

**Forestry Audit: BC Timber Sales Program
Lakes Timber Supply Area**



FPB/ARC/78

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Board Commentary

In summer 2005, the Forest Practices Board conducted a compliance audit of forest planning and practices of the British Columbia Timber Sales (BCTS) program and timber sale licence holders in the Lakes Timber Supply Area (see map on page 2). BCTS's operating areas are administered by the Babine Timber Sale Office, located in Burns Lake.

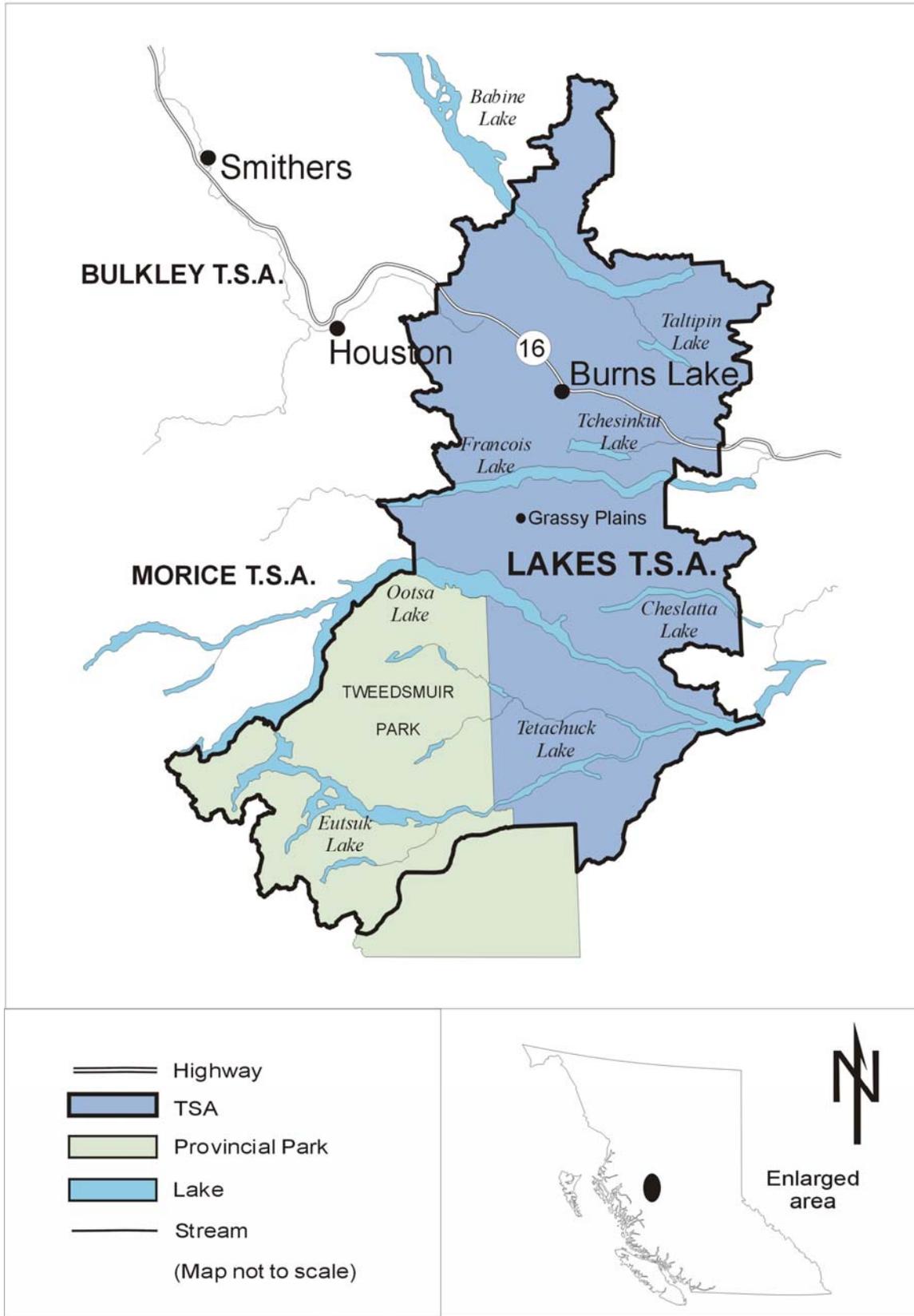
Planning and practices undertaken by BCTS, and its timber sale licence holders, complied with legislative requirements in all significant respects.

The audit identified two instances where harvesting practices conducted by timber sale licence holders caused excess soil disturbance. These practices were not widespread, since they were observed on only 2 of the 26 cutblocks examined. However, they demonstrated poor practices that were avoidable.

