

**Audit of Forest Planning and Practices
Triumph Timber Ltd.**

Forest Licence A16820



FPB/ARC/89

May 2007

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Board Commentary

In summer 2006, the Board conducted a compliance audit of forest planning and practices of forest licence A16820, held by Triumph Timber Ltd. The licence permits harvesting within the North Coast Forest District, mainly to the north and south of Prince Rupert. (See map on page 2)

The audit assessed the planning, activities and obligations of Triumph including;

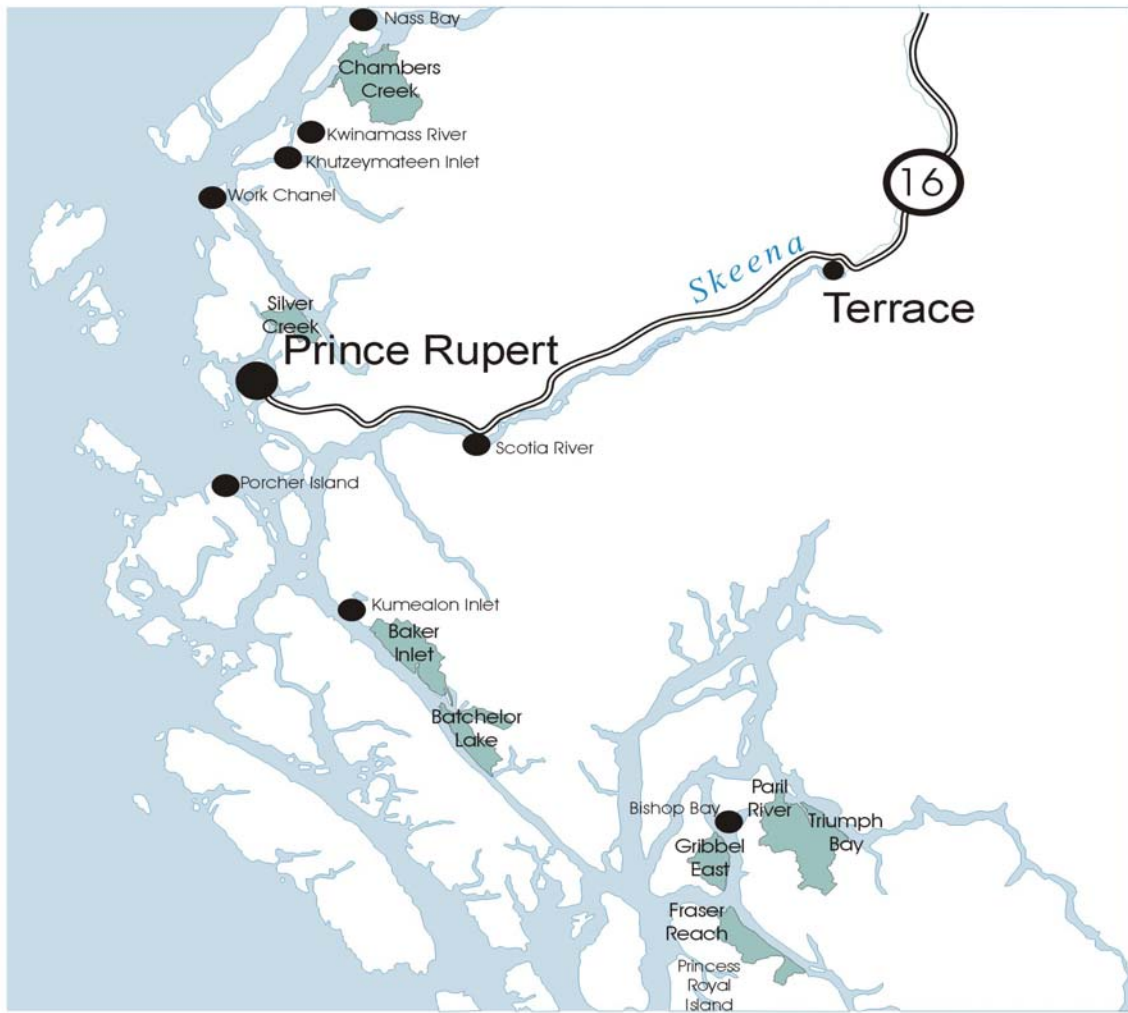
- operational planning;
- 30 harvested cutblocks;
- more than 80 kilometres of road work;
- 14 bridges;
- 33 cutblocks with silviculture obligations; and
- fire preparedness.

The Board is pleased to note that Triumph complied with legislative requirements in all significant respects and encourages it to continue to work with and improve the principles of ecosystem based management (EBM), while continuing to harvest in challenging operating areas and working closely with local First Nations.

