

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

**Forest Licence A20192  
Slocan Group - Slocan Division**



November 1998

FPB/ARC/10

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## **Report from the Board**

## A. Report from the Board

This is the Forest Practices Board's report on a compliance audit<sup>1</sup> of Forest Licence A20192<sup>2</sup> held by Slocan Group - Slocan Division (Slocan). Operating areas in this licence are located around Slocan Lake, near the towns of Slocan and Nakusp in the West Kootenays (see map on page A-3).

The audit examined Slocan's timber harvesting, road practices, and related operational plans for the period June 1, 1997, to June 26, 1998. The audit assessed 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:

- the harvesting of 49 cutblocks
- operational planning for future harvesting of 38 cutblocks
- road layout and design for 23 road sections totaling 61 kilometers
- the construction of 24 road sections totaling 48.3 kilometers
- the construction of 4 bridges
- the maintenance and seasonal deactivation of approximately 227 kilometers of road
- the permanent deactivation of 12 road sections totaling 9.7 kilometers

### Conclusions and Recommendations

Slocan'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. The Board notes the high degree of compliance by Slocan in an operating area that includes eleven community watersheds and steep terrain.

#### Old Road Systems Within Operating Area of Forest Licence A20192

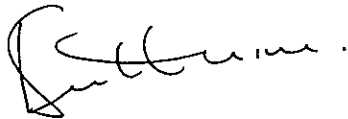
The auditor noted extensive old road systems within Slocan's area of operations on Forest Licence A20192. These roads include access to private lands, roads formerly designated as highways, and roads used to facilitate past mining and logging activities. Almost all of these old

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<sup>1</sup> 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.

<sup>2</sup> The report from the auditor (Part C of this document) provides specifics about the operating areas of Forest License A20192 and the forest planning and field activities of Slocan that were the subject of this audit and the audit results.

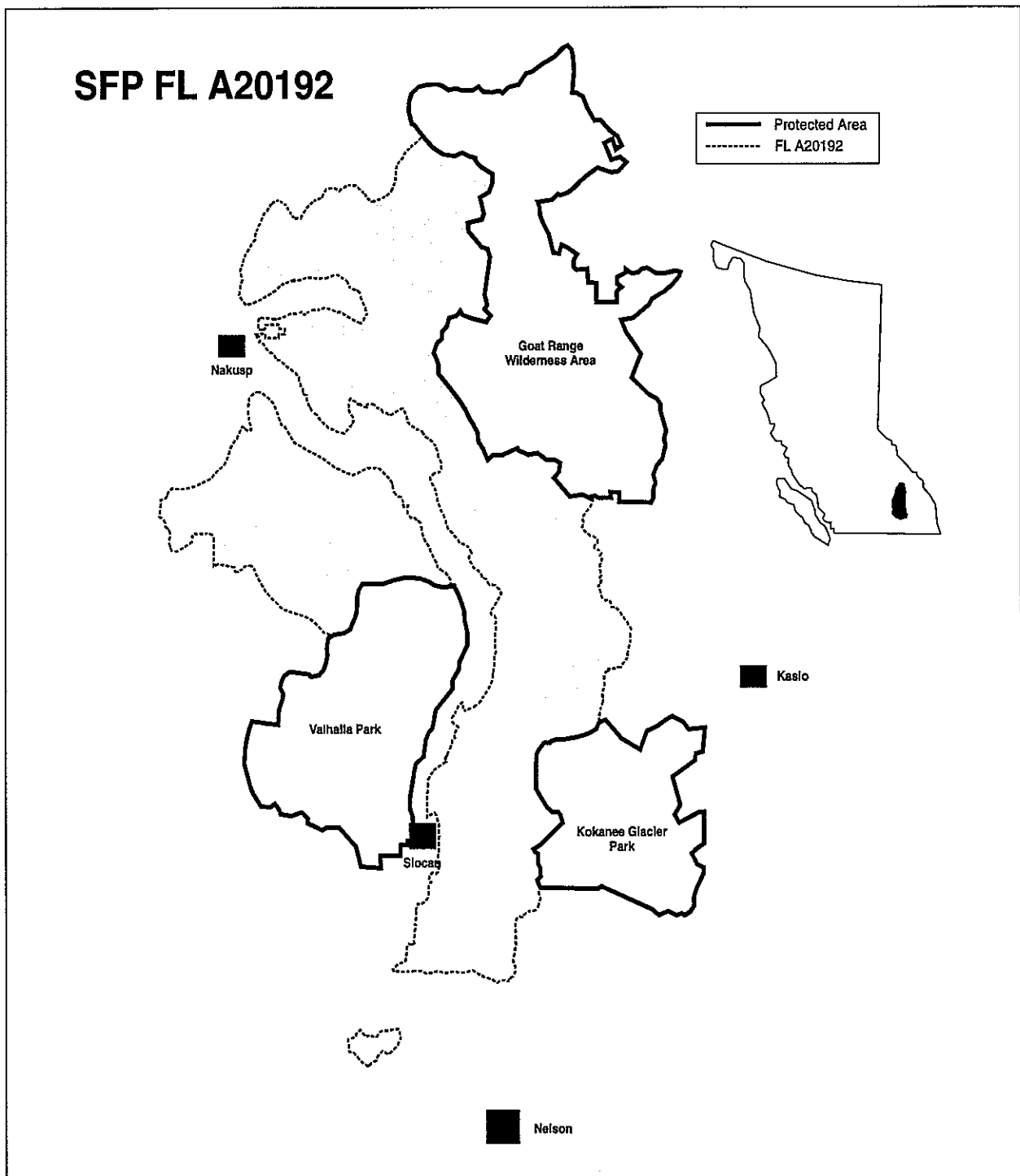
roads have never been Slocan's responsibility and are not part of Slocan's current operations on Forest Licence A20192. Slocan is not required to maintain or deactivate these roads. There appears to be no party with legal responsibility under the Code to maintain or deactivate the roads, or to carry out work to avoid potential impacts. Remedial work has been carried out on some of the roads. Other sections are in need of remediation and/or deactivation to guard against possible adverse impacts on forest resources and water quality. In the Board's view, this situation warrants further assessment by the government.

