



**Forest
Practices
Board**

Forestry Audit: BC Timber Sales and Timber Sale Licence Holders

*Seaward-tlasta Business Area in the
North Island-Central Coast and Campbell River Natural
Resource Districts*

FPB/ARC/241

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Audit Results

Introduction

The Forest Practices Board is the public's watchdog for sound forest and range practices in British Columbia. One of the Board's roles is to audit the practices of the forest industry to ensure compliance with the *Forest and Range Practices Act* (FRPA) and the *Wildfire Act*.

As part of the 2020 Forest Practices Board audit program, the Board randomly selected the BC Timber Sales' (BCTS) Seaward-tlasta Business Area for audit. A map of the audit area appears on page 2.

This report explains what the Board audited and the results. Detailed information about the Board's compliance audit process is provided in Appendix 1.



BCTS operations in the North Island – Central Coast Natural Resource District. The area is typically steep and rugged terrain, and often isolated.

Background

BCTS operates on Northern Vancouver Island and the mainland, within the North Island – Central Coast Natural Resource District and a small portion of the Campbell River Natural Resource District.

This audit took place within the traditional territories of the following First Nations: Quatsino, Tlatlasikwala, Kwakiutl, 'Namgis, Nuxalk, Gwa'sala-'Nakwaxda'xw, Wuixinuxw, Heiltsuk, Kwikwasut'inuxw Haxwa'mis, Dzawada'enuxw, Gwawaenuk, Tlowitsis, Mamalilikulla, Da'naxda'xw/Awaetlala, Wei Wai Kum, and We Wai Kai. The Forest Practices Board would like to recognize the importance of their historical relationship with the land that continues to this day.

BCTS's operations on northern Vancouver Island extend from the Nimpkish River in the south to the north end of the island, and operations on the mainland extend from Knight Inlet north to Kimsquit and Klemtu north of Bella Bella. The main communities within the operating area on Vancouver Island are Port Hardy, Port McNeil, Port Alice and Woss. Sointula, Alert Bay, Bella Bella and Bella Coola are the main communities on the smaller islands and mainland east and north of Vancouver Island.

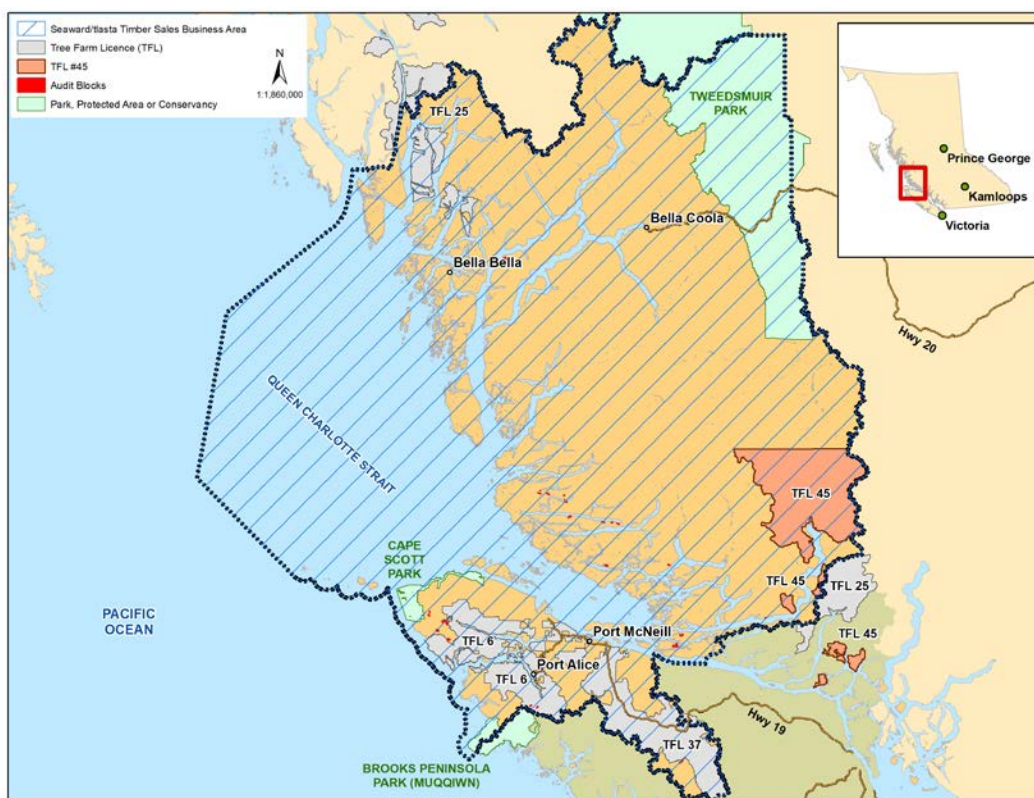
BCTS operates in remote and rugged areas, many of which are only accessible by boat or air. The operating areas contain complex ecological conditions that support a rich and diverse array of wildlife. Many species of resident and migratory birds, mammals and amphibians and reptiles are present in the area.

