



**Forest  
Practices  
Board**

## **Audit of Forest Planning and Practices**

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*Babine Forest Products Ltd.*  
*FL A16823*

**FPB/ARC/132**

January 2012

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## Board Commentary

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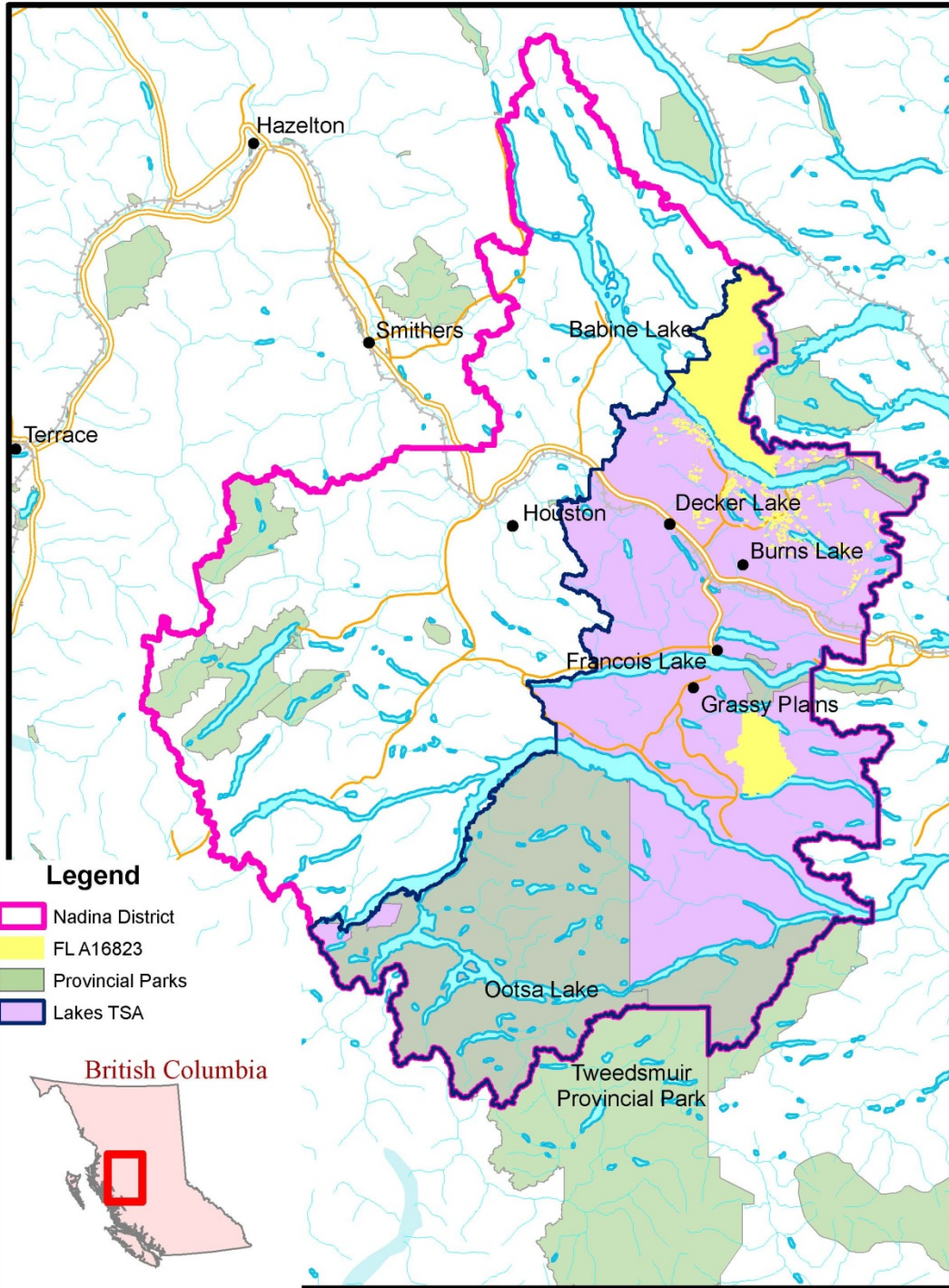
In September 2011, the Board conducted a full-scope compliance audit of forest planning and practices on Babine Forest Products' (BFP) Forest Licence A16823. This is the first time this forest licence has been audited by the Board.