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

Keith Moore  
Chair

November 5, 1998

# SFP FL A20192



# **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 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 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 1998 compliance audit program, Forest Licence A20192 ("Licence") was selected for audit from the population of major forest licences within the Nelson Forest Region. The Licence, held by Slocan Group - Slocan Division, was selected randomly and not on the basis of location or level of past performance.

The Licence is a volume based licence within the Arrow Timber Supply Area. Forest licences do not have specific borders within which activities take place. However, the traditional "operating area" for the Licence, although it includes the operations of other licencees, is fairly well defined. This area contains 11 community watersheds and a number of domestic watersheds. The area surrounds the town of Slocan and is located as shown on the attached map.

The Licence has an allowable annual cut of 218,472 cubic metres. The actual amount cut during the audit period was approximately 150,000 cubic metres, which is approximately 70% of the allowable annual cut.

### 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 June 1, 1997, to June 26, 1998, were included in the scope of the audit. This involved examining all aspects of operational planning - such as forest development plans<sup>1</sup>, silviculture prescriptions<sup>2</sup>, and logging plans<sup>3</sup> - that supported the activities examined during the audit period.

Slocan Group's activities on the Licence between June 1, 1997 and June 26, 1998 were:

- the harvesting of 49 cutblocks
- obtained approvals for silviculture prescriptions for 54 cutblocks, of which 16 cutblocks were also harvested during the period
- obtained approvals for logging plans for 32 cutblocks, all of which were harvested during the period
- the construction of 24 road sections totaling 48.3 kilometers, including four bridges

- the maintenance and seasonal deactivation of approximately 227 kilometers of road involving activities such as surfacing and the cleaning of culverts and ditches
- the permanent deactivation of 12 road sections totaling 9.7 kilometers
- road layout and design for 23 road sections totaling 61 kilometers

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.

There is an extensive network of old roads and structures, such as bridges, within the operating area as a result of historical logging and mining activity. These now inactive forestry and mining roads have sections in need of remediation and/or deactivation to guard against possible adverse impacts on forest resources and water quality. Slocan Group does not have maintenance or deactivation obligations under the Code for these roads and structures.

### **3. Audit Findings**

#### **Planning and practices examined**

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

- 25 cutblocks harvested during the period and their related silviculture prescriptions and logging plans, of which 12 of the silviculture prescriptions and 19 of the logging plans were approved during the period
- 21 cutblocks where harvesting activity had not yet commenced but the related silviculture prescriptions were approved
- the construction of 15 road sections totaling 33.2 kilometers, including two bridges
- the maintenance and seasonal deactivation of approximately 108 kilometers of road involving activities such as surfacing and the cleaning of culverts and ditches
- the permanent deactivation of 8 road sections totaling 7.5 kilometers
- road layout and design for 5 road sections totaling 6 kilometers

#### **Findings**

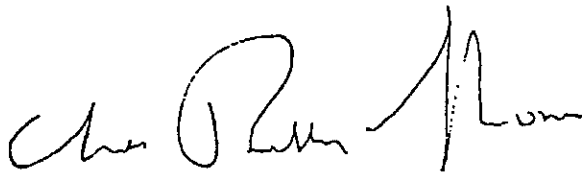
The audit found that the forest planning and practices of Slocan Group - Slocan Division were in compliance, in all significant respects, with Code requirements for timber harvesting activities and road construction, maintenance and deactivation activities.

#### 4. Audit Opinion

In my opinion, the timber harvesting and road construction, maintenance and deactivation activities carried out by Slocan Group - Slocan Division on Forest Licence A20192 from June 1, 1997, to June 26, 1998, were in compliance, in all significant respects, with the road and harvesting requirements of the Code as of June 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 describes the basis of the audit work performed in reaching the above 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.

A handwritten signature in black ink, appearing to read "Chris Ridley-Thomas". The signature is fluid and cursive, with a prominent vertical stroke at the end.

Chris Ridley-Thomas, R.P. Bio.  
Auditor

Vancouver, British Columbia  
October 27, 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 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 to be harvested (a cutblock). 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, 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.





PO Box 9905, Stn Prov Govt  
Victoria, British Columbia  
Canada V8W 9R1

Phone: 250-387-7964  
Fax: 250-387-7009  
Toll free: 1-800-994-5899  
E-mail: [fpboard@gems9.gov.bc.ca](mailto:fpboard@gems9.gov.bc.ca)

Information on the Board is on the  
internet: <http://www.fpb.gov.bc.ca>