



**Forest  
Practices  
Board**

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

---

*British Columbia Timber Sales, Strait of Georgia  
Business Area, Powell River Business Unit*

**FPB/ARC/108**

July 2009

# Table of Contents

---

<b>Board Commentary</b> .....	<b>1</b>
<b>Audit Results</b> .....	<b>3</b>
Background.....	3
Audit Approach and Scope.....	3
Audit Findings .....	4
Other Comments .....	4
Audit Opinion .....	6
<b>Appendix 1: Forest Practices Board Compliance Audit Process</b> .....	<b>7</b>

## Board Commentary

---

In September 2008, the Forest Practices Board conducted a limited scope compliance audit of the British Columbia Timber Sales (BCTS) program and timber sale licence holders in the Powell River Business Unit of the Strait of Georgia Business Area, located in the Sunshine Coast Forest District (see map on page 2).

The audit assessed more than 30 cutblocks, over 300 kilometres of road activities and obligations, 89 bridges and associated operational planning of the BCTS program and its timber sale licence holders.

The Board commends BCTS for improving the provincial inventory of *Rubus nivalis*, an evergreen trailing raspberry that is red-listed by the BC Conservation Data Centre, and for constructing log dumps that limit or compensate for damage to fish and fish habitat.

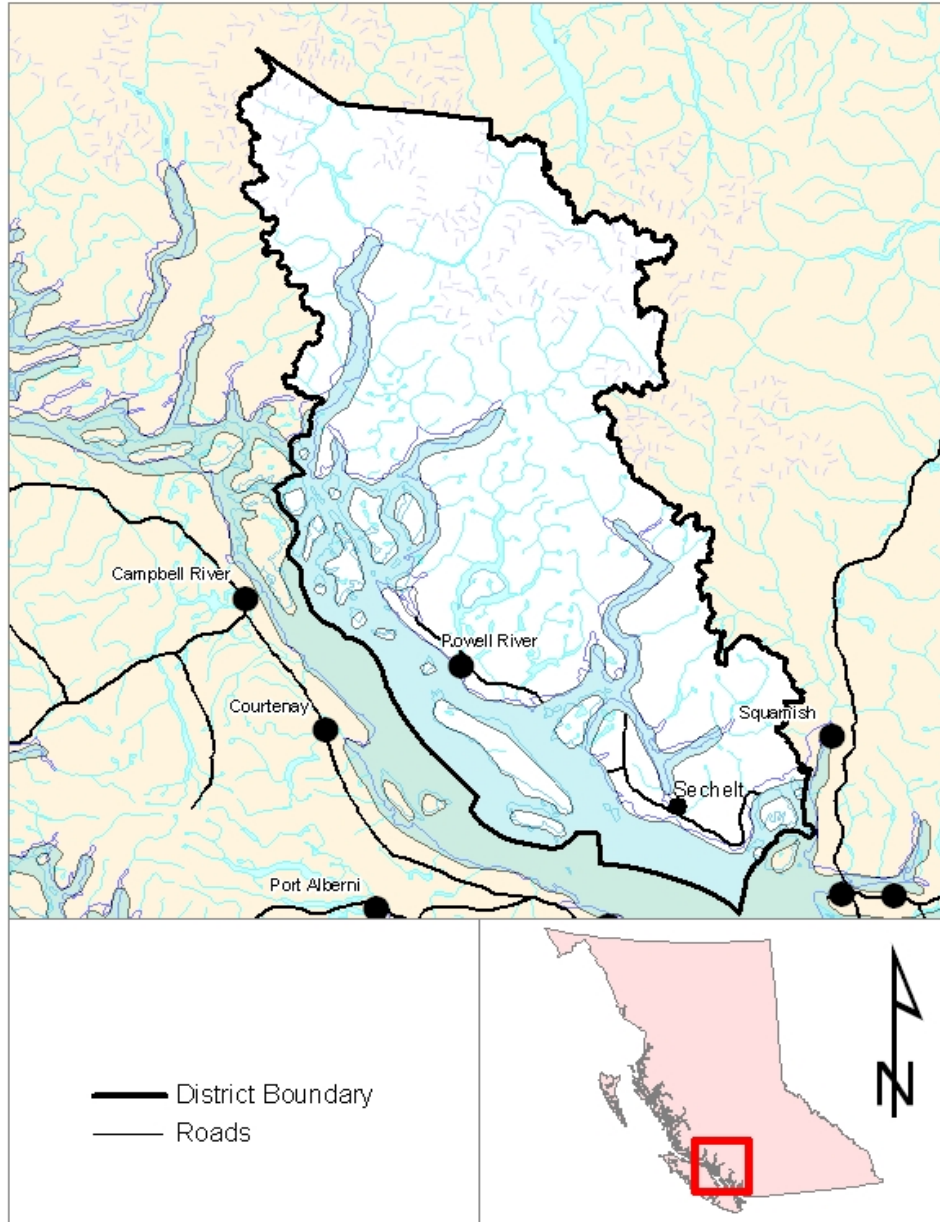
While the audit found that harvesting, road activities and associated planning undertaken by BCTS and its timber sale licence holders complied with legislative requirements in all significant respects, it did identify a portion of two forest service roads that required maintenance. Those roads were built by another licensee and BCTS assumed responsibility for them through the timber reallocation process initiated under the *Forestry Revitalization Act* (2003). BCTS identified that many crossing structures had pre-existing deficiencies, but did not undertake any maintenance activities in the 14 months after it assumed responsibility for these roads because negotiations to secure access through adjacent private property were unsuccessful.

