



**Forest
Practices
Board**

Audit of Forest Planning and Practices

*Pacific Inland Resources
a Division of West Fraser Mills Ltd.*

Forest Licence A16830

FPB/ARC/120

December 2010

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Board Commentary

In July 2010, the Board conducted a full-scope compliance audit of forest planning and practices of Pacific Inland Resources (PIR) on Forest Licence A16830. PIR is a division of West Fraser Mills Ltd. This is the third time this forest licence has been audited by the Board.

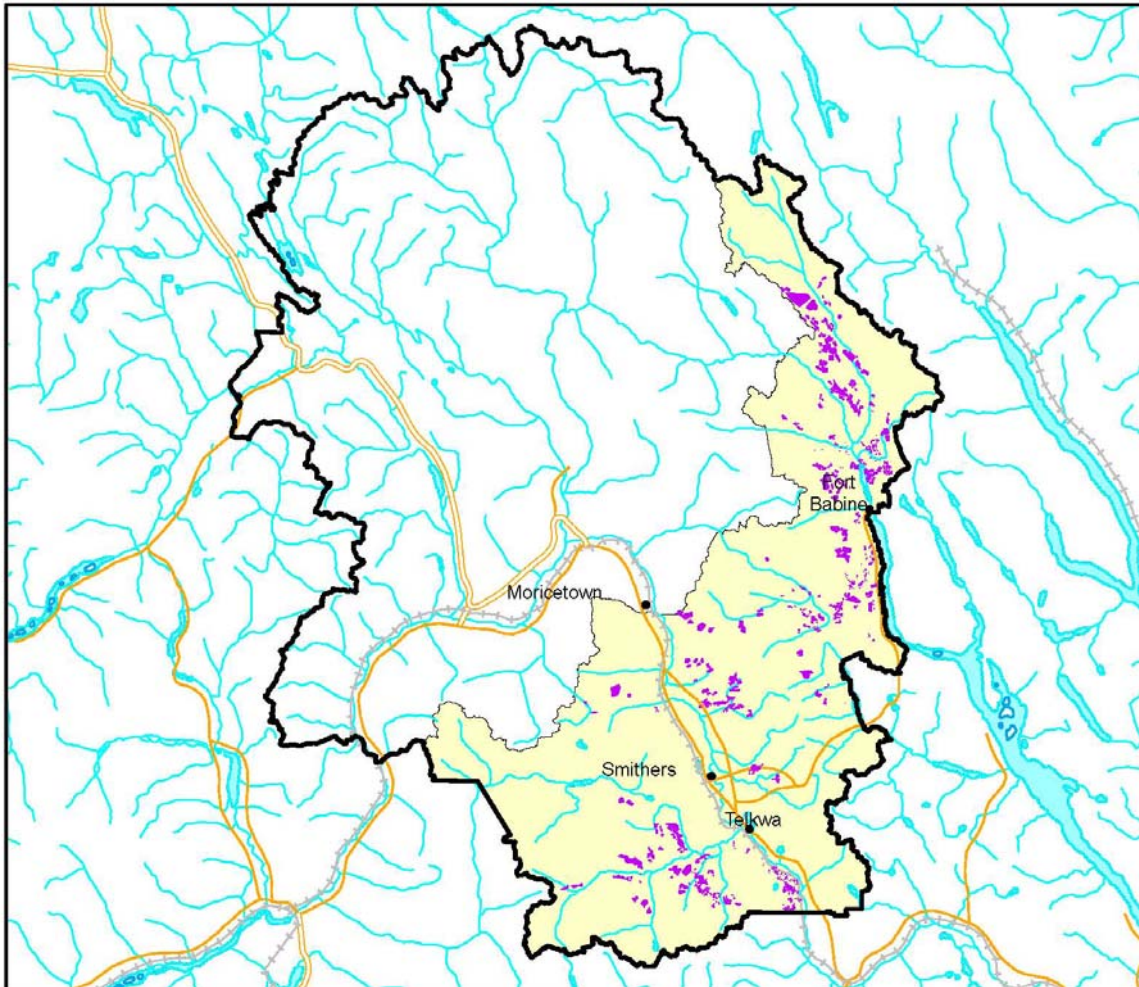
In 1999, PIR was randomly selected for one of the first full-scope compliance audits conducted by the Board, and it was one of the first cleanⁱ Board audits. It was also the first Board audit report to contain two distinct notable practices.ⁱⁱ

In 2003, the Board produced a special report titled, *Evaluating Mountain Pine Beetle Management in British Columbia*.ⁱⁱⁱ As part of that project, the Board conducted a compliance audit of five licensees within the Hallett draft landscape unit in the Vanderhoof Forest District. Although PIR normally operated in the Skeena Stikine Forest District, the Ministry of Forests and Range had approved a transfer of allowable annual cut to allow PIR to harvest timber to help manage the mountain pine beetle infestation in the Vanderhoof district. Therefore, PIR's licence was included in that audit, which found PIR to be in compliance, in all significant respects, with planning and practices requirements as they related to MPB management.




