

**Audit of Timber Harvesting and Road
Construction, Maintenance and
Deactivation**

**Tree Farm Licence 19
Doman-Western Lumber Ltd.**



February 1999

FPB/ARC/16

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A. Report from the Board

This is the Board's report on a compliance audit¹ of Tree Farm Licence (TFL) 19² held by Doman-Western Lumber Ltd. (Doman-Western) and managed by Western Forest Products Limited. TFL 19 is located on the west side of Vancouver Island near Gold River, Tahsis and Zeballos (see map) and consists of three divisions.

The audit examined Doman-Western's timber harvesting and road practices, and related operational plans, for the period August 1, 1997 to August 28, 1998 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 plans and practices:

- operational planning for future harvesting of 55 cutblocks
- harvesting of 98 cutblocks
- construction, and layout and design of 131 road sections
- construction of 17 bridges
- maintenance of approximately 575 kilometres of roads
- maintenance of 357 bridges
- seasonal deactivation of 27 road sections
- semi permanent deactivation of 32 road sections
- permanent deactivation of 24 road sections

Conclusions

Doman-Western's timber harvesting and road construction, maintenance and deactivation practices complied with the Code in all significant respects. The few instances of non-compliance were minor in nature and had little impact on the environment.


On many cutblocks, forest practices in areas adjacent to non-fish streams met or exceeded the recommended best management practices specified in the Code guidebooks for riparian areas. Doman-Western's practices included the retention of trees and other vegetation which helped protect the stream ecosystem and the diversity of wildlife habitat and vegetation.

Riparian area: land adjacent to a stream, river, lake or wetland containing vegetation that, due to the presence of water, is distinctly different from the vegetation of adjacent upland areas.

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 Tree Farm Licence 19 and the forest planning and field activities of Doman-Western Lumber Ltd. that were the subject of this audit and the audit findings.

The Board notes the high degree of compliance and commends Doman-Western's practices in riparian areas.

A handwritten signature in black ink, appearing to read "Keith Moore". The signature is written in a cursive style with a large initial "K".

Keith Moore

Chair

February 15, 1999

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.

C. Report from the Auditor

1. Introduction

As part of the Forest Practices Board's 1998 compliance audit program, Tree Farm Licence (TFL) 19 was selected for audit from the population of major forest licences in the Vancouver Forest Region. The TFL, held by Doman-Western Lumber Ltd. and managed by Western Forest Products Limited, was selected randomly and not on the basis of location or level of performance.

TFL 19 is located on the west side of Vancouver Island, between Strathcona Provincial Park and the coast, from south of Gold River to north of Zeballos, as shown on the map included at the end of this report. The TFL lies within the Campbell River Forest District and is managed by three divisions within Doman-Western's Nootka Region: the Gold River, the Nootka Contract Administration and the Zeballos forest operations.

The TFL area is 191,503 hectares, of which 144,510 hectares is productive forest. Doman-Western's allowable annual cut within the TFL is 887,726 cubic metres.

The audit did not assess any activities undertaken by the Ministry of Forests Small Business Forest Enterprise Program within the TFL area.

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 and road construction, maintenance, and deactivation activities and obligations for the period August 1, 1997 to August 28, 1998 were included in the scope of the audit. This involved examining all aspects of operational planning - such as the forest development plans¹, silviculture prescriptions² and logging plans³ - that supported the activities examined.

The following activities were carried out during the audit period, and were therefore subject to audit:

- harvesting of 98 cutblocks
- operational planning (including silviculture prescriptions and logging plans) for the future harvesting of 55 cutblocks

- construction, and layout and design of 131 road sections totaling 93.2 kilometres
- construction of 17 bridges
- permanent deactivation of 24 road sections totaling 19.9 kilometres
- semi-permanent deactivation of 32 road sections totaling 34.3 kilometres
- seasonal deactivation of 27 road sections totaling 64.2 kilometres
- maintenance of approximately 575 kilometres of roads
- maintenance of 357 bridges

Section 3 describes the audit of these activities and the results. The Board's audit reference manual, "Reference Manual - Compliance Audits, Version 3.0, May 1998", sets out the standards and procedures that were used to carry out this audit.

3. Audit Findings

Planning and practices examined

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

- harvesting of 35 cutblocks
- operational planning for future harvesting of 8 cutblocks
- construction of 31 road sections totaling 36.3 kilometres
- layout and design of 6 road sections totaling 6.3 kilometres
- construction of 11 bridges
- permanent deactivation of 12 road sections totaling 6.2 kilometres
- semi-permanent deactivation of 17 road sections totaling 18.3 kilometres
- seasonal deactivation of 13 road sections totaling 41.2 kilometres
- maintenance of approximately 83 kilometres of roads and bridges using ground procedures and an undetermined length of roads by helicopter

We also examined, through overview flights, the condition of old road systems in the TFL.

Findings

The audit found that Doman-Western complied, in all significant respects, with the road and harvesting requirements of the Code. The instances of non-compliance were relatively few in number and minor in nature.

