



**Forest  
Practices  
Board**

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

---

*TimberWest Forest Corporation  
Tree Farm Licence 47*

**FPB/ARC/174**

February 2015

# Table of Contents

---

<b>Audit Results.....</b>	<b>1</b>
Background .....	1
Audit Approach and Scope .....	2
Planning and Practices Examined .....	2
Findings.....	3
Audit Opinion.....	5
<b>Appendix 1: Forest Practices Board Compliance Audit Process .....</b>	<b>6</b>

# Audit Results

---

## Background

As part of the Forest Practices Board's 2014 compliance audit program, the Board randomly selected the Campbell River District as the location for a full scope compliance audit. Within the district, the Board selected Tree Farm Licence (TFL) 47, held by TimberWest Forest Corporation (TimberWest), for the audit.

TFL 47 is located north of Campbell River, along Johnstone Strait, and southeast of Port McNeill. TimberWest's activities were located in 12 forest development units—11 in the Campbell River District and 1 in the North Island Central Coast District (see map on page 2). TimberWest administers the TFL from its office in Campbell River, and operates from several camps on BC's south-central coast. The islands to the east of Johnstone Strait are only accessible by water, making these operations challenging. The TFL contains natural resource values, including scenic corridors, marine recreation areas, old growth forests, rare plant communities and cultural sites, requiring special management.

The South Central Coast Order<sup>i</sup> (SCCO) and the Vancouver Island Land Use Plan Higher Level Plan Order<sup>ii</sup> (VILUP) apply to the audit area. The orders define land use objectives for the area and include direction for protected areas, human well-being initiatives for First Nations communities and ecosystem-based targets for forest management (i.e., ecosystem based management (EBM)<sup>iii</sup>. EBM is applicable only to certain coastal parts of the province and includes specific environmental requirements. The orders are legally binding and provide direction to the licensee.

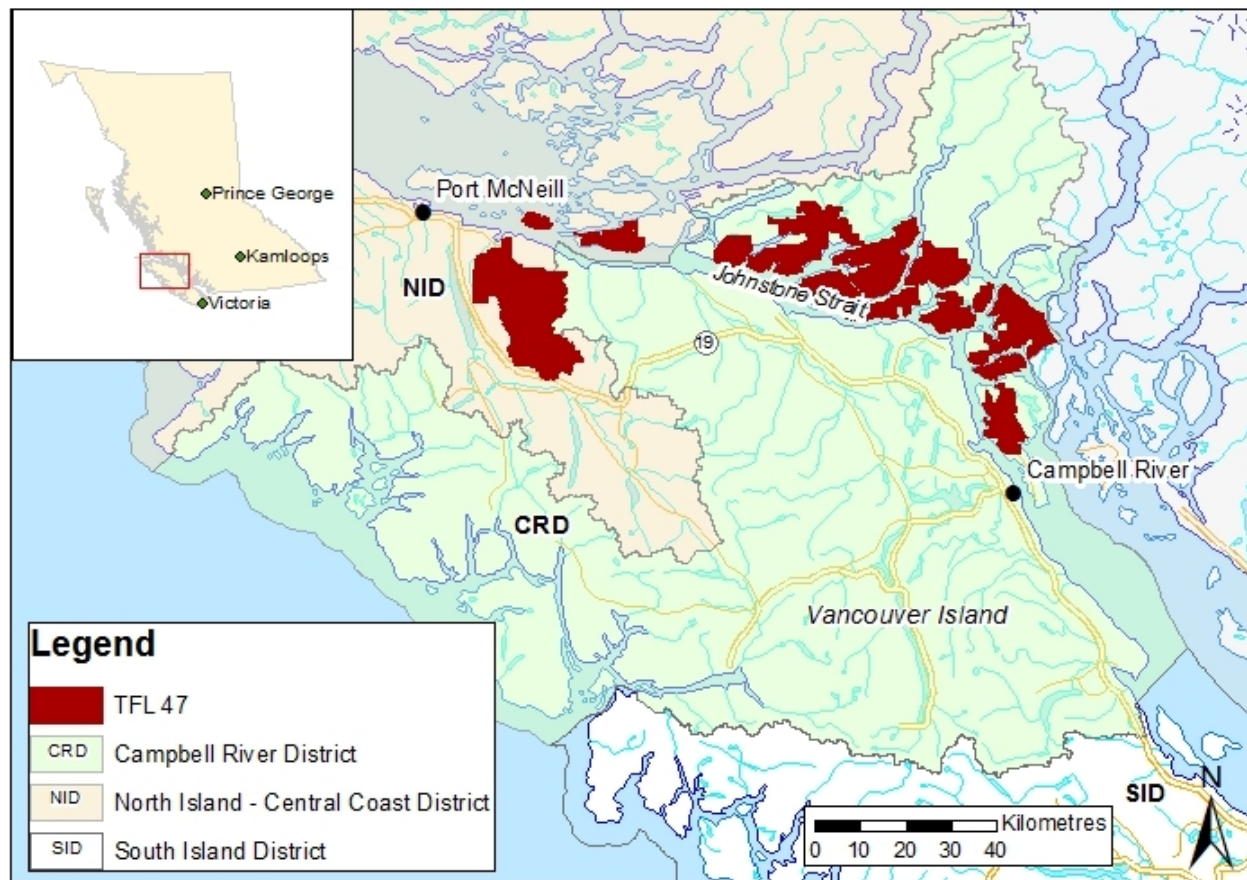
TFL 47 has an allowable annual cut of 646 793 cubic metres per year. During the two-year audit period, August 2012 to August 2014, TimberWest harvested a mix of species totalling approximately 730 000 cubic metres of timber.