In this 2010 audit, PIR was again found to be in compliance with the legislated requirements of the *Forest and Range Practices Act* and the *Wildfire Act*. In the 1999 audit, PIR was recognized for two notable practices around riparian management and retention of stand structure attributes during harvesting. The 2010 audit found that PIR continues its high level of management with respect to these two practices.

The Board would like to recognize PIR for its continued commitment to sound forest practices in British Columbia. In particular, the Board notes PIR's commitment to work with the community to ensure its operations are consistent with the Bulkley Land and Resource Management Plan and the Bulkley Valley Sustainable Resource Management Plan, and that it has done so despite the difficult economic times facing the forest industry and the company.

**Audit of Forest Planning and Practices
Pacific Inland Resources
a Division of West Fraser Mills Ltd.
FL A16830**



Legend

-  FL A16830 Harvesting Activities
-  Bulkley TSA
-  Skeena Stikine Forest District (southern portion only)



Audit Results

Background

As part of the Forest Practices Board's 2010 compliance audit program, the Board randomly selected the Skeena Stikine Forest District as the location for a full-scope compliance audit. Within the district, the Board selected Forest Licence A16830 for audit. This licence has been held by Pacific Inland Resources, a division of West Fraser Mills Ltd., since 1982.

FL A16830 permits PIR to harvest 392,313 cubic metres of timber annually from the Bulkley Timber Supply Area (TSA). During the one-year period of this audit, PIR harvested 267,173 cubic metres under FL A16830. The primary operating areas are scattered throughout the TSA (See map on page 2).



Small scale harvesting conducted by PIR to address mountain pine beetle.

The Board's audit fieldwork took place from July 5 to 8, 2010.

Additional information about the Board's compliance audit process is provided in Appendix 1.

Land Use Planning

In addition to objectives set by government in the *Forest and Range Practices Act* and related regulations, objectives for forest stewardship in FL A16830 are also guided by two land use plans:

- the *Bulkley Land and Resource Management Plan, 1998* (BLRMP), and
- the *Bulkley Valley Sustainable Resource Management Plan, 2005* (BVSRRMP).

The BLRMP is a sub-regional land use plan covering approximately 760,000 hectares of north central British Columbia, including the operating area of FL A16830. The BLRMP guides management of public lands and resources within the plan area.

The objectives in the BLRMP were established as land use objectives (LUO) for the Bulkley TSA in 2006, through the BLRMP objectives set by government order.

The BVSRRMP is specific to the Bulkley Landscape Unit. It established broad objectives for resource values and identifies key resource features such as ecosystem networks, enhanced timber development areas, visual quality objectives and view points, and trails and recreation features.

Audit Approach and Scope

The Board conducted a full-scope compliance audit, which includes all harvesting, roads, silviculture, protection activities, and associated planning, carried out between July 1, 2009, and July 8, 2010. These activities were assessed for compliance with the *Forest and Range Practices Act* (FRPA), the *Wildfire Act* (WA) and related regulations.

The Board's audit reference manual, *Compliance Audit Reference Manual, Version 6.0, May 2003*, and the addendum to the manual for the 2010 audit season, set out the standards and procedures that were used to carry out this audit.

Planning and Practices Examined

PIR conducts its operational planning under the West Fraser Mills – PIR Forest Stewardship Plan (FSP),^{iv} approved in July 2007. The FSP was examined in the audit.

During the audit period, PIR harvested 49 cutblocks with a gross area totalling 1,245 hectares. The audit examined 27 of those cutblocks, totalling 784 hectares. Harvesting was conducted with ground-based systems only.

PIR built 57.1 kilometres, maintained 1,250 kilometres and deactivated 58.1 kilometres of road during the audit period. PIR constructed one new bridge and maintained 155 bridges. No bridges were deactivated during the audit period.

The Board audited all of the new road construction, 354 kilometres of road maintenance, 21 kilometres of road deactivation, the 1 new bridge and 67 of the maintained bridges.

Within the audit period, PIR site prepared 26 blocks and planted 111 blocks, 52 blocks had regeneration obligations due and 25 blocks had regeneration obligations declared as being met during the audit period. Also, 26 blocks had free-growing obligations due and 24 had free-growing obligations declared as being met, during the audit period.

The board audited 10 site prepared blocks, 11 planted blocks, 11 blocks with regeneration obligations due, 5 blocks where regeneration obligations were declared as being met, 18 blocks with free-growing obligations due and 6 blocks where free-growing obligations were declared as being met.