Doman-Western's planning and practices in the riparian management areas⁴ of numerous S5 and S6 streams met the best management practices in the *Riparian Management Guidebook*. In addition, the retention of trees and understorey along these streams exceeded the best

management practices. The company is providing for a level of protection of these forest resources which is recommended, but not required, by the Code.

4. Audit Opinion

In my opinion, the timber harvesting and road construction, maintenance and deactivation activities carried out by Doman-Western Lumber Ltd. on Tree Farm Licence 19 from August 1, 1997 to August 28, 1998 were in compliance, in all significant respects, with the road and harvesting requirements of the Code as of August 1998.

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.

Sections 2 and 3 of this report from the auditor describe the basis of the audit work performed in reaching this 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.

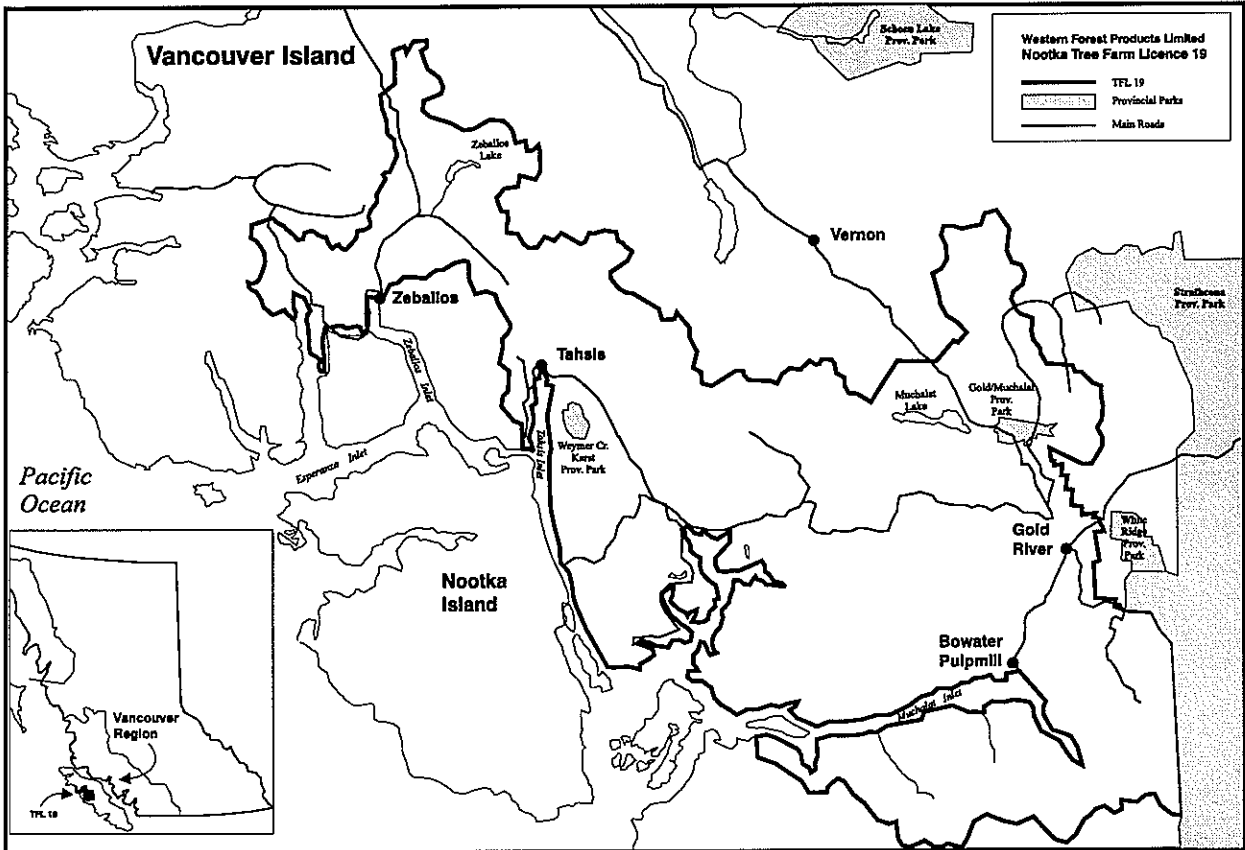


Jon Davies, CA
Auditor
Forest Practices Board

Victoria, British Columbia
December 11, 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. The plan must specify measures that will be carried out to protect forest resources (including water, fisheries, 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 to be harvested (a cutblock). The silviculture prescriptions examined in the audit are required to describe 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, 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.
4. A Riparian Management Area is an area adjacent to a stream, lake or wetland, consisting of a riparian management zone and, depending on the riparian class of the stream, lake or wetland, a riparian reserve zone. The Code's objectives for riparian areas are to minimize or prevent impacts of forest use on stream channel dynamics, aquatic ecosystems, and water quality, as well as on the diversity and sustainability of wildlife habitat and vegetation in these areas. Constraints to road and harvesting practices are applied within these zones, with the most stringent requirements for the riparian reserve zones.





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