices.

The Board determines how many audits it will conduct in a year, and what type of audits (limited or full scope), based on budget and other considerations. The Board audits agreement holders who have forest licences or other tenures under the *Forest Act* or the *Range Act*. The Board also audits government's Small Business Forest Enterprise Program (SBFEP) which is administered by Ministry of Forests district offices. Selection of agreement holders and district SBFEPs for audit is done randomly, using a computer program, to ensure a fair, unbiased selection of auditees.

Audit Standards

Audits by the Forest Practices Board are conducted in accordance with the auditing standards developed by the Board. These standards are consistent with generally accepted auditing standards.

The audits determine compliance with the Code based on criteria derived from the *Forest Practices Code of British Columbia Act* and its related regulations. Audit criteria are established for the evaluation or measurement of each practice required by the Code. The criteria reflect judgments about the level of performance that constitutes compliance with each requirement.

The standards and procedures for compliance audits are described in the Board's "Reference Manual — Compliance Audits, Version 3, May 1998".

Audit Process

Conducting the Audit

Once the Board selects an audit and decides on the scope of the audit (limited scope or full scope), the staff and resources required to conduct the audit and the period covered by the audit are determined. Board staff also meet with the party being audited to discuss the logistics of the audit before commencing the work.

All the activities carried out during the period subject to audit are identified. This includes activities such as the sites harvested or replanted and road sections built or deactivated during the audit period. The items that comprise each forest activity are referred to as a “population.” For example, all sites harvested form the “timber harvesting population.” All road sections constructed form the “road construction population”. The populations are then sub-divided based on factors such as the characteristics of the sites and the potential severity of the consequences of non-compliance on the sites.

The most efficient means of obtaining information to conclude whether there is compliance with the Code is chosen for each population. Because of limited resources, sampling is usually relied upon to obtain audit evidence, rather than inspecting all activities.

Individual sites and forest practices within each population have different characteristics, such as the type of terrain or type of yarding. Each population is divided into distinct sub-populations on the basis of common characteristics (e.g. steep ground vs. flat ground). A separate sample is 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 the sub-population where the risk of non-compliance is greater.

Audit work in the field includes assessments from helicopters and intensive ground procedures such as the measurement of specific features like road width. The audit teams generally spend two to three weeks in the field.

Evaluating the Results

The Board recognizes that compliance with the many requirements of the Code is more a matter of degree than absolute adherence. Determining compliance requires the exercise of professional judgment within the direction provided by the Board.

Auditors collect, analyze, interpret and document information to support the audit results. The audit team, comprised of professionals and technical experts, first determines whether forest practices are in compliance with Code requirements. For those practices considered to not be in compliance, the audit team then evaluates the degree to which the practices are judged not in

compliance. The significance of the non-compliance is determined based on a number of criteria including the magnitude of the event, the frequency of its occurrence, and the severity of the consequences.

As part of the assessment process, auditors categorize their findings into the following levels of compliance:

Compliance — where the auditor finds that practices meet Code requirements.

Not significant non-compliance — where the auditor, upon reaching a non-compliance conclusion, determines that a non-compliance event, or the accumulation and consequences of a number of non-compliance events, is not significant and is not considered worthy of reporting.

Significant non-compliance — where the auditor determines that the event or condition, or the accumulation and consequences of a number of non-compliance events or conditions, is 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 the non-compliance. A significant breach can also result from the cumulative effect of a number of non-compliance events or conditions.

Identification of a possible significant breach requires the auditor to conduct tests to confirm whether or not there has been a breach. 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 Ministers of Forests, Energy & Mines, and Environment, Lands & Parks.

Reporting

Based on the above evaluation, the auditor then prepares the “Report from the Auditor”, for submission to the Board. The party being audited is given a draft of the report before it is submitted to the Board so that the party is fully aware of the findings. The party is also kept fully informed of the audit findings throughout the process, and is given opportunities to provide additional relevant information and to ensure the auditor has complete and correct information.

Once the auditor submits the report, the Board reviews it and determines whether any party or person is potentially adversely affected by the audit findings. 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 to the public and government. The representations allow potentially adversely affected parties to present their views to the Board.

At the discretion of the Board, representations may be written or oral. The Board will generally offer written representations to potentially adversely affected parties, unless the circumstances strongly support the need for an oral hearing.

The Board then reviews both the report from the auditor and the representations before preparing its final report which includes the Board's conclusions and may also include recommendations, if appropriate.

If the Board's conclusions or recommendations result in newly adversely affected parties or persons, additional representations would be required.

Once the representations have been completed, the report is finalized and released: first to the auditee and then to the public and government.

Report from the Auditor

C. Report from the Auditor

1. Introduction

As part of the Forest Practices Board's 1997 audit program, Forest License A18157 was selected for audit from the population of major forest licences within the Prince George Forest Region. The licence, held by Plateau Forest Products Ltd. (Slocan Group), was selected randomly and not on the basis of location or the level of performance.

