



**Forest
Practices
Board**

Forestry Audit: British Columbia Timber Sales

Seaward-tlasta Business Area

FPB/ARC/118

June 2010

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Board Commentary

In June 2009, the Board conducted a full-scope compliance audit of forest planning and practices of the British Columbia Timber Sales (BCTS) program and timber sale holders, in the central coast portion of the Seaward-tlasta Business Area (see map on page 2).

The audit assessed operational planning, silviculture obligations, fire protection activities, harvesting on 27 cutblocks and over 500 kilometres of road activities.

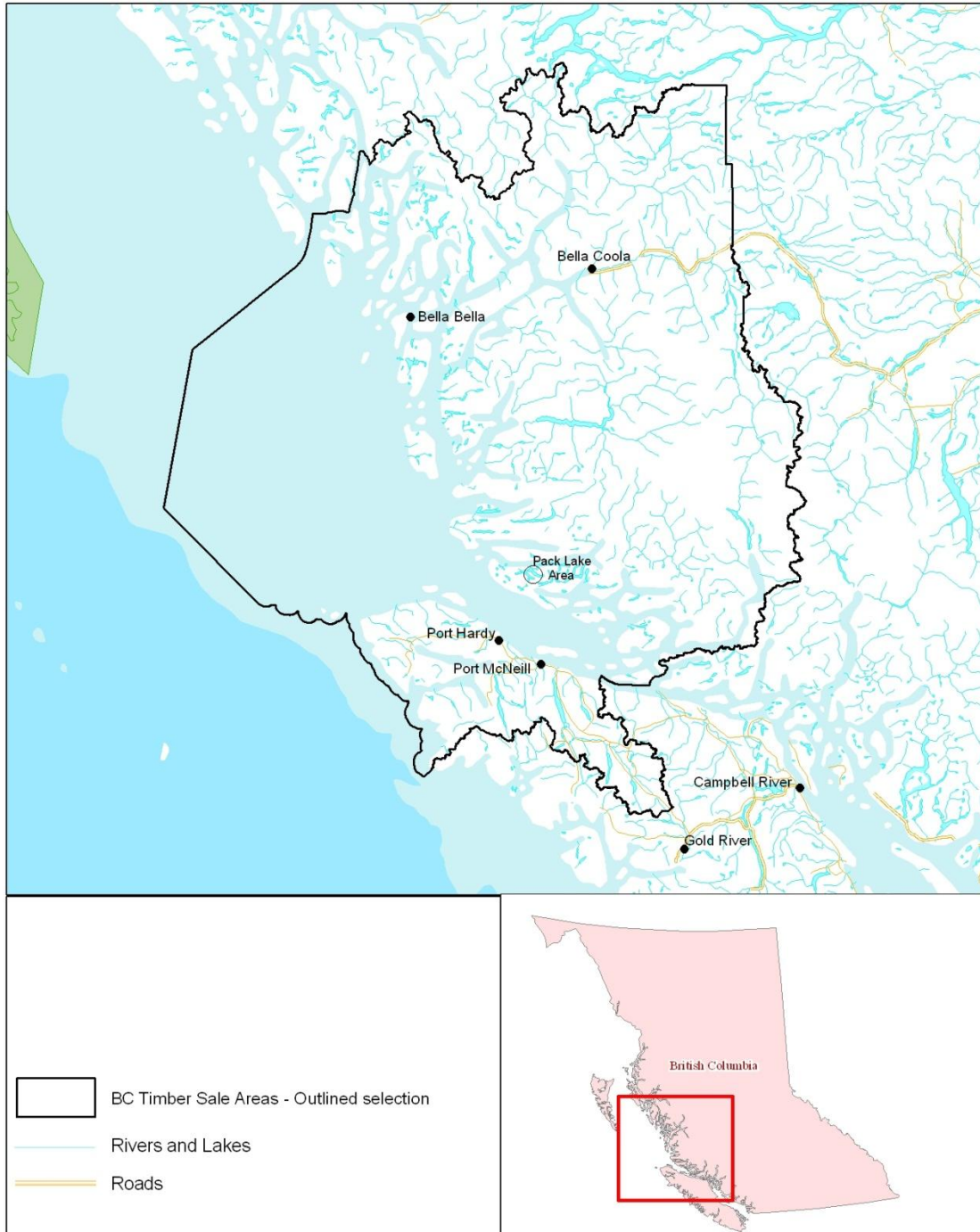
While the audit found that BCTS and timber sale licence holders met most legislated requirements, a significant non-compliance regarding road maintenance was found. BCTS had not inspected some roads for which it had maintenance responsibility, and therefore did not ensure structural integrity or that the drainage systems were functional. While no adverse effects were noted during the audit, this is a systemic issue that could lead to environmental harm.

The audit also noted that road and bridge construction in the vicinity of Pack Lake impacted some poor quality fish streams. Along with ensuring greater care in the future when constructing roads and bridges in the vicinity of any quality of fish stream, the Board also encourages BCTS to undertake follow-up monitoring and identify and implement any additional remedial action necessary to reduce the risk to fish habitat in the Pack Lack area.