During the audit, two active harvesting sites were encountered and the fire preparedness requirements of the WA were audited on both sites.

Findings

The audit found that the planning and field activities undertaken by PIR complied in all significant respects, with the requirements of FRPA, the WA, and related regulations, and applicable transitional elements of the Code, as of July 2010.

Operational Planning

The audit found that PIR incorporated the objectives of the BLRMP and the OSBGO into the FSP. Quantitative objectives in the BLRMP for seral-stage distribution and wildlife tree retention were incorporated directly into the FSP. Qualitative objectives in the BLRMP for wildlife, ecosystem representation and landscape corridors, visual quality, fish habitat, recreation and timber were incorporated into the FSP by describing appropriate strategies to be followed. The audit found that the quantitative objectives were met and the strategies were followed.

The FSP was found to be consistent with legislated requirements and approved land use plans, including the BLRMP, BVSMP and the LUO. Site plans were evaluated and found to be consistent with the FSP.

Timber Harvesting

The majority of logging was conducted with permits designed to allow licensees to target mountain pine beetle (MPB) infected stands. This has been effective in controlling historic levels of MPB activity. However, populations are starting to increase due to growing MPB pressure from outside the geographic area. Consequently, the current salvage strategy will have to be monitored to determine if it will continue to be effective.

The strategies for addressing landscape connectivity were evaluated through planning review and field observations. Strategies included limited road construction, small opening size within the corridor and the percent of the corridor within a landscape unit that could be disturbed. PIR did meet the strategies they committed to in the FSP.

Auditors noted that PIR retains understory subject to operational constraints and acceptability criteria established with the Ministry of Forests and Range and other licensees in the mid-1990's. Field observations indicated that PIR contractors did a good job of retaining understory that will contribute towards a future crop of trees in the mid-term.

Riparian

Auditors note that PIR continues to recognize the value of riparian areas and demonstrated good riparian management by:

- Establishing wildlife tree patches around wetlands or creeks.
- Locating block boundaries outside of the riparian management zones where logical.
- Managing the riparian management areas with understory retention strategies.
- Managing wetlands with adequate buffers to help maintain the integrity of the wetland.
- Removing winter crossing across fish bearing streams before spring freshet.
- Treating non-classified drainages as S6 streams.

Wildlife Tree Retention (WTR)

WTR targets were established in the OSBGO (2006) and incorporated into the FSP. The objectives are based on biogeoclimatic ecosystem classification subzone and landscape unit. The audit found wildlife trees were retained in patches, dispersed groups and as individual stems, focusing on non-pine and deciduous species. PIR also retained advanced regeneration and understory that will contribute to a future crop. WTR objectives were met and provided immediate structural diversity, which enhances wildlife and ecological values, and provides a source of coarse woody debris recruitment over time.

Road & Bridge Construction, Maintenance and Deactivation

No concerns were identified with road and bridge construction, maintenance and deactivation during the audit. PIR's environmental management system for tracking and documentation of environmental incidents is thorough and any concerns are identified, tracked and addressed by the licensee. The audit found that:

- Natural drainage patterns were maintained.
- Crossings were removed on major creeks or fish bearing creeks where winter roads were used and there was evidence of good vegetation management around these crossing.
- Maintained crossings showed good practices with respect to sediment control, which utilized grass seeding, silt fencing along ditchlines and sediment ponds.
- Bridges were all well signed, armoured and maintained.

Silviculture obligations and activities

There were no concerns noted with site preparation activities, planting, regeneration obligations or free to grow obligations, during the course of the audit. Auditors noted that site preparation was focused on the wetter sites and that past site preparation assessed appeared effective.

Fire Protection Activities

PIR has a current fire preparedness plan and operators assess fire danger classes regularly. Both active sites were found to have sufficient fire tools present, as well as a functional water delivery system on site.

Audit Opinion

In my opinion, the operational planning; timber harvesting; road construction, maintenance and deactivation; silviculture; and fire protection activities carried out by Pacific Inland Resources, a division of West Fraser Mills Ltd., on Forest Licence A16830 between July 1, 2009, and July 8, 2010, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act*, and related regulations, as well as applicable transitional elements of the *Forest Practices Code of British Columbia Act*, as of July 2010.

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 FRPA, WA and the Code.



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Victoria, British Columbia
November 15, 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.

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.

ⁱ Clean audit – a term used by the Board to describe an audit that found no significant non-compliances with legislation or areas of improvement noted.

ⁱⁱ <<http://www.fpb.gov.bc.ca/publications.aspx?id=2260>>

ⁱⁱⁱ <<http://www.fpb.gov.bc.ca/publications.aspx?id=2570>>

^{iv} 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 five years.