Two forestry professionals, a professional engineer and a chartered accountant made up the audit team. The Board's audit field work took place from August 18 to 21, 2014. Additional information about the Board's compliance audit process is provided in Appendix 1.



**Free-growing plantation on East Thurlow Island.**

## Map of TimberWest – Tree Farm Licence 47



### Audit Approach and Scope

The Board conducted a full scope compliance audit, in which all harvesting, roads, silviculture, fire protection activities and associated planning, carried out between August 1, 2012, and August 21, 2014, were included. Auditors assessed these activities 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 7.0, September 2012*, sets out the standards and procedures that were used to carry out this audit.

### Planning and Practices Examined

#### Operational Planning

TimberWest operates under three forest stewardship plans (FSPs)<sup>iv</sup>: TimberWest Forest Corp Bonanza FSP for the Bonanza operating area in the North Island Central Coast District, TimberWest Forest Corp Quadra-Quinsam FSP for the Quadra Island operating area and TimberWest Forest Corp Johnstone Strait FSP for the Johnstone Strait operating areas, both in the Campbell River District. Auditors examined the FSPs and site-level plans to assess whether they were consistent with legislated requirements. They also examined site-level plans during harvesting, road and silviculture field sampling, to assess whether they accurately identified site conditions.

## **Timber Harvesting**

TimberWest harvested 94 cutblocks, covering 1939 hectares. Auditors sampled 32 cutblocks, totaling 722 hectares, focusing on practices in close proximity to resource features including riparian features, sensitive soils, steep slopes, visual quality, karst, wildlife habitat and cultural features.

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

TimberWest constructed 110 kilometres of road and had maintenance obligations for 1762 kilometres of road. It did not deactivate any roads.<sup>1</sup> The auditors examined 47 kilometres of construction and 555 kilometres of road for maintenance activities.

TimberWest constructed 31 bridges and maintained 145 bridges. The auditors examined 22 of the constructed bridges and 34 of the maintained bridges.

## **Silviculture Obligations and Activities**

Silviculture activities included planting in 86 cutblocks, brushing in 219 cutblocks and fertilization in 20 cutblocks. TimberWest also had regeneration delay and free growing obligations on 140 and 131 cutblocks, respectively.

Auditors examined planting activities in 12 cutblocks, seedling transfers in all planted cutblocks, brushing in 25 cutblocks and fertilization in 2 cutblocks. Auditors also examined 35 cutblocks for regeneration delay and 35 cutblocks for free-growing obligations.

## **Fire Protection**

TimberWest was required to complete hazard abatement on 118 cutblocks. Auditors examined abatement activities on 28 cutblocks, in conjunction with harvest and silviculture auditing.

TimberWest did not conduct formal fire hazard assessments. Its standard practice is to pile and burn roadside slash to abate any fire hazard within the required time frames.