Rugged mountains and numerous inlets characterize the topography. The forests contain a mixture of hemlock, balsam and western red cedar, with lesser amounts of fir, spruce and yellow cedar.

BCTS manages its activities from Port McNeill, where staff prepare operational plans, auction timber sales, and issue timber sale licences (TSLs) and road permits. BCTS awards the successful bidder at each auction a TSL authorizing the holder to harvest the auctioned timber. The TSL holder, in turn, is responsible for fulfilling timber harvesting and road work associated with the licence, permit and operational plan obligations.

During the audit period, TSL holders harvested volume from portions of the North Island Timber Supply Area (TSA), Pacific TSA, Great Bear Rainforest North TSA, Great Bear Rainforest South TSA and Tree Farm Licence (TFL) 45. BCTS has an apportionment of 541 157 cubic metres per year from the four TSAs, and an additional 10 080 cubic metres per year from TFL 45. During the one-year audit period, TSL holders harvested about 300 000 cubic metres from BCTS’s apportionment.

Map of Audit Area



Audit Approach and Scope

This was a full scope compliance audit with a one-year timeframe. All activities that BCTS and TSL holders carried out between September 1, 2019, and September 30, 2020, were subject to audit.

BCTS is responsible for operational planning, including preparing forest stewardship plans (FSP)ⁱ and site plans, silviculture activities, major structure¹ maintenance, construction and deactivation, and most road construction, maintenance and deactivation outside of cutblocks.

ⁱ Major structure includes bridges and major culverts where:

- Bridge means a temporary or permanent crossing structure with a span length equal to or greater than 6 metres or an abutment height of 4 metres or greater.
- Major culvert has a pipe diameter of 2 metres or greater or a bottom arch with a span greater than 2.13 metres.

TSL holders are responsible for timber harvesting, fire protection, and most road construction, maintenance and deactivation within cutblocks.

Auditors assessed these activities for compliance with FRPA, the *Wildfire Act*, applicable regulations and legal orders. Auditor’s work included interviewing BCTS staff, reviewing the FSP and site plans, assessing silviculture records and conducting site visits with BCTS staff to review field practices. Sites were accessed by truck and by helicopter. Two forest professionals, one professional engineer, and a chartered professional accountant made up the audit team. The audit team was in the field from September 28 to 30, 2020.

The standards and procedures used to carry out this audit are set out in the Board’s *Compliance Audit Reference Manual, Version 7.1, July 2016*.

Planning and Practices Examined

BCTS Responsibilities

Operational Planning

Auditors assessed BCTS operations for compliance with legal obligations contained in FRPA, the *Wildfire Act*, and higher level plans. BCTS planned its activities under a FSP approved in 2017. Auditors examined the FSP and stand-level site plans to ensure they met legal requirements. Auditors also considered site plans during harvesting, road and silviculture field sampling to ensure that they accurately identified site conditions.

BCTS must comply with the legal obligations in the *Vancouver Island Land Use Plan Higher Level Plan Order (VILUP)* and six land use objective orders for its operations on the Vancouver Island portion of the business area, and the *Great Bear Rainforest Order (GBRO)* for its operations on the mainland portion of the business area. BCTS must also comply with requirements for managing established ungulate winter ranges, wildlife habitat areas, visuals and karst resources.

Road and Major Structure Construction, Maintenance and Deactivation

BCTS constructed, maintained and deactivated roads and major structures during the audit period. The major structure maintenance population included 268 bridges and 4 major culverts. Auditors reviewed 135 bridges and 2 major culverts.

Table 1. Population and Sample for Roads and Structures

ACTIVITY	POPULATION	SAMPLE
Road construction (FSR)	6.6 km	6.6 km
Road maintenance (FSR)	816.8 km	308.7 km
Road deactivation (FSR)	3.1 km	3.1 km
Bridge construction	8	6
Bridge & major culvert maintenance	272	137
Bridge removal	1	1

Silviculture Obligations and Activities

BCTS conducted planting and brushing activities, and had regeneration and free-growing obligations during the audit period.

Table 2. Population and Sample for Silviculture Activities and Obligations

OBLIGATIONS AND ACTIVITIES	POPULATION (cutblocks)	SAMPLE (cutblocks)
Planting	36	9
Brushing	3	2
Regeneration obligations (due or declared)	44	10
Free-growing obligations (due or declared)	35	15

Timber Sale Licensee Responsibilities

Timber Harvesting

During the audit period, 10 TSL holders harvested 34 cutblocks, covering 917 hectares. Auditors examined harvesting by 9 licensees on 18 cutblocks, totalling 599 hectares.