This audit provided the Board with an opportunity to examine BCTS's implementation of "ecosystem based management" as described in the South Central Coast Land Use Objectives Order and the Central and North Coast Land Use Objectives Order. While the objectives in the orders did not apply to the audited road and harvesting activities, (because they had been approved before the orders took effect), BCTS has made progress addressing the objectives related to First Nations interests, by developing constructive working relationships. The Board encourages BCTS to continue its efforts to fully implement planning and practices that are consistent with these orders.

Since the audit, BCTS has increased road inspections and has nearly completed a report recommending schedules for road maintenance, based on risk. The Board acknowledges BCTS's effort to reduce environmental risk and requests that BCTS provide the Board with a written update of further progress made to implement its road maintenance strategy, by October 31, 2010.

Forestry Audit: British Columbia Timber Sales Seaward-tlasta Business Unit



Audit Results

Background

As part of the Forest Practices Board's 2009 compliance audit program, the British Columbia Timber Sales (BCTS) program and timber sale licence (TSL) holders in the central coast portion of the Seaward-tlasta Business Area were selected for audit. Activities were located in the North Island Central-Coast Forest District and administered by the BCTS office in Port McNeill.

BCTS develops Crown timber for auction, offers timber for sale to registrants in the BCTS program, and 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 Seaward-tlasta Business Area 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 area subject to audit is predominantly in the coastal western hemlock biogeoclimatic zone and mostly western hemlock and red cedar were harvested. The community of Bella Bella is in the northern portion of the area subject to audit.

The Board's audit fieldwork took place from June 22 to 25, 2009.

Audit Approach and Scope

The audit examined both BCTS's and timber sale licence holders' obligations and activities.

BCTS is responsible for operational planning, including preparing forest stewardship plans (FSP)¹ and site plans;² silviculture; and most road construction, maintenance and deactivation outside of cutblocks.

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

These activities were assessed for compliance with the *Forest and Range Practices Act* (FRPA),³ the *Wildfire Act* (WA) and related regulations, as well as applicable transitional elements of the *Forest Practices Code of British Columbia Act* (the Code). All activities, planning and obligations for the period June 1, 2008, to June 25, 2009 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 2009 audit season, set out the standards and procedures that were used to carry out this audit.

Planning and Practices Examined

Higher Level Plans

The area under audit is subject to the *South Central Coast Land Use Objectives Order* and the *Central and North Coast Land Use Objectives Order*. The orders establish legal objectives for First Nations values, aquatic habitats and biodiversity, for the purpose of directing forest practices implemented under the *Forest and Range Practices Act*. The audit examined BCTS's planning and practices for compliance with the orders.

BCTS Responsibilities

BCTS's planned activities were approved in a FSP on October 12, 2006, were amended on February 22 and were amended again on September 22, 2008. Although the FSP was in effect during the audit period, many of the activities subject to audit were previously approved under the Code and were therefore audited against Code requirements.

Auditors reviewed 13 of the 29 kilometres of new road built by BCTS. Auditors also examined 196 of the 528 kilometres of road maintained by BCTS, and 13 of the 18 kilometres of road deactivated by BCTS.

BCTS installed 12 bridges and major culverts during the audit period. Seven were reviewed in the field. Another 186 bridges were required to be maintained by BCTS during the same period and auditors reviewed 40 of them.

Forty-one cutblocks were required to be free-growing during the audit period. Auditors reviewed 14 of them in the field, and reviewed the documentation for an additional 6. Auditors field-sampled 4 of the 36 cutblocks with regeneration obligations due during the audit period and examined 2 of the 5 cutblocks that had been manually brushed.

Auditors reviewed records for fire hazard assessments completed on 7 cutblocks and abatement activities on 2 cutblocks.

Timber Sale Licence Holders' Responsibilities

Twenty-seven cutblocks totaling 752 hectares were harvested under 9 different timber sales during the audit period. Auditors assessed 13 of the cutblocks.

Auditors examined 13 of the 30 kilometres of road constructed by TSL holders, 16 of the 26 kilometres of road deactivated by TSL holders, and 1 of the 3 kilometres of the road maintained by TSL holders.

Findings

The audit found, with one exception, that the planning and field activities undertaken by BCTS and timber sale licence holders complied in all significant respects with the requirements of FRPA, WA and applicable elements under the Code as of June 2009. The exception was a finding of significant non-compliance related to BCTS's road maintenance.

BCTS Road Maintenance

Through the course of the audit, auditors identified several road sections with minor deficiencies. These deficiencies included plugged culverts and ditches, small failures, and erosion. Also noted were slash piles loaded onto two sections of road fill. Although the noted deficiencies are currently minor in nature, the concern is that BCTS has not recently inspected many of these roads; therefore these deficiencies were unknown to BCTS.