The audit assessed over 80 cutblocks and close to 300 kilometres of road activities and obligations, as well as operational planning, and found that BFP complied with the legislated requirements of the *Forest and Range Practices Act* and the *Wildfire Act*, as well as the *Lakes District Land and Resource Management Plan* and the *Lakes North Sustainable Resource Management Plan*.

The auditors found that Babine Forest Products met or exceeded legislative requirements of forest management throughout all aspects of their operations examined. During this prolonged economic downturn, BFP continues to target mountain pine beetle damaged stands and the Board is pleased to report that the wildlife tree retention strategies practiced by BFP met the intent of the Chief Forester's Guidance. As well, roads, bridges and drainage structures were well maintained and their silviculture program was very well managed.

The Board would like to recognize Babine for the sound forest practices found by our audit team.

# Map of Babine Forest Products Ltd. FL A16823 Operating Areas Subject to Audit



# Audit Results

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## Background

As part of the Forest Practices Board's 2011 compliance audit program, the Board randomly selected the Nadina District as the location for a full scope compliance audit. Within the district, the Board selected Forest Licence A16823 for audit which is located in the Lakes Timber Supply Area (TSA). This licence is held by Babine Forest Products Ltd. (BFP), a joint venture between Oregon-based forest products company Hampton Affiliates and the Burns Lake Native Development Corporation (BLNDC)<sup>i</sup>.

The Lakes TSA<sup>ii</sup> covers approximately 1.5 million hectares in north-central British Columbia, and ranges from Tweedsmuir Provincial Park in the south to Klaytahnkut Lake in the north. The TSA contains the headwaters of important tributaries of both the Skeena and Fraser River watersheds as well as numerous lakes, which include some of the largest fresh water bodies in the province. Forests in the area consist mostly of lodgepole pine and spruce, with balsam at higher elevations and some small isolated areas of Douglas-fir, particularly along the shores of Babine Lake and François Lake.

The Village of Burns Lake is the largest community in the TSA. There are also numerous smaller communities in the area including Decker Lake, François Lake, and Grassy Plains.

The Lakes TSA has been heavily impacted by mountain pine beetle (MPB). Approximately 90 percent of the pine trees available for harvesting in the Lakes TSA have been killed by MPB, and this figure is not expected to change significantly in the future, as very little new attack is projected over the next 10 years.

FL A16823 permits BFP to harvest 344 951 cubic metres of timber annually. During the audit period of August 1, 2010 to September 15, 2011 BFP harvested approximately 713 300<sup>iii</sup> cubic metres under FL A16823. The increased harvest level allows BFP to manage the mountain pine beetle infestation in the Nadina District. Lodgepole pine made up 77 percent of the harvested volume and 70 percent of the lodgepole pine was dead or damaged. BFP's primary operating area is north of Highway 16.

BFP was certified in July 2011 by the Sustainable Forestry Initiative (SFI)<sup>iv</sup>.

The Board's audit fieldwork took place from September 12 to September 15, 2011.

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

## Objectives Set by Government

In addition to objectives set by government in the *Forest and Range Practices Act* (FRPA) and related regulations, forest stewardship in FL A16823 is also guided by the *Lakes District Land and Resource Management Plan*<sup>v</sup> (LRMP) and the *Lakes North Sustainable Resource Management Plan 2009*<sup>vi</sup> (LNSRMP).

The Lakes District LRMP was approved by the provincial government in 2000. The plan creates resource management zones, and objectives and strategies for various resources, including biodiversity, fish and wildlife, forestry, mining, agriculture, recreation, and tourism.

Two strategic land use plans were established to provide operational direction to implement objectives of the Lakes District LRMP, to manage the mountain pine beetle infestation and to support the increase in allowable annual cut. The Lakes South Sustainable Resource Management Plan (LSSRMP) was approved in 2003 and the Lakes North Sustainable Resource Management Plan (LNSRMP), under which FL A16823 operates, was approved in 2009.



Small openings created after harvesting dead pine.

The LNSRMP covers the northern portion of the Lakes Timber Supply Area in the Nadina District.

The LNSRMP provides clear and measurable biodiversity objectives to ensure that a diversity of forest habitats is retained on the landscape. The LNSRMP is designed to assist with forest planning and forest management activities by providing guidance and flexibility in how to respond to the MPB infestation and meet biodiversity objectives.

## 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 August 1, 2010 and September 15, 2011. 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 2011 audit season, set out the standards and procedures that were used to carry out this audit.