The Board acknowledges that efforts were made to secure access, but notes that BCTS did not pursue several options available to it. A higher standard of road maintenance was possible and, given that nearby streams contain important spawning areas for salmon and trout, warranted.

Subsequent to the audit, BCTS informed the Board that it has now secured an access agreement with the private land owner and has undertaken some road maintenance activities. The Board believes this is an important step to reduce the risk to fisheries and other forest resource values on the Potlatch and McNab forest service roads.

The Board requests that BCTS provide us with a report by October 31, 2009, on the remedial actions taken with respect to the ongoing maintenance issues on portions of the Potlatch and McNab forest service roads.

Audit of Forest Planning and Practices  
BCTS in the Sunshine Coast Forest District



# Audit Results

---

## Background

As part of the Forest Practices Board's 2008 compliance audit program, the British Columbia Timber Sales (BCTS) program and timber sale licence holders in the Strait of Georgia Business Area's Powell River Business Unit, located in the Sunshine Coast Forest District, were selected for a limited scope audit. The audit examined roads, harvesting, and associated operational planning. Activities are administered by the BCTS Strait of Georgia Business Area office, located in Powell River.

BCTS is an independent organization within the BC Ministry of Forests and Range that develops Crown timber for auction. BCTS offers timber for sale to registrants in the BCTS program, prepares operational plans and issues timber sale licences and road permits. Successful bidders are awarded timber sale licences and must fulfill licence, permit and operational plan obligations, including timber harvesting and road work within cutblocks.

The Strait of Georgia Business Area's Powell River Business Unit was selected randomly, and was not chosen on the basis of location or past performance. Additional information on the compliance audit process is provided in Appendix 1.

The Board's audit fieldwork took place from September 15 to 18, 2008.

## Audit Approach and Scope

The Board conducted a limited scope audit in which only harvesting, road activities and associated planning by both BCTS and timber sale licence holders were examined.

BCTS is responsible for most road construction, maintenance and deactivation outside of cutblocks.

Timber sale licensees are responsible for timber harvesting and most road construction, maintenance and deactivation within cutblocks.

These activities were assessed for compliance with the *Forest and Range Practices Act (FRPA)*,<sup>1</sup> and related regulations as well as certain transitional elements of the *Forest Practices Code of British Columbia Act* (the Code). All harvesting and road activities for the period September 1, 2007, to September 18, 2008, were included in the scope of the audit.

The Board's audit reference manual, *Compliance Audit Reference Manual, Version 6.0, May 2003*, and the addendum to the manual for the 2008 audit season, set out the standards and procedures that were used to carry out this audit.

## Audit Findings

### Planning and Practices Examined

#### *BCTS Responsibilities*

BCTS' planned activities were approved in a forest stewardship plan<sup>2</sup> (FSP) on February 8, 2007. Although the FSP was in effect during the majority of the audit period, most of the activities subject to audit were previously approved under the Code and were therefore audited against Code requirements.

