



**Forest  
Practices  
Board**

## **Audit of District Manager Obligations on Forest Service Roads**

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*Okanagan Shuswap Natural Resource District*

**FPB/ARC/244**

April 2021

# Table of Contents

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**Audit Results..... 1**

    Introduction ..... 1

    Background ..... 1

    Audit Approach and Scope ..... 4

    Planning and Practices Examined ..... 4

**Audit Opinion ..... 6**

**Appendix 1: Forest Practices Board Compliance Audit Process ..... 7**

# Audit Results

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## 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*.

As part of its 2020 compliance audit program, the Board chose three areas across the province to audit forest service roads (FSRs) where the district manager (DM) has statutory obligations. The Board randomly selected the Dawson Creek Timber Supply Area (TSA) portion of the Peace Natural Resource District, the Campbell River Natural Resource District and the Okanagan Shuswap Natural Resource District for audit.

An FSR is defined under section 1 of the *Forest Act*.<sup>1</sup> Timber sale managers/DMs administer FSRs, and ensure that maintenance is carried out on them until the roads are either transferred to another jurisdiction or deactivated, discontinued and closed.

The FSRs that are solely the responsibility of the DM are not normally assessed in Board audits of forest companies or BC Timber Sales (BCTS).

This report explains what the Board audited and the findings for the Okanagan Shuswap District. Results for the other districts are provided in separate audit reports. Detailed information about the Board's compliance audit process is in Appendix 1.



*A typical FSR and major structure located near Peachland.*

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<sup>1</sup> *Forest Act* definition: "forest service road" means a road on Crown land that

- (a) is declared a forest service road under section 115 (5),
- (b) is constructed or maintained by the minister under section 121,
- (c) was a forest service road under this definition as it was immediately before the coming into force of this paragraph, or
- (d) meets prescribed requirements.

## Background

Located in the southern interior of British Columbia, the Okanagan Shuswap Natural Resource District falls within the Okanagan Timber Supply Area (TSA). Staff located in Vernon, Penticton and Salmon Arm provide stewardship over the diverse ecosystems in the Okanagan, Lower Similkameen and Shuswap drainages.

This audit took place within the traditional territories of the Ktunaxa, Nsyilxcən and Secwepemctsin speaking Peoples. The Forest Practices Board recognizes the importance of their historical relationship with the land that continues to this day.

The Okanagan TSA covers about 2.5 million hectares in south-central BC and stretches from the Seymour River and Shuswap Lake in the north to the Canada-United States border in the south, and from the Monashee Mountains in the east to the Okanagan Mountains in the west. It includes the communities of Penticton, Vernon, Kelowna and Salmon Arm (see map on page 3).

The varied climate and terrain produce a wide range of vegetation in the TSA, from wet interior hemlock and cedar forests in the north to semi-arid sagebrush grasslands in the south, and Douglas-fir and lodgepole pine stands predominant throughout.

The broad variety of habitat types in the TSA support many wildlife species, including mountain caribou, mountain goat and grizzly bear. The TSA includes the Shuswap Lake system, which serves as a vital salmon spawning and rearing area, making it one of the most important salmon producing areas in BC. Other primary natural resources include water, timber, range and recreation, making resource stewardship an important component of FSR management in the TSA.

There were 6227 kilometres of FSR in the Okanagan TSA at the time of the audit notification. The DM was the maintainer<sup>2</sup> for 1203 kilometres, BCTS was responsible for 1980 kilometres and the remaining 3044 kilometres were the responsibility of forest licensees under road use permits (RUPs).<sup>3</sup> After initiating the audit, auditors determined that the FSRs the DM was solely responsible to maintain were all wilderness FSRs.<sup>4</sup>