## Planning and Practices Examined

BFP conducts its operational planning under the Babine Forest Products Ltd./Babine Timber Ltd. Forest Stewardship Plan<sup>vii</sup> (FSP), approved in March 2007. The FSP was examined in the audit.

The field activities carried out by BFP during the audit period, and therefore subject to audit, were:

- harvesting of 42 cutblocks, 10 of which were active, with a gross area totalling 3691 hectares
- construction of 80 kilometres of road
- maintenance of 778 kilometres of road, and 28 bridges
- planting of 46 blocks
- brushing of 39 blocks

In addition to those field activities, several obligations either became due or were declared as being met during the audit period, and therefore also subject to audit. These were:

- regeneration obligations due on 223 blocks
- regeneration declared as being met on 5 blocks
- free-growing obligations due on 71 blocks
- free-growing declared as being met on 22 blocks

The Board examined the following activities and obligations on the ground;

- 21 harvested blocks with a gross area of 2117 hectares, including 4 active blocks for fire preparedness requirements of the *Wildfire Act*
- 41 kilometres of road construction
- 256 kilometres of road maintenance
- 22 bridges
- 5 planted blocks
- 12 brushed blocks
- 15 blocks with regeneration obligations due
- 5 blocks with regeneration declared as being met
- 18 blocks with free-growing obligations due
- 9 blocks with free-growing declared as being met

## Findings

The audit found that the planning and field activities undertaken by BFP complied, in all significant respects, with the requirements of FRPA, WA, related regulations, the Lakes LRMP and the LNSRMP, as of September 2011.

### Operational Planning

The audit found that BFP incorporated the LNSRMP objectives for seral stage<sup>viii</sup>, old growth, wildlife tree retention and connectivity into the FSP. The FSP was found to be consistent with legislated requirements and approved land use plans. Site plans were evaluated and found to be consistent with the FSP.

BFP generates maps on an annual basis, showing proposed and existing forestry activities across their operating area and refers them to over 120 interested parties for comments and feedback. This ensures clear and ongoing communication with the communities and affected parties.

BFP also produces an annual *Woodlands Operations Handbook*, which outlines environmental management standards, operator awareness guidelines for minimizing soil disturbance, crossing watercourses, leave trees and coarse woody debris, noxious weeds, species and ecosystems of concern (endangered species), cultural and heritage resource identification, fire preparedness, fuel handling and spill response, and contact numbers. These are distributed to staff and contractors to help guide operational activities.

### Harvesting

The majority of logging targeted mountain pine beetle (MPB) infected stands. All harvesting was conducted using ground-based systems.

Auditors noted that BFP contractors retained understory, subject to operational constraints and acceptability criteria. BFP also exhibited diligence in managing stand retention on a broad scale by retaining healthy timber within blocks. These mitigate impacts on ecological values when creating large openings to deal with MPB. There were instances where some individual retained stems had blown down, but these were infrequent events on the blocks that were field reviewed.



Typical mechanized harvesting operation.

BFP uses a positive financial reinforcement (bonus) system, rather than a punitive system to reward operator performance.



This appeared to be a progressive management strategy that encouraged contractors to strive to achieve desired results.

### Soil Disturbance

Soil disturbance was managed diligently. When auditors identified a small portion of one block that may have had excessive compaction, the licensee showed it had previously identified the area, completed a soil disturbance survey, and had developed a mitigation plan. The survey confirmed that the disturbance on the portion of the block in question was below allowable limits.

### Riparian

Auditors note that BFP recognize the value of riparian areas and demonstrated sound riparian management by:

- Establishing wildlife tree patches around wetlands or creeks.
- Locating block boundaries outside of the riparian management zones where appropriate.
- Managing the riparian management areas with understory retention strategies including bumper trees.
- Maintaining the integrity of wetlands with adequate buffers.
- Removing crossings and seeding with grass as soon as practicable.
- Treating non-classified drainages as S6 streams.



Effective use of bumper trees to protect advanced regeneration around a riparian feature.

### Wildlife Tree Retention (WTR)

WTR targets established in the FSP are a minimum of 10 percent of the total area of the cutblocks, which exceeds the requirements of the *Forest Planning and Practices Regulation* but is consistent with the LNSRMP. Wildlife trees were retained in patches, dispersed groups and individual stems, focusing on non-pine and deciduous species. Individual stems did not contribute towards the WTR calculation, but served as additional retention.