There were six active cutblocks during the field audit, managed by three operators. Auditors conducted fire tool inspections on all three operators in five of the six cutblocks.

## **Findings**

Auditors found that the planning and field activities undertaken by TimberWest on TFL 47 complied in all significant respects with the requirements of FRPA, WA and related regulations, as of August 2014.

## **Operational Planning**

The FSPs were consistent with FRPA and other legislated requirements. Planning at the landscape and site-plan levels was consistent with the FSPs. Plans were also consistent with the legal requirements of the SCCO and VILUP orders, including EBM.

---

<sup>1</sup> TimberWest's road maintenance practices were to back-up culverts by constructing cross-ditches and water bars. No roads had been "deactivated" as defined in Section 82 of the Forest Planning and Practices Regulation, and therefore this type of practice is not considered deactivation, rather a type of maintenance.

Auditors assessed the site plans and site plan maps for all sampled harvest blocks in the audit period. The maps accurately identified wildlife tree patches, road locations, streams and their classifications, and ecological units.

TimberWest addressed site-specific resource features in site plans by accurately identifying and prescribing practices for these features. Primary resource features included wildlife habitat, streams and wetlands, visual quality, karsts, and cultural heritage features. In some situations, cutblock boundaries were established to exclude areas with identified features from the area to be harvested.

## **Timber Harvesting**

Harvesting practices were consistent with site level plans. Overall, TimberWest maintained natural drainage patterns, protected streams, retained forest cover and protected soil productivity and hydrologic function. To protect primary resource features, TimberWest:

- retained wildlife trees in patches and individual stems to protect wildlife habitat.
- included fish streams in reserves or machine free zones and felled and yarded away from them to protect fish habitat.
- harvested small openings, oriented block boundaries with natural terrain features, retained trees and marine foreshore buffers to protect visual quality.
- completed a karst inventory and prescribed measures to protect karsts in the vicinity of timber harvesting, such as excluding the karsts from cutblocks, placing reserves around karsts or falling and yarding away.
- shared information with First Nations prior to forest activities, conducted archaeological impact assessments where required and adapted plans and practices to protect cultural features.

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

Auditors did not identify any concerns with road construction or maintenance. Roads were stable and stream crossings were well-maintained and in good condition. Natural drainage patterns were maintained on all roads.

TimberWest met legal requirements for bridge construction and maintenance, and no concerns were identified.

## **Silviculture Activities and Obligations**

Silviculture activity included planting, brushing, fertilization, regeneration delay and free-growing obligations. All cutblocks were reforested promptly with ecologically appropriate species and all treatments were carried out as planned. Regeneration due dates and free-growing obligations were met. Seedlings used for reforestation met the *Chief Foresters Standards for Seed Use* and there were no concerns noted with planting.

All forest activities had been reported to the government within the required time frames.

Auditors observed several cutblocks in the free-growing sample that were well stocked with healthy, mixed stands of white pine, sitka spruce, western hemlock, western red cedar and Douglas-fir.

## Fire Protection

Auditors did not identify any concerns with fire preparedness or hazard abatement. TimberWest managed fire hazards during operations and at the completion of harvesting, as required in the WA. Hazard abatement methods included piling and burning slash piles or leaving some piles for wildlife use.

The WA<sup>v</sup> requires TimberWest to assess fire hazards at prescribed intervals, unless otherwise specified by an official or a qualified person. TimberWest had not conducted any hazard assessments, nor were they exempted from the requirement to do so.

Auditors found TimberWest is abating the hazard within the required time frames as its standard practice. However it cannot demonstrate that it has been diligent in assessing the hazard, which could be an issue in the future if a fire were to start in a TimberWest cutblock. As a result, this is an area requiring improvement.

All active operations had the required fire tools and operators had notified the authorities of their activities.

Subsequent to the audit, TimberWest is working with the Coastal Fire Centre to develop a fuel management plan. This plan, once approved, would exempt TimberWest from the requirement to complete site-specific fire hazard assessments.

## Audit Opinion

In my opinion, the operational planning, timber harvesting, road construction and maintenance, silviculture and fire protection activities carried out by TimberWest Forest Corporation on Tree Farm Licence 47 between August 1, 2012, and August 22, 2014, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations, as of August 2014. No opinion is provided regarding road deactivation.