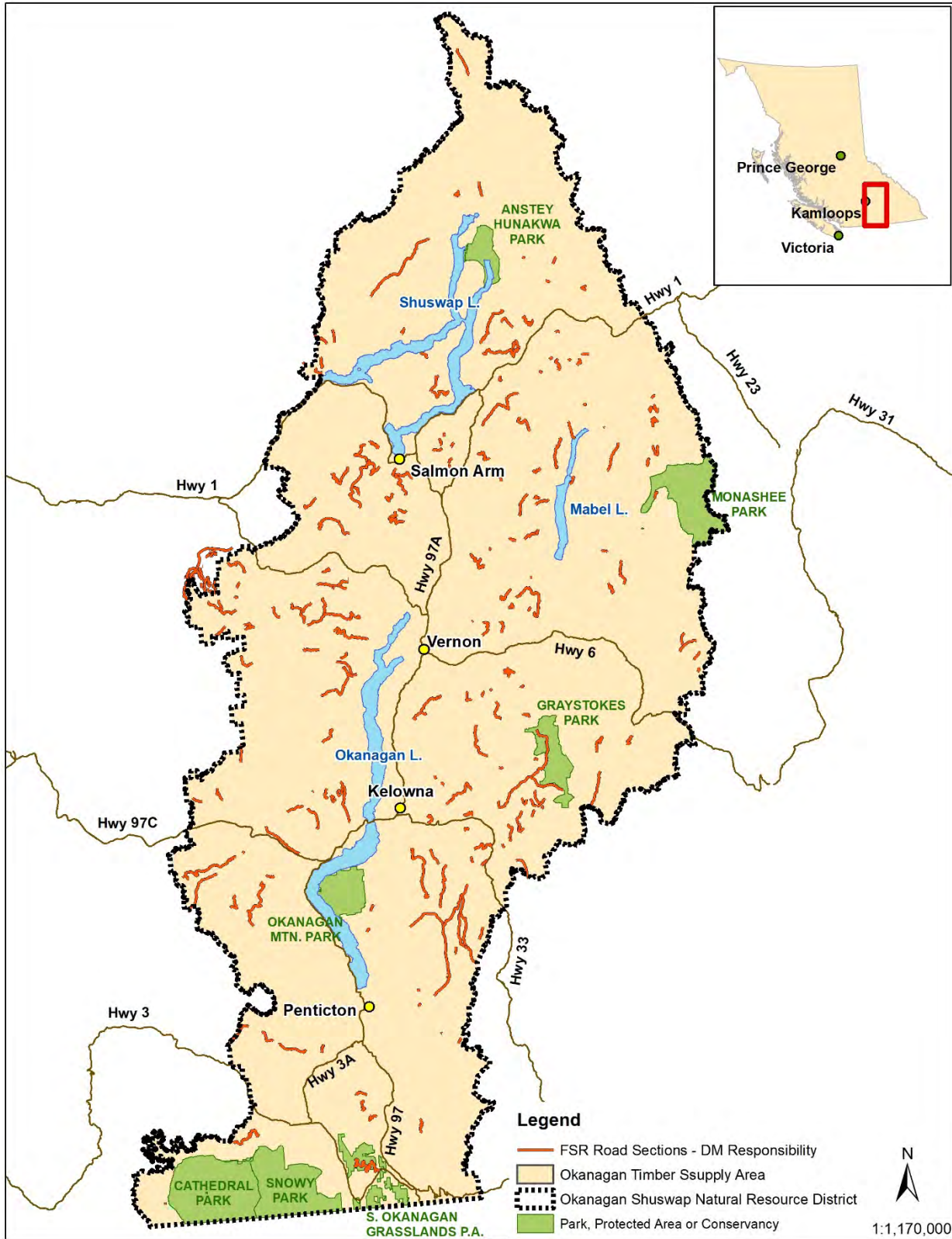
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<sup>2</sup> The DM designates one party to be responsible for maintaining a FSR. There is only one maintainer for a section or entire length of FSR. If the DM has not designated another party responsible for maintenance, the DM is responsible for maintenance.

<sup>3</sup> An RUP is a government document that authorizes a party to use a FSR. There may be several RUPs on a section of FSR, but one party is designated maintenance responsibilities for that section.

<sup>4</sup> Wilderness roads are roads not being used for industrial purposes. On these wilderness FSRs, the DM is responsible for maintaining the structural integrity of the road prism and clearing width, and ensuring the drainage systems of the road are functional to the extent necessary to ensure there is no material adverse effect on a forest resource.

# Map of Audit Area



## Audit Approach and Scope

This was a limited scope compliance audit that examined FSRs, including major structures,<sup>5</sup> where the DM was responsible for all statutory obligations, including construction, maintenance and deactivation. All activities carried out between September 1, 2018, and September 25, 2020, where the DM was the maintainer on FSRs in the Okanagan TSA, were subject to audit.

Auditors assessed activities for compliance with FRPA, the *Wildfire Act*, and applicable regulations. Auditors' work included interviewing district staff, reviewing administrative records and conducting site visits. Sites were accessed by truck and by helicopter. One forest professional, one professional forester/geoscientist and a chartered professional accountant made up the audit team. The audit team was in the field from September 21 to 25, 2020.

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*.

## Planning and Practices Examined and Findings

The following describes the activities audited and the findings.

### Administration

The extensive FSR network in the TSA created administrative and operational complexities for managing the FSRs. To address the complexities, the DM prioritized road and structure maintenance activities based on funding, maintenance assignment and risk to forest resources.

The DM annually enters into a memorandum of understanding with BCTS that assigns maintenance responsibilities for FSRs to BCTS. Periodically, the DM negotiates road use on FSRs with industrial users and assigns road maintenance responsibilities by issuing RUPs. The DM maintains a ledger to track road maintenance assignments, which also identifies unassigned FSR road sections that the DM is responsible for maintaining.

In general, the DM is responsible for those FSRs that are not currently being used for industrial purposes, but are important to be kept operational. The Ministry prioritizes non-industrial purposes for maintaining roads in active state in this order: 1) community access, 2) rural residence access, 3) high value recreation site access, and 4) other legislative requirements.