The Board is encouraged by steps taken by the local BCTS office in response to these soil disturbance findings:

- BCTS immediately completed a soil disturbance survey that verified the audit findings on one of the blocks. The survey information was turned over to government enforcement personnel for further investigation. BCTS plans to conduct a soil survey for the second block in 2006.
- BCTS has hired a second compliance technician in the area to monitor licensee performance on timber sales, effectively doubling its inspections of timber sale licence operations to ensure compliance.
- BCTS has changed the term of most timber sale licences from one year to two years. This is expected to reduce pressure on licensees to complete winter operations late in the season, during warm weather and wet soil conditions, which can result in excess soil disturbance.

Audit of BCTS - Lakes TSA



Audit Results

Background

As part of the Forest Practices Board's 2005 compliance audit program, the British Columbia Timber Sales (BCTS)¹ program and timber sale licence holders in the Lakes Timber Supply Area (TSA) was selected for audit from the 12 BCTS business areas in the province. The selection was random and not on the basis of location or past performance. Information on the Board's compliance audit process is provided in Appendix 1 (see page 8).

The audit examined planning, activities and obligations undertaken or administered by BCTS from July 1, 2004, to July 29, 2005. The audit examined work done by both BCTS and its timber sale licence holders.²

Although BCTS has specific operating areas in the Lakes TSA, actual operations have moved around the TSA as licensees focus on salvage of mountain pine beetle (MPB) infested stands. In the last two years, BCTS harvest operations have been concentrated in the Francois East landscape unit, between Francois Lake and Cheslatta Lake. In contrast, silviculture operations are scattered around the TSA, as are roads and bridges that BCTS must maintain. The main communities in the TSA are Burns Lake and Grassy Plains (see map on page 2).

The audit area is relatively uniform. The land is gently rolling, with numerous lakes and wetlands. Large linear lakes (e.g., Ootsa, Babine, and Francois) characterize the area. The area



Mature pine forests heavily infested with mountain pine beetle.

has long cold winters and warm dry summers. Lodgepole pine stands are the most common timber type, and the area has been under heavy MPB attack for several years. MPB is by far the most significant forest health concern, and most of the harvesting during the audit period was to salvage MPB-decimated stands. The MPB management strategy for the majority of the audit area is salvage, rather than control.

During the audit period, BCTS harvested approximately 450,000 cubic metres, using mostly ground-based harvesting systems.³ Most harvesting and road-building activities occurred in areas with low- or moderate-risk features.

Higher Level Plans

Government approved an “Order Establishing Resource Management Zones and Resource Management Zone Objectives for the Lakes District” in October 2001. This is a higher level plan⁴ under the Forest Practices Code and applies to the audited BCTS operations. The order sets interim seral stage distribution targets⁵ for each landscape unit in the district until landscape planning is complete, and requires old growth management areas with interior forest conditions to be located within each landscape unit.

To address the MPB infestation in the audit area, the order allows the district manager, and designated environment official, to deviate from its requirements in the event of catastrophic impacts from insect outbreaks. In July 2003, the Lakes South Sustainable Resource Management Plan (SRMP)⁶ took effect. The plan allows temporary deviation from the seral stage objectives of the order to manage the MPB infestation.

Audit Approach and Scope

The audit examined BCTS’s obligations and activities in the areas of:

- operational planning (including forest development plans⁷, silviculture prescriptions⁸ and site plans⁹);
- timber harvesting;
- road construction, maintenance and deactivation;
- silviculture; and
- fire protection.

The audit assessed these activities for compliance with the requirements of the *Forest Practices Code of British Columbia Act* (the Code), the *Forest and Range Practices Act* (FRPA)¹⁰, the *Wildfire Act*, and related regulations. All planning, activities, and obligations for the period July 1, 2004, to July 29, 2005, 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 2005 audit season, set out the standards and procedures that were used to carry out the audit.

Planning and Practices Examined

Activities during the audit period were approved under the 2002-2007 forest development plan (FDP) and subsequent amendments.

Selected roads and cutblocks were audited from the ground, and from the air using a helicopter.

During the audit period, the following activities and obligations were audited:

- 26 of 54 cutblocks harvested by BCTS's timber sale licence holders, including in-block roads
- 25 of 30 kilometres of new road constructed by BCTS
- 176 of 1,112 kilometres of existing road maintained by BCTS
- 0.2 of 0.3 kilometres of road deactivated by BCTS
- 10 of 10 new bridges built by BCTS
- 6 of 28 bridges maintained by BCTS
- free-growing obligations on 253 of 750 hectares where due
- regeneration obligations on 560 of 1635 hectares where due
- 13 of 22 hectares of site preparation
- 11 of 103 hectares of brushing
- fire preparedness on 3 active operations encountered

The audit also assessed plans for consistency with higher level plan objectives.