On the blocks audited, WTR objectives exceeded the 10 percent objective contained in the FSP; WTR was 17 percent of the gross area and 21 percent of the net area of the sampled blocks. This met the intent of the *Chief Forester's Guidance on Landscape- and Stand-level Structural Retention in Large-Scale Mountain Pine Beetle Salvage Operations*<sup>ix</sup> (December 2005).

## **Road & Bridge Construction, Maintenance and Deactivation**

No concerns were identified with road and bridge construction and maintenance. BFP'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.
- Exposed cutbanks, fill slopes and running surfaces were grass seeded where there was a possibility of sediment entering streams.
- Bridges were well signed, well armoured and well maintained.
- No evidence of siltation or road failures was noted.

## **Silviculture activities and obligations**

Auditors noted that BFP actively managed silviculture activities and obligations, and some aspects of the silviculture program were considered exceptional. One example involved voluntary brushing on a block that had previously been declared as free-to-grow. Another example was BFP's experimentation in planting. BFP planted Douglas-fir on one site that was outside of its recommended range, and continues to monitor the stand to see how it develops over time in response to natural and cyclic climatic variation. The Douglas-fir was mixed with spruce and pine and was limited to less than three percent of the total trees planted in case of failure.

All of the site preparation activities, planting, regeneration obligations and free to grow obligations examined during the audit complied with requirements.

Twelve blocks were assessed for manual brushing treatments. The auditors consider that the manual brushing treatments carried out to be more effective than chemical since only those areas required to be brushed are treated. Areas treated are reassessed and may be scheduled for more than one treatment if warranted.

## **Fire Protection Activities**

BFP has a current fire preparedness plan and operators assess fire danger classes regularly. All active sites reviewed 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 Babine Forest Products Ltd. on Forest Licence A16823 between August 1, 2010 and September 15, 2011, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations, as of September 2011.

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, and WA.



Christopher R. Mosher CA, EP(EMSLA)  
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Victoria, British Columbia  
November 14, 2011

# Appendix 1:

## Forest Practices Board Compliance Audit Process

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### 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 8 or 9 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 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 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 fieldwork 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 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 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 generally worthy of reporting. However, in certain circumstances, events that are considered not significant non-compliance may be reported as an area requiring improvement.

***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, Lands and Natural Resource Operations.

## **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.

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<sup>i</sup> Burns Lake Native Development Corporation is composed of the Cheslatta Carrier Nation, Burns Lake Band, Lake Babine Nation, Nee Tahi Buhn Indian Band, Skin Tye Nation and the Wet'suwet'en First Nation:  
<http://www.blndc.ca/>

<sup>ii</sup> 2010 Lakes TSA Timber Supply Analysis Discussion Paper:  
[http://www.for.gov.bc.ca/hts/tsa/tsa14/current\\_tsr\\_2009/14ts10pdp.pdf](http://www.for.gov.bc.ca/hts/tsa/tsa14/current_tsr_2009/14ts10pdp.pdf)

<sup>iii</sup> Forest Licensees are required to balance their annual allowable cut every five years. BFP had undercut their annual allowable cut in years one, two and three of the five year period due to poor market conditions. As a result, BFP increased their harvest volumes in years four and five, which resulted in the large harvest volume during the audit period.

<sup>iv</sup> Sustainable Forestry Initiative (SFI) is an internationally recognized sustainable forestry certification program. Conformance to the SFI standard is independently assessed through voluntary 3<sup>rd</sup> party audits.

<sup>v</sup> Lakes District LRMP: <http://ilmbwww.gov.bc.ca/slrp/lrmp/smithers/lakes/index.html>

<sup>vi</sup> Lakes North SRMP:  
[http://archive.ilmb.gov.bc.ca/slrp/srmp/north/lakes\\_north/Docs/Lakes\\_North\\_SRMP\\_20090126.pdf](http://archive.ilmb.gov.bc.ca/slrp/srmp/north/lakes_north/Docs/Lakes_North_SRMP_20090126.pdf)

<sup>vii</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 five years.

<sup>viii</sup> Seral Stage - Any stage of development of an ecosystem from a disturbed, unvegetated state to a climax plant community.

<sup>ix</sup> MPB Salvage Guidance: <http://www.for.gov.bc.ca/hfd/library/documents/bib95960.pdf>



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