Section 81(a) of the *Forest Planning and Practices Regulation* requires BCTS to ensure that the structural integrity of the road prisms are protected and the drainage systems are functional, only to the extent necessary to ensure there is no material adverse effect on a forest resource. Since BCTS had not inspected several of these road sections, it could not ensure the structural integrity of the road or that the drainage systems were functional, therefore this is regarded as non-compliance. Given the potential for harm to the environment to result, it is considered significant.

Through previous independent certification audits, BCTS had self-identified this concern with road maintenance. Prior to the audit, BCTS developed a strategy for assessing the risk for roads and is currently developing a maintenance schedule.⁴

Other Comments

The audit found an opportunity for BCTS to improve road and bridge construction practices in the Pack Lake area. The audit also found a positive practice relating to consultation with First Nations. Both items are discussed below.

New Road and Bridge Construction in the Pack Lake Area

Auditors examined six kilometres of road construction, and five new crossings over fish streams in the vicinity of Pack Lake, which was all of the road work undertaken by BCTS in that area.

The audit found that, during road construction, a landslide occurred and buried 40 metres of an S3 stream. Because the quality of the fish habitat upstream and downstream of the slide was already poor, the impact of sediment transported downstream on available fish habitat was limited. Although remediation efforts have been taken, they do not appear to have been effective for reducing erosion of the remaining soil material on the slide path.

As well, auditors noted stream crossing work that resulted in rock and debris being deposited or placed in four S3 and S4 fish streams. In one case, the rock and debris likely resulted in a partial

barrier to the passage of cutthroat trout, and the removal of vegetation and channel modifications likely would have transported sediment downstream. Despite remediation efforts, the over-steepened fill slopes under the bridge deck continue to be an area of concern.

Although the limited fish habitat affected by the road and bridge work was of poor quality, and the impacts are therefore not considered significant, this is considered an area of improvement to ensure this practice does not occur elsewhere.

Land Use Objectives Orders

The area under audit is subject to “ecosystem based management” (EBM) to both maintain ecosystem integrity and improve human well being. EBM is implemented in part through the South Central Coast Land Use Objectives Order and the Central and North Coast Land Use Objectives Order. FRPA requires BCTS to identify strategies and/or results in its FSPs that are consistent with the objectives of the orders, and to implement the strategies or achieve the results. This audit provided an early opportunity to test the implementation of the orders and EBM as it applies to a forestry operation.

The audit found that BCTS’s FSP included results and strategies to achieve the objectives of the orders. Those results and strategies were also consistent with the guidance for achieving the intent of the objectives, as described in Background and Intent Document for the South Central Coast and Central and North Coast Land Use Objectives Orders, April 18, 2008.

In one strategy, BCTS committed to initiating ongoing, regular information sharing or consultation with First Nations, on at least an annual basis, in writing or in person, to share planning information including location of proposed blocks and roads. Of the 19 First Nations or bands whose traditional territories potentially include BCTS operating areas, each of the five that responded to the auditors said that BCTS is consulting regularly on proposed developments and that they are satisfied with the level of effort put forward by BCTS to meet annually. The results for this FSP strategy were effective in part, because First Nations had one person that they knew that they should contact for information sharing meetings.

Other FSP strategies generally created longer-term commitments, so did not require actions to be completed within the period of the audit. Because all of BCTS’s harvesting and new road construction included in the audit was approved or permitted prior to the orders, it was exempt from the FSP strategies and results. This means auditors could not fully assess the implementation of BCTS’s commitments to achieving EBM.

Audit Opinion

In my opinion, except for road maintenance discussed below, the operational planning; silviculture; road construction, maintenance, and deactivation; and fire-protection activities carried out by BCTS and its timber sale licence holders in the central coast portion of the Seaward-tlasta Business Area, located in the North Island Central-Coast Forest District, for the period June 1, 2008, to June 25, 2009, complied in all significant respects with the requirements of

the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations, and applicable transitional elements of the *Forest Practices Code of British Columbia Act*, as of June 2009.

As described in the *BCTS Road Maintenance* section of this report, the audit identified a situation of significant non-compliance related to the lack of an adequate inspection and maintenance program for roads for which BCTS has maintenance responsibilities.

Without further qualifying my opinion, I draw attention to the *Other Comments* section of this report, which discusses road and bridge construction practices as well as BCTS efforts in meeting ecosystem based management.

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 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 FRPA, WA and the Code.



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Director, Audits

Victoria, British Columbia
May 10, 2010

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 generally 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.

¹ 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.

² A site plan is a site-specific plan that is required in place of a silviculture prescription as of December 17, 2002, except where there is already an existing silviculture prescription. The site plan contains some of the same elements as a silviculture prescription and is designed to identify resource values and define what a free-growing stand will be on that site. However, it is not an operational plan under FRPA and does not require review or approval by government to be implemented.

³ Most of the *Forest Practices Code of British Columbia Act* and regulations (the Code) were 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 (except for previously approved cutblocks and roads). Therefore, although FRPA came into effect prior to the audit period, some of the legislated forest practices requirements that applied to the auditee were a mix of the requirements of the Code and FRPA.

⁴ Road Risk Analysis Strategy, BC Timber Sales Seaward-tlasta Business Area, June 18, 2009



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