The Board audited all 1.7 kilometres of new road construction by BCTS, 81.8 of the 180.3 kilometres of road maintenance, and 20.5 of the 22.5 kilometres of road deactivated by BCTS.

BCTS installed three bridges during the audit period and all were audited in the field. Also, the Board audited 20 of the 86 bridges that BCTS was required to maintain.

#### *Timber Sale Licence Holders' Responsibilities*

Thirty-three cutblocks totaling 521 hectares were harvested under 15 different timber sales during the audit period. The Board audited 14 of the cutblocks.

The Board audited 16.4 of the 27.5 kilometers of road constructed by TSL holders, 9.5 of the 20.3 kilometers of road deactivated by TSL holders, and 46.6 of the 74.3 kilometers of the road maintained by TSL holders.

### Overall Findings

The audit found that the harvesting and road activities undertaken by BCTS and timber sale licence holders complied in all significant respects with the requirements of FRPA and related obligations under the Code, as of September 2008.

## Other Comments

### Road Maintenance

As a result of tenure reallocation under the *Forestry Revitalization Act*, the district manager for the Sunshine Coast Forest District reclassified the McNab and Potlatch roads from road permit road to Crown forest service roads, and delegated maintenance responsibilities to BCTS effective June 4, 2007.

However, prior to that date, BCTS had proactively assessed the roads and identified 81 crossing structures—predominately wooden box culverts and corrugated metal pipes—with pre-existing structural deficiencies, undersized openings, buried or blocked inlets, damaged inlets and outlets, and/or perched or scoured outlets. The audit found that BCTS did not address those deficiencies or undertake any maintenance activities in the 14 months after it assumed responsibility for these

roads. Also, BCTS did not identify or address a section of the Potlatch Road that had severely eroded, and is at risk of further erosion.

BCTS told the Board that it did not undertake road maintenance activities because it did not have authority to pass through the adjoining private land, despite MFR's repeated negotiations with changing owners. The Board noted BCTS's and MFR's considerable efforts to secure access, but found that BCTS did not pursue several other options available to it, which were:

- It could have sought access through a major licensee's existing statutory right-of-way agreement, which allowed the major licensee to transfer its rights without restriction.
- It could have requested that MFR, which was in ongoing negotiations with the property owners to secure timber hauling rights, simultaneously negotiate for a temporary non-hauling access for the purpose of managing environmental risk.
- It could have flown and walked the roads to monitor their condition.

Although no material adverse effect on forest resources was found to have resulted from this lack of maintenance, nearby streams with important spawning areas for salmon and trout<sup>3</sup> warranted undertaking a road maintenance program that addressed potential risks. The audit identified this is an area for improvement.

### ***Rubus nivalis***

*Rubus nivalis* (snow bramble) is an evergreen trailing raspberry found at mid-elevations in the Pacific Northwest. While not listed as a species at risk under the *Forest and Range Practices Act*, the BC Conservation Data Centre (CDC) designates it as red-listed—a classification for indigenous species that are extirpated, endangered or threatened.

BCTS identified 28 populations of snow bramble over 1,700 hectares surveyed in the Mount Elphinstone area, made the results available to the CDC, and developed management protocols for it. While long-term monitoring is required to determine whether BCTS's management protocols will have a positive effect on populations, its survey work has improved the provincial inventory and is therefore notable.

### **Log Dumps**

Most of the timber from BCTS's operating areas is transferred to the ocean at log dumps and then transported to mills. Log dumps can adversely affect the marine environment by damaging the ocean floor during the transfer of logs to the ocean, and by smothering habitat and its inhabitants through the deposition of bark, debris and sunken logs.

BCTS built log dumps in East West Bay, Brittain River and Saltery Bay that were consistent with best management practices to prevent, limit or compensate for damage to fish and fish habitat,<sup>4</sup> including:

- reducing the impact of bark debris through systems to intercept bark before it reaches the ocean, or confine its footprint on the ocean floor;
- designing and implementing systems to capture and dispose of hydrocarbons and fuels; and
- designing skid ways to minimize damage to the ocean floor.