Findings

The audit found that planning and field activities undertaken or administered by BCTS complied in all significant respects with the requirements of the Code, FRPA, the *Wildfire Act* and related regulations.

Soil Disturbance

Soil disturbance is disturbance resulting from temporary roads, gouges, ruts, scalps or compacted areas. Without rehabilitation, disturbed sites often have reduced soil productivity and may be unable to support new trees. For that reason, maximum allowable amounts of soil disturbance are set in regulation.

The audit found excessive soil disturbance from harvesting practices by timber sale licence holders on 2 of 26 cutblocks. In one instance, soil disturbance at roadside operations substantially exceeded the 25 percent limit for roadside areas. In the other instance, skidding operations resulted in excessive soil disturbance in two large areas within the cutblock. In both cases, the damaging activities may have occurred, inappropriately, in warm weather and wet

soil conditions, resulting in the excess soil disturbance. Although these practices were not found to be widespread, they are avoidable and therefore require improvement.

Audit Opinion

In my opinion, the operational planning; timber harvesting; silviculture; road construction, maintenance, and deactivation; and fire-protection activities carried out by BCTS and its timber sale licence holders for the period July 1, 2004, to July 29, 2005, complied in all significant respects with the requirements of the Code, FRPA, and the *Wildfire Act* and their related regulations as of July 2005.

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 important enough to highlight in the audit report.

Without qualifying my opinion, I draw attention to the *Soil Disturbance* section of this report, which describes concerns with excess soil disturbance on two timber sale licences. These practices were avoidable and thus require improvement.

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 Code, FRPA, and the *Wildfire Act*.



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Director, Audits
February 2, 2006

¹ BCTS issues timber sale licences and permits; develops operational plans; and conducts forest practices that are not subject to licences and permits, such as silviculture activities and some road work. Timber sale licence holders fulfill licence, permit and operational plan obligations, including timber harvesting and road work.

² BCTS replaced the Ministry of Forest's Small Business Forest Enterprise Program (SBFEP) as of April 1, 2003. Some operational plans and work towards fulfilling silviculture obligations were completed by the SBFEP. However, for ease of reading this report, activities, obligations and findings are referenced to BCTS or its licence holders.

³ Excluding some non-replaceable forest licences that were not part of the audit.

⁴ A higher level plan is a forest resource management objective that is established as legally binding by a written order. The objective applies to a resource management zone, landscape unit, sensitive area, recreation site, recreation trail, or interpretive forest site. Higher level plans are a provision of the *Forest Practices Code of British Columbia Act* that give direction to operational plans.

⁵ Seral stage is a term for grouping the age of a forest. The basic forest age groups (seral stages) important in managing biodiversity are young, mature and old. Depending on tree species, mature forests are generally 80 to 140 years old and old forests are older than 140 years in the interior and 250 years on the coast.

⁶ Sustainable resource management planning is a consolidated approach to planning at the landscape level on provincial Crown lands. It incorporates local, watershed and landscape unit planning under one umbrella. The scale or level of detail is "landscape." SRMPs are the main vehicle for translating existing, broad 'strategic' land use plans (i.e., regional and sub-regional plans) into more specific and tangible resource management direction for operational planning and day-to-day resource management decisions. SRMPs build on, and are consistent with, the direction provided in regional and sub-regional (LRMP) plans.

⁷ A forest development plan is an operational plan that provides the public and government agencies with information about the location 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 certain forest resources prescribed by regulation. It must also be consistent with any higher level plans. Site-specific plans are required to be consistent with the forest development plan.

⁸ 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 forest development plans that encompass the area to which the prescription applies.

⁹ 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 many 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 the Code and does not require review or approval by government to be implemented.

¹⁰ 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 say 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 has been in effect during the audit period, the audited legislated forest practices requirements were requirements of the Code.

Appendix 1: Forest Practices Board Compliance Audit Process

Background

The Forest Practices Board conducts audits of government and agreement-holders for compliance with the *Forest Practices and Range Practices Act* (FRPA). The Board has the authority to conduct these periodic independent audits under section 122(1) of FRPA. Compliance audits examine forest planning and practices to determine whether or not they meet FRPA requirements.

Most of the *Forest Practices Code of British Columbia Act* (the Code) was repealed on January 31, 2004, and replaced with FRPA. 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 stewardship plan, at which point the requirements of FRPA apply. 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 British Columbia Timber Sales (BCTS) program. Selection for audit, of both areas and licensees or agreement-holders to be audited, is made randomly to ensure a fair, unbiased selection.

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 audits determine compliance with the Code and FRPA, based on criteria derived from those Acts and related regulations. 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 *Compliance Audit Reference Manual*.

Audit Process

Conducting the Audit

Once the Board randomly selects an audit licensee and area, 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 and 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 and FRPA 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 and FRPA 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 copy of the draft 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 draft report from the auditor 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.