Forest License A18157 is located in the Vanderhoof Forest District, and within the Prince George Timber Supply Area, as shown on the attached map. The current operating area consists of:

- a main area (about 95 % of total operations) to the south west of Vanderhoof, between the Blackwater river to the south and the Nechako river to the west; and
- a smaller area (the remaining 5 % of operations) located near Takla Lake which is about 250 km north of Fort St. James.

This volume based license has harvesting operations over an area of about 1.6 million hectares (16,000 square kilometres) and has an allowable annual cut of 619,223 cubic metres.

2. Audit scope

The audit examined the planning and field activities related to timber harvesting and road construction, maintenance, and deactivation. These activities were assessed for compliance with the *Forest Practices Code of British Columbia Act* and related regulations (the Code), including the transitional provisions of the Code.

All timber harvesting, road construction and deactivation, and road maintenance obligations for the period August 1, 1996, to August 11, 1997, were included in the scope of the audit. This involved examining all aspects of operational planning - such as forest development¹ plans, silviculture prescriptions² and logging plans³ - that supported the harvesting and road activities examined during the audit period.

The field activities that were carried out during the audit period and were therefore subject to audit are described below:

- the harvesting of 80 cutblocks;
- the construction of 142 kilometres of road;
- the maintenance of approximately 556 kilometres of road, involving activities such as surfacing and the cleaning of culverts;
- the deactivation of 9 road sections totaling 25 kilometres; and
- the deactivation of temporary roads within the 80 harvesting cutblocks.

Section 3 describes our audit of these activities, and the results. The Board's audit reference manual, "Reference Manual - Compliance Audits, Version 2.0, May, 1997", sets out the standards and procedures that were used to carry out this audit.

3. Audit findings

Practices examined

The audit work on selected roads and cutblocks included assessments from the air using helicopters and ground-based procedures. The audit examined:

- timber harvesting practices on 27 cutblocks;
- the construction of 21 road sections totaling 46.8 kilometres;
- the maintenance of 30.5 kilometres of roads using ground procedures and an undetermined portion of roads reviewed by helicopter; and
- the deactivation of four access roads totaling 10.5 km and 14.9 kilometres of temporary roads within 11 cutblocks.

Findings

The audit identified a number of instances where small fish streams were not correctly classified in accordance with Code requirements. In all other respects, the timber harvesting, road construction, maintenance, and deactivation practices and the related planning of Plateau Forest Products Ltd. were in compliance, in all significant respects, with Code requirements.

Of the 27 cutblocks examined in the audit, there were 22 cutblocks (about 82 percent) with streams, lakes or wetlands either within or adjacent to the cutblocks. Small fish streams were not correctly classified on 23 percent of the 22 cutblocks.

Most of the misclassified streams were S4 fish streams that were classified as S6 non-fish stream reaches. Some sedimentation had occurred in one S4 fish stream that was misclassified as non-fish. No adverse impacts were observed to any of the other misclassified streams, with one S4 fish stream being over-classified as an S3 fish stream and receiving more protection than required by the Code.

The correct identification and classification of streams is important because the stream class determines the extent and location of the adjacent riparian management area and the practices that will be applied around the stream. Riparian areas contain a high number of the plants and animal species found in the forest, including habitats and travel corridors for wildlife. Riparian vegetation protects water quality, stabilizes banks, and is essential to aquatic ecosystems. Many

of the organisms that come from overhanging vegetation and bordering trees are food for fish. Misclassification of streams increases the risk that adequate protection will not be provided to streams and their associated riparian areas.

The main areas of the Code to which the above non-compliance relates is sections 33(3)(b) and 39(3)(b) of the Operational Planning Regulation, which require that streams be described and classified in plans, and section 72 of the Operational Planning Regulation, which sets out the stream classification requirements.

4. Audit opinion

In my opinion, except for the significant non-compliance described in the following paragraph, the timber harvesting and road construction, maintenance, and deactivation activities carried out by Plateau Forest Products Ltd. (Slocan Group) on Forest License A18157 from August 1, 1996, to August 11, 1997, were in compliance, in all significant respects, with the road and harvesting requirements of the Code as of August 1997.

As described in section 3, the audit identified that small fish streams were not correctly classified on 23 percent of the 22 cutblocks with streams, lakes and wetlands.

In reference to compliance, the term "in all significant respects" recognizes that there may be minor instances of non-compliance that either may not have been detected by the audit, or that were detected but not considered worthy of inclusion in the audit report.

Sections 2 and 3 of this report from the auditor describe the audit work that formed the basis for reaching this qualified opinion. The audit was conducted in accordance with the auditing standards of the Forest Practices Board. Such an audit includes examining sufficient road and timber harvesting practices to support an overall evaluation of compliance with the Code.