The federal Department of Fisheries and Oceans stated that BCTS's practices for log dumps are exemplary and effective.

## Audit Opinion

In my opinion, the timber harvesting and road construction, maintenance and deactivation activities carried out by BCTS and timber sale licence holders, in the Strait of Georgia Business Area's Powell River Business Unit, for the period September 1, 2007, to September 18, 2008, complied in all significant respects with the requirements of the *Forest and Range Practices Act* (FRPA), related regulations, and certain transitional elements of the *Forest Practices Code of British Columbia Act* (the Code), as of September 2008.

Without qualifying my opinion, I draw attention to the *Other Comments* section of this report, which describes an area of improvement regarding road maintenance, as well as notable practices regarding log dumps and the identification of *Rubus nivalis*.

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. Such an audit includes examining sufficient forest planning and practices to support an overall evaluation of compliance with the FRPA and the Code.



Christopher R. Mosher CA, CEA (SFM)  
Director, Audits

Victoria, British Columbia  
July 2, 2009



# Appendix 1:

## Forest Practices Board Compliance Audit Process

---

### 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* (WA). Compliance audits examine forest or range planning and practices to determine whether or not they meet FRPA and / or WA requirements. (The transitional provisions of FRPA state that the Code continues to apply to forest practices carried out under a forest development plan, until there is an approved forest or range stewardship plan, at which point the requirements of FRPA apply.)

### Selection of auditees

The Board conducts about eight or nine compliance audits annually. Most of these are audits of agreement holders. The Board also audits the government's BC Timber Sales Program (BCTS). This section describes the process for selecting agreement holders to audit.

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

For example, in 2007, the Board randomly selected the Robson Valley Timber Supply Area as a location for an audit. After assessing the activities within that area, we discovered that two licensees had recently closed operations due to financial problems. As the Board has expressed concern in the past about financially strapped companies failing to meet outstanding obligations, such as reforestation, and road maintenance, the audit focused on the status of the outstanding obligations of these two licences.

For BCTS audits, a forest district within one of the 12 business areas within the province is selected randomly for audit.

### Audit Standards

Audits by the Board are conducted in accordance with the auditing standards developed by the Board. These standards are consistent with 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.

Audit field work includes assessments of features using helicopters as well as ground procedures, such as measuring specific features like riparian reserve zone width. The audit teams generally spend one to two weeks in the field.

### Evaluating the Results

The Board recognizes that compliance with the many requirements of the Code, 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 Code, FRPA and WA requirements.

***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 worthy of reporting. Therefore, this category of events will not be included in audit reports.

***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 and Range.

## 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 auditor's draft report 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.

---

<sup>1</sup> Most of the *Forest Practices Code of British Columbia Act* (the Code) was repealed on January 31, 2004, and replaced with the *Forest and Range Practices Act* (FRPA). The transitional provisions of FRPA state that the Code continues to apply to forest practices carried out under a forest development plan. This continues until there is an approved forest stewardship plan, at which point, the requirements of FRPA apply. Therefore, although FRPA came into effect prior to the audit period, the legislated forest practices requirements that applied to the auditee were the requirements of the Code.

<sup>2</sup> 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 cutblocks. FSPs can have a term of up to 5 years.

<sup>3</sup> Port Mellon Reconnaissance (1:20,000) fish and Fish Habitat Inventory, McNab Creek: 900-106300, Potlatch Creek: 900-104300, Prepared for Canadian Forest Products Ltd. by M.A. Whelen and Associates Ltd. Fisheries Resources Services, December 31, 1999.

<sup>4</sup> Guidebook. Environmentally Sustainable Log Handling Facilities in British Columbia, April 2003. Report prepared for Fisheries and Oceans Canada, Pacific and Yukon Region, Habitat and Enhancement Branch by G3 Consulting Ltd.



**Forest  
Practices  
Board**

PO Box 9905, Stn Prov Govt

Victoria, BC, Canada V8X 9R1

Tel. 250.213.4700 | Fax 250.213.4725 | Toll Free 1.800.994.5899

For more information on the Board, please visit our website at: [www.fpb.gov.bc.ca](http://www.fpb.gov.bc.ca)