Road and Major Structure Construction, Maintenance and Deactivation

During the audit period, TSL holders constructed, maintained and deactivated roads, and constructed and deactivated major structures. TSL holders did not maintain any major culverts.

Table 3. Population and Sample for Road and Major Structure Activities

ACTIVITY	POPULATION	SAMPLE
Road construction	16.8 km	10.2 km
Road maintenance	3.5 km	3.5 km
Road deactivation	24.0 km	22.3 km
Bridge construction	2	1
Bridge removal	4	3

Wildfire Protection

Auditors examined fire hazard assessment and abatement practices and wildfire preparedness as part of the harvest sampling.

Table 4. Population and Sample of Wildfire Protection Activities

ACTIVITY	POPULATION (cutblocks)	SAMPLE (cutblocks)
Fire preparedness at active work sites	2	2
Fire hazard assessment	18	8
Fire hazard abatement	18	8

Findings

The audit found BCTS's and TSL holders' planning and practices complied with FRPA and the *Wildfire Act*, as of September 2020.

BCTS Responsibilities

Operational Planning

BCTS operates under an FSP approved in 2017. The FSP incorporated the objectives in the Orders that apply to forest practices in the audit area. BCTS maintained accurate documentation of planning and operational activities. The files were accessible and complete. Site plans were consistent with the FSP and addressed site-specific resources by accurately identifying and prescribing practices for resource features such as wildlife tree retention, riparian, wildlife, and soils.

BCTS completed assessments at the landscape and operational (cutblock) levels where required. BCTS did not harvest or construct roads within ungulate winter ranges or wildlife habitat areas. All harvesting was outside of mapped old growth management areas (OGMAs) on Vancouver Island and outside of landscape reserves in the GBRO operating areas. BCTS completed an a-spatial analysis to confirm that old forest objectives are being met in Vancouver Island landscape units where spatial OGMAs were not established, and in the GBRO operating areas where landscape reserves did not meet the entire old forest retention targets.

Auditors noted no issues with operational planning.

Road and Major Structure Construction, Maintenance and Deactivation

Road Construction

Road construction techniques varied from conventional balanced bench to full benching with end haul. BCTS followed the recommendations in terrain stability assessments, maintained natural drainage patterns and ensured that the roads were structurally sound and safe for industrial use.

Road Maintenance

Most of the roads BCTS is responsible for maintaining are considered wilderness roads.² BCTS adequately maintained the roads to retain the structural integrity of the road prism. All of the culverts examined were functional and BCTS managed water to maintain natural drainage patterns. Auditors reviewed roads in the Central Coast operating area, primarily from the air. Numerous road sections are old, heavily overgrown and inaccessible by vehicle. Auditors did not observe any road failures on these roads. Roads that were open were safe for industrial use, culverts and ditch lines were functional and natural drainage patterns were maintained.

Road Deactivation

Deactivated roads were marked with signs and adequately barricaded. BCTS removed culverts and maintained natural drainage.

Bridge Construction

Auditors did not identify any administrative or operational issues with the new structures sampled. All documentation was complete (e.g., general arrangement designs, structural drawings, fabrication

² Wilderness roads are roads not being used for industrial purposes. On these wilderness roads, BCTS is responsible for maintaining the structural integrity of the road prism and clearing width, and ensuring the drainage systems of the road are functional.

drawings, record drawings and construction assurance statements), accurate and compliant with legislation. The bridges reviewed in the field were well constructed and safe for industrial use.

Bridge and Major Culvert Maintenance

BCTS works in conjunction with the Regional Coastal Engineering Group³ to complete major structure maintenance and inspections. Within the Central Coast area, the majority of the structures are located on wilderness roads. BCTS adequately maintained bridges and culverts and posted load ratings for bridges or blocked them where applicable. Both major culverts assessed were functional.

Bridge Deactivation

Auditors examined the removal of one log bridge. The removal work was well done.

The operating area is very challenging with steep, difficult terrain requiring specialized construction techniques, intensive water management and continual maintenance to ensure that resource roads and bridges are safe for use. Auditors found all road-related activities were well done.

Silviculture Activities and Obligations

BCTS planted cutblocks with suitable tree species and stock within the required timeframes. It monitored and tended its plantations to ensure it met free-growing requirements. Cutblocks contained the range of healthy, well-spaced, acceptable trees necessary to meet free-growing requirements within the required periods. BCTS met its regeneration, free growing and annual reporting requirements.

Silviculture planning and practices were well done and auditors had no concerns.