The Board also encourages Triumph to continue to utilize barges to land logs when using helicopters, as this process reduces the potential for operations to affect marine mammals and their habitat.

Prior to conducting this audit, the Board initiated a special investigation, “High Retention Harvesting and Timber Sustainability on the BC Coast”, along the Central and North Coast as well as the Queen Charlotte Islands / Haida Gwaii. As the special investigation is focused on the issue of high retention harvesting that are not specific to Triumph alone, the Board will defer detailed comment on this issue to the special investigation report.

Triumph Timber Ltd. Audit of Forest Planning and Practices



- Areas with activity
- Settlements
- Highway

(Map not to scale)



Audit Results

Background

As part of the Forest Practices Board's 2006 compliance audit program, the Board selected forest licence A16820 for audit. The licence, held by Triumph Timber Ltd. (Triumph), was selected randomly and not on the basis of location or level of performance. Additional information on the compliance audit process is provided in Appendix 1.

Triumph is a privately held company that has been operating for seven years in the North Coast Timber Supply Area (TSA). The licence was transferred to Triumph from another licensee in 2000. The operating area includes seven separate geographic areas extending from Chambers Creek, 70 kilometres north of Prince Rupert, to Princess Royal Island, 160 kilometres south of Prince Rupert. The terrain is rugged, with remote operations isolated in narrow tidal inlets that are accessible only by aircraft or boat. Most of the harvesting is in the lower elevation coastal western hemlock (CWH) ecological zone which is characterized by high rainfall, cool summers and mild winters. Western hemlock, western redcedar, amabilis fir, sitka spruce and yellow cedar are the major tree species.

The licence allows cutting of approximately 146,000 cubic metres per year. Approximately 115,500 cubic metres were harvested in the audit period.

Triumph is committed to applying ecosystem based management (EBM) principles, adapted to align with local First Nations participation in its operations.

Ecosystem Based Management

The terms of reference for the North Coast Land and Resource Management Plan (LRMP), specified that the LRMP should be based on the principles of EBM. The planners recommended adopting the EBM Planning Handbook, developed by the Coast Information Team (CIT), as guidance in applying EBM. CIT defines EBM as:

“...an adaptive approach to managing human activities that seeks to ensure the coexistence of healthy, fully functioning ecosystems and human communities.

The intent is to maintain those spatial and temporal characteristics of ecosystems such that component species and ecological processes can be sustained, and human wellbeing supported and improved.”

General management direction and monitoring procedures for EBM are still under development, and the recommended LRMP management for timber emphasizes research and adaptive management to achieve practices consistent with EBM principles. Research and adaptive management will be applied to the effects of the retention on regeneration, growth and yield, windthrow and future physical attributes.

Audit Approach and Scope

The audit examined Triumph Timber Ltd.'s planning, field activities and obligations in the areas of:

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

These activities were assessed for compliance with the *Forest Practices Code of British Columbia Act* (the Code), the *Forest and Range Practices Act* (FRPAⁱⁱⁱ) and the *Wildfire Act* (WA) and related regulations. All activities, planning and obligations for the period August 1, 2005, to August 24, 2006, 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 2006 audit season, set out the standards and procedures that were used to carry out this audit.

Planning and Practices Examined

Triumph Responsibilities

Triumph's operations under License A16820 are approved under its 2000-2004 Forest Development Plan (FDP). Most of Triumph's activities in the audit period were governed by amendments to the original FDP. There is no higher-level plan for the area, and the LRMP process had not yet been completed for the North Coast. However, in January 2005, North Coast LRMP planners submitted recommendations to government in a report entitled "North Coast Land and Resource Management Plan: Final Recommendations."

In February 2006, government established land-use zoning to guide development of final LRMPs for the North and Central Coast. The zoning was based on the principles of ecosystem based management. Since 2001, Triumph management has implemented an EBM approach in its planning and operational practices. Triumph has completed significant numbers of archeological, visual, riparian and terrain assessments in its planning. Most harvest blocks use partial cut harvesting systems that retain more than 50% of the trees dispersed across the cutblock.

The Board audited:

- 12 of 30 harvest cutblocks;
- 30.2 kilometres of road deactivation and removal of 4 bridges;
- 49.8 kilometers of road maintenance and maintenance of 10 permanent bridges;

- regeneration obligations at 3 of 10 cutblocks;
- free growing obligations declared at 5 of 11 cutblocks; and
- planting at 3 of 12 cutblocks.

There was no road construction during the audit period; as a result, the Board was unable to audit road construction practices.