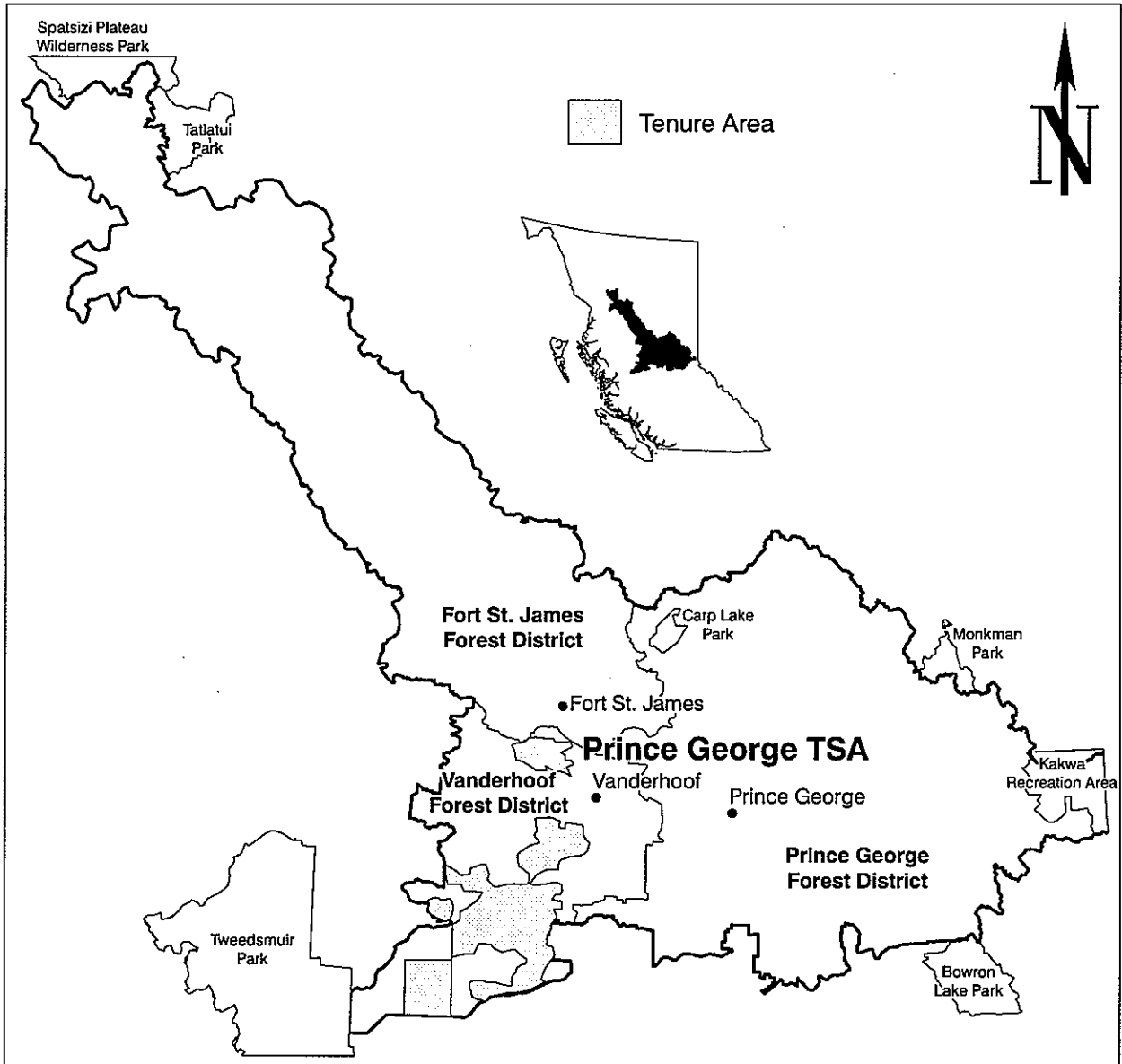
Sucha More, CA
Auditor
Forest Practices Board

Victoria, British Columbia
October 20, 1998

Endnotes

- 1 A forest development plan is an operational plan which provides the public and government agencies with information about the location and scheduling of proposed roads and cutblocks for harvesting timber over a period of at least five years, except under special circumstances. The plan must specify measures that will be carried out to protect forest resources (including biological diversity, water, fisheries, wildlife and other forest resources). It must also illustrate and describe how objectives and strategies established in higher level plans, where they have been prepared, will be carried out. Site specific plans are required to be consistent with the forest development plan.
- 2 A silviculture prescription is a site specific operational plan that describes the forest management objectives for an area. It describes the management activities proposed to maintain the inherent productivity of the site, accommodate all resource values including biological diversity, and produce a free growing stand capable of meeting stated management objectives. Silviculture prescriptions must be consistent with higher level plans that encompass the area to which the prescription applies.
- 3 A logging plan is an operational plan that details how, when, and where timber harvesting and road construction activities will take place in a cutblock (a specific area authorized for timber harvesting) in accordance with the approved silviculture prescription and forest development plan for the area. Information about other forest resource values, plus all current field information for the area, must be clearly shown in the logging plan.

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