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 this audit report.

Without qualifying my opinion, I draw attention to the *Wildfire Protection* section of this report, which describes an area requiring improvement regarding fire hazard assessments.

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(CEA)  
Director, Audits

Victoria, British Columbia  
January 19, 2015

# 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 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 2010, the Board randomly selected the Mackenzie district as a location for an audit. After assessing the activities within that area, we discovered that a large licensee 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, and we knew that some of the licence area is very remote, the new licence holder was selected for audit.

For BCTS audits, a district within 1 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 Canadian 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 week 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.

## ENDNOTES

---

<sup>i</sup> The *South Central Coast Order* was initially established in December, 2007 and was subsequently amended in March, 2009. The Order support the implementation of Ecosystem based management (EBM) by establishing land use objectives designed to protect important First Nations cultural values, support ecosystem integrity and provide environmental benefits by maintaining the diversity and abundance of organisms within the plan area. FRPA requires licensees in the Order's defined area to identify strategies and/or results in their forest stewardship plan that are consistent with the objectives of the Order, to implement the strategies and achieve the results. The Order defines certain resource interests and identifies the areas where the objectives for those interests apply. More information about the Order can be found at:  
<http://www.ilmb.gov.bc.ca/slrp/lrmp/nanaimo/cencoast/plan/objectives/index.html>

<sup>ii</sup> The Vancouver Island Land Use Plan was the first regional land use plan announced by the provincial government in June 1994, following two years of strategic planning by the Commission on Resources and Environment. The land use decision applied to Crown land on Vancouver Island, with the exception of Clayquot Sound. The Vancouver Island Land Use Plan Higher Level Plan Order was initially established in 2000 and was amended in 2002. The Order established resource management zones and resource management zone objectives within the area covered by the Vancouver Island Land Use Plan. Details regarding the Vancouver Island Land Use Plan Higher Level Plan Order can be found at:  
<http://www.for.gov.bc.ca/tasb/SLRP/plan90.html>

<sup>iii</sup> Ecosystem based management (EBM) is an adaptive approach to managing human activities that seeks to ensure the coexistence of healthy, fully functioning ecosystems and human communities. Commitments for EBM emerged from the Land and Resource Management Planning processes which began in 1997 for the Central Coast and in 2001 for the North Coast. Full implementation of EBM is planned for 2014, once a governance framework, human well-being policies and initiatives, conservation measures, adaptive management systems and flexibility provisions are in place, as defined by the Joint Land and Resource Forum. The guiding principles of EBM implementation are detailed in the *Coast Information Team Ecosystem-Based Management Planning Handbook* (March 2004) at: <http://www.citbc.org/c-ebm-hdbk-fin-22mar04.pdf>. For more information, the latest implementation update report can be found at:  
[http://archive.ilmb.gov.bc.ca/slrp/lrmp/nanaimo/central\\_north\\_coast/docs/EBM\\_Implementation%20Update\\_report\\_July%2031\\_2012.pdf](http://archive.ilmb.gov.bc.ca/slrp/lrmp/nanaimo/central_north_coast/docs/EBM_Implementation%20Update_report_July%2031_2012.pdf).

<sup>iv</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 cut blocks. FSPs normally have a term of five years.

### <sup>v</sup> **Wildfire Act and Wildfire Regulation: Hazard Assessment**

WA 7 (1) In prescribed circumstances and at prescribed intervals, a person carrying out an industrial activity or a prescribed activity on forest land or grass land or within 1 km of forest land or grass land must conduct fire hazard assessments.

WA 72 (3) An official may exempt a person from all or part of a regulation made under subsection (2), subject to conditions or alternative requirements the official may specify.

WR 11 (3.1) The prescribed intervals, at which a person described in section 7 (1) of the Act who is a qualified holder must conduct fire hazard assessments, are the intervals; (a) set out in subsection (2) or (3) of this section, as applicable, or (b) specified by a professional forester or a registered forest technologist.



**Forest  
Practices  
Board**

PO Box 9905 Stn Prov Govt

Victoria, BC V8X 9R1 Canada

Tel. 250.213.4700 | Fax 250.213.4725 | Toll Free 1.800.994.5899

For more information on the Board, please visit our website at: [www.bcfpb.ca](http://www.bcfpb.ca)