Fire preparedness and practices were also audited. The auditors completed a fire tool inspection and found sufficient fire tools for crews and equipment. Under the *Wildfire Regulation*, the licensee is responsible for submitting contact names and numbers to the Smithers fire centre, and this was audited as well.

Findings

The audit found that Triumph's forest planning and practices complied, in all significant respects, with requirements of the Code, FRPA, WA and related regulations.

Other comments

Part of Triumph's EBM strategy is adopting retention harvest systems and using helicopters to remove selected trees. It is notable that Triumph's helicopter operations use barges to land logs, instead of the more common practice of dropping logs, into the water. Triumph's practice of using offshore log barges eliminates the need for log storage sites, log dumps or booming grounds, thereby minimizing log handling in the water. This method also reduces the amount of woody debris left in the water, and thus reduces potential for operations to affect marine mammals and their habitat.^{iv}

The retention harvest system allows harvesting large areas while maintaining other values such as visual quality and first nation's spiritual values following harvest. However, when compared to a clear-cut silviculture method, the retention method may compromise future timber production by reducing the growth potential of the site.

Previous Licence Holders Responsibilities

The previous licensee maintained silviculture obligations incurred before transferring its licence in 2000. Auditors assessed 12 of 27 cutblocks harvested prior to 2000 that held free growing obligations. These 12 sites were confirmed to be free growing.

Audit Opinion

In my opinion, the operational planning; timber harvesting; road maintenance and deactivation; silviculture; and fire-protection planning carried out by Triumph Timber Ltd. on forest licence A16820 from August 1, 2005, to August 24, 2006, complied in all significant respects with the requirements of the *Forest Practices Code of British Columbia Act*, the *Forest and Range Practices Act* and the *Wildfire Act* and related regulations as of August 2006. No opinion is provided regarding road construction 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.

Without qualifying my opinion, I draw attention to the *Other Comments* section of this report, which describes the notable use of log barges as well as the concern regarding retention harvest systems.

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 WA.

Christopher R. Mosher CA, CEA(SFM)

A handwritten signature in black ink that reads "C R Mosher". The signature is written in a cursive, flowing style.

Director, Audits
April 11, 2007

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) and the *Wildfire Act* (WA). The Board has the authority to conduct these periodic independent audits under section 122(1) of FRPA and section 68(1) of WA. Compliance audits examine forest planning and practices to determine whether or not they meet FRPA and WA 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, FRPA and WA, 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, 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 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.

ⁱ 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.

ⁱⁱ 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.

ⁱⁱⁱ 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.

^{iv} In September 2005, the Forest Practices Board completed complaint investigation 040565 entitled "Humpback Whales and Helicopter Log Drops on the North Coast". This investigation noted that the Federal Department of Fisheries and Oceans favours barge use for landing zones.



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NEWS release

For Immediate Release

May 7, 2007

Board finds good performance in North Coast Audit

VICTORIA – Triumph Timber Ltd. received a clean audit for operations in the North Coast Forest District, the Forest Practices Board reported today.

The board audited Triumph's activities near Prince Rupert, in seven separate areas between Chambers Creek and Princess Royal Island, and found the licensee was in compliance with legislative requirements for planning, harvesting, road management, silviculture and fire protection. The audit covered the period from Aug. 1, 2005 to Aug. 24, 2006.

"The board found full compliance by the licensee in this challenging terrain, with isolated operating areas accessible only by aircraft or boat," said board chair Bruce Fraser.

"The licensee employed good environmental practices, such as using barges instead of dropping logs into the water from the helicopter. This reduces woody debris and minimizes the impact of logging on whales and other marine mammals."

During the course of the audit, the board noted the licensee's approach to applying ecosystem-based management (EBM) in the audit area. In February 2006, the provincial government established land-use zoning to guide final strategic land-use plans on the North and Central Coast, which apply to the area under audit. The zoning was based on the principles of EBM, an adaptive approach to forest management which maintains the key functions of ecosystems and species associated with them.

EBM involves retaining more standing trees than regular clear-cut harvesting. Concerns have been raised about the implications of higher-retention harvesting on future forest timber values. The board will examine these concerns in an upcoming special investigation report.

The Forest Practices Board is B.C.'s independent watchdog for sound forest and range practices, reporting its findings and recommendations directly to the public and government. The board:

- audits forest and range practices on public lands;
- audits appropriateness of government enforcement;
- investigates public complaints;
- undertakes special investigations of current forestry issues;
- participates in administrative appeals; and
- makes recommendations for improvement to practices and legislation.

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This news release and more information about the board are available on the Forest Practices Board website at www.fpb.gov.bc.ca or by contacting:

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