Timber Sale Licensee Responsibilities

Harvesting

TSL holders conducted harvesting in accordance with the requirements of legislation and site plans. TSL holders used ground-based, cable and aerial harvest systems. They maintained natural drainage patterns, and achieved wildlife tree retention objectives. There are abundant streams and non-classified drainages within cutblocks. BCTS managed riparian areas using machine-free zones and vegetation management adjacent to streams. Soil disturbance was below the limit in the site plans. Auditors found no issues with harvesting.



Active harvesting operation in the Knight Inlet area.

³ The Regional Coastal Engineering Group is part of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development.

Road and Major Structure Construction, Maintenance and Deactivation

TSL holders are responsible for in-block roads and road sections connecting to forest service roads.

Road Construction

Road construction was well done. Construction techniques varied from conventional balanced bench to full benching with end haul. Auditors had no concerns with roads TSL holders constructed.

Road Maintenance

TSL holders adequately maintained roads to ensure the structural integrity of the road prism. The roads assessed were safe for industrial use, culverts and ditch lines were functional, and natural drainage patterns were maintained.

Road Deactivation

TSL holders deactivated in-block roads by removing culverts and bridges, and maintaining natural drainage.

Bridge Construction

Auditors reviewed one bridge constructed by a TSL holder. The bridge was well constructed and safe for industrial use. BCTS supplied all documentation for the new bridges to the auditors and the information was complete and accurate.

Bridge Deactivation

Auditors examined the deactivation and removal of two log bridges and one portable bridge during the audit field work. Stream channels had minimal disturbance in each case and the removal work was well done.

Auditors found no issues with TSL holders' road and bridge construction, maintenance or deactivation. All works was compliant with legislation and all required documentation was complete and accurate.

Wildfire Protection

Auditors evaluated all cutblocks in the harvest audit sample for compliance with the *Wildfire Act*. TSL holders completed fire hazard assessments for all eight cutblocks where an assessment was required and on another two cutblocks where harvesting is complete but the assessment was not yet due. Piling slash following harvest activities is the standard practice of all the TSL holders. The fire hazard assessments reviewed indicated that slash pile abatement was not required due to the low inherent fire hazard risk, wet ecosystem and remote location.



New road and bridge construction. The bridge is elevated to drain water away from the crossing.

Audit Opinion

In my opinion, the operational planning, timber harvesting, road construction, maintenance and deactivation, silviculture, and fire protection activities carried out by BC Timber Sales and its TSL holders in the Seaward-tlasta Business Area, between September 1, 2019, and September 30, 2020, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations, as of September 2020.

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 including adherence to the auditor independence standards and the ethical requirements, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Such an audit includes examining sufficient forest planning and practices to support an overall evaluation of compliance with FRPA, and *Wildfire Act*.



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Director, Audits

Victoria, British Columbia
January 11, 2021

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*. Compliance audits examine forest or range planning and practices to determine whether or not they meet FRPA and / or *Wildfire Act* requirements. The Board conducts about 10 compliance audits annually. Most of these are audits of agreement holders. The Board also audits the government's BC Timber Sales Program (BCTS).

Selection of auditees

To begin with, auditors randomly select an area of the Province, such as a natural resource 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, auditors choose the auditee(s) that best suits the selected risk and priorities. The audit selections are not based on past performance.

For example, in 2016, the Board randomly selected the Dawson Creek portion of the Peace Natural Resource District as a location for an audit. After assessing the activities within the area, it was noted that there were two community forest agreements that had not yet been audited by the Board. As the Board strives to audit an array of licence types and sizes each year, these two community forest agreements were selected for audit.

For BCTS audits, a district or timber supply area within 2 of the 12 business areas in the province are selected randomly for audit. Only those areas that have not been audited by the Board in the past five years are eligible for selection.

Audit Standards

The audits are conducted in accordance with auditing standards developed by the Board. These standards include adherence to the auditor independence standards and the ethical requirements, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour and 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. For smaller audits, the sample will include the full population.

Auditors' work includes interviewing licensee staff, reviewing applicable plans, assessing features from helicopters and measuring specific features like riparian reserve zone width using ground procedures. The audit teams generally spend three to five days in the field.

Evaluating the Results

The Board recognizes that compliance with the requirements of FRPA and the *Wildfire Act* 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 legal 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 *Wildfire Act* requirements.
- **Unsound practice** – where the auditor identifies a significant practice that, although in compliance with FRPA or the *Wildfire Act*, is not considered to be sound management.
- **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, these events 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 more non-compliance events.

If a significant breach of the legislation 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, Natural Resource Operations and Rural Development.

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.

The Board reviews the draft report 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 reviews representations from parties that may potentially be adversely affected, makes any necessary changes to the report, and decides if recommendations are warranted. The report is then finalized and released: first to the auditee and then to the public and government seven days later.

ENDNOTES

ⁱ 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 can have a term of up to five years.



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