The DM assigns a risk rating for each FSR section, and the risk rating determines the inspection<sup>6</sup> schedule. Auditors found that FSR and associated major structure inspections did not always conform to the schedule, which is not consistent with DM policy, but this is not a legal requirement.

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<sup>5</sup> Major structures includes bridges and major culverts where:

- Bridge means a temporary or permanent crossing structure with a span length equal to or greater than 6 metres or an abutment height of 4 metres or greater.
- A major culvert has a pipe diameter of 2 metres or greater or a pipe arch or an open bottom arch with a span greater than 2.13 metres.

<sup>6</sup> Road inspections are usually completed by district staff and crossing inspections are undertaken by regional engineering staff.

## Road and Major Structure Construction, Maintenance and Deactivation

### *Road and Major Structure Construction*



*South Fork FSR was re-constructed to stabilize the road.*

The DM constructed 0.7 kilometres of the South Fork FSR during the audit period and did not construct any major structures.

The South Fork FSR was re-aligned to stabilize the road. The DM conducted a terrain stability assessment using a qualified professional and followed the professional's recommendations when constructing the road. The FSR was well built and stable.

### *Road and Major Structure Maintenance*

During the audit period, the DM maintained 1203 kilometres of FSR, including 62 major structures. Auditors assessed 466 kilometres of FSR and 42 structures.

Road prisms were generally stable, the culverts examined were functional, natural drainage patterns were maintained, and appropriate signage was in place. Since the audited FSRs were all wilderness roads, FRPA industrial safety requirements did not apply and auditors only checked for

impacts to forest resources and found none.

Auditors found no issues with the FSR or major structure maintenance.

### *Road and Major Structure Deactivation*

The DM did not deactivate any FSRs nor remove any major structures during the audit period.



*Commonly, the DM maintained FSRs to provide access to parks and recreation areas, such as Myra Bellevue Provincial Park.*



*Range use is common in the Okanagan TSA. The maintenance of cattle guards and drift fences are necessary to control cattle movement.*

## Wildfire Protection

No fire hazard assessments nor abatement was required during the audit period. There were no active operations during the field audit and the fire risk was low to moderate.

Auditors did not identify any issues with wildfire protection.

# Audit Opinion

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In my opinion, the forest service road and major crossing construction and maintenance practices carried out in the Okanagan Timber Supply Area by the Okanagan Shuswap Natural Resource district manager between September 1, 2018, and September 25, 2020, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations, as of September 2020. No opinion is provided regarding deactivation activities.

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*, and *Wildfire Act*.



Christopher R. Mosher CPA, CA, EP(CEA)  
Director, Audits

Victoria, British Columbia  
April 16, 2021



# Appendix 1: Forest Practices Board Compliance Audit Process

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## 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*. Compliance audits examine forest or range planning and practices to determine whether or not they meet FRPA and / or *Wildfire Act* requirements. The Board conducts about 10 compliance audits annually. Most of these are audits of agreement holders. The Board also audits the government's BC Timber Sales Program (BCTS).

### Selection of auditees

To begin with, auditors randomly select an area of the Province, such as a natural resource 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, auditors choose the auditee(s) that best suits the selected risk and priorities. The audit selections are not based on past performance.

For example, in 2016, the Board randomly selected the Dawson Creek portion of the Peace Natural Resource District as a location for an audit. After assessing the activities within the area, it was noted that there were two community forest agreements that had not yet been audited by the Board. As the Board strives to audit an array of licence types and sizes each year, these two community forest agreements were selected for audit.

For BCTS audits, a district or timber supply area within 2 of the 12 business areas in the province are selected randomly for audit. Only those areas that have not been audited by the Board in the past five years are eligible for selection.

### Audit Standards

The audits are conducted in accordance with auditing standards developed by the Board. These standards include 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 and 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. For smaller audits, the sample will include the full population.

Auditors' work includes interviewing licensee staff, reviewing applicable plans, assessing features from helicopters and measuring specific features like riparian reserve zone width using ground procedures. The audit teams generally spend three to five days in the field.

## **Evaluating the Results**

The Board recognizes that compliance with the requirements of FRPA and the *Wildfire Act* 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 legal 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 *Wildfire Act* requirements.

**Unsound practice** – where the auditor identifies a significant practice that, although in compliance with FRPA or the *Wildfire Act*, 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, these events 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 more non-compliance events.

If a significant breach of the legislation 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, Natural Resource Operations and Rural Development.

## **Reporting**

Based on the above evaluation, the auditor then prepares a draft audit report. The party being audited is given a copy of the draft report for review and comment before it is submitted to the Board.

The Board reviews the draft report 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 reviews representations from parties that may potentially be adversely affected, makes any necessary changes to the report, and decides if recommendations are warranted. The report is then finalized and released: first to the auditee and then to the public and government seven days later.



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