



**Forest
Practices
Board**

Audit of Forest Planning and Practices – SN Forestry Operations Ltd.

Forestry Licence to Cut A82551

FPB/ARC/193

August 2016

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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* (WA).

For its first compliance audit of 2016, the Board randomly selected the Sea to Sky Natural Resource District for the location of a full scope compliance audit. Within the district, the Board selected Forestry Licence to Cut (FLTC) A82551, held by SN Forestry Operations Ltd. for audit.

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



Looking north up the Squamish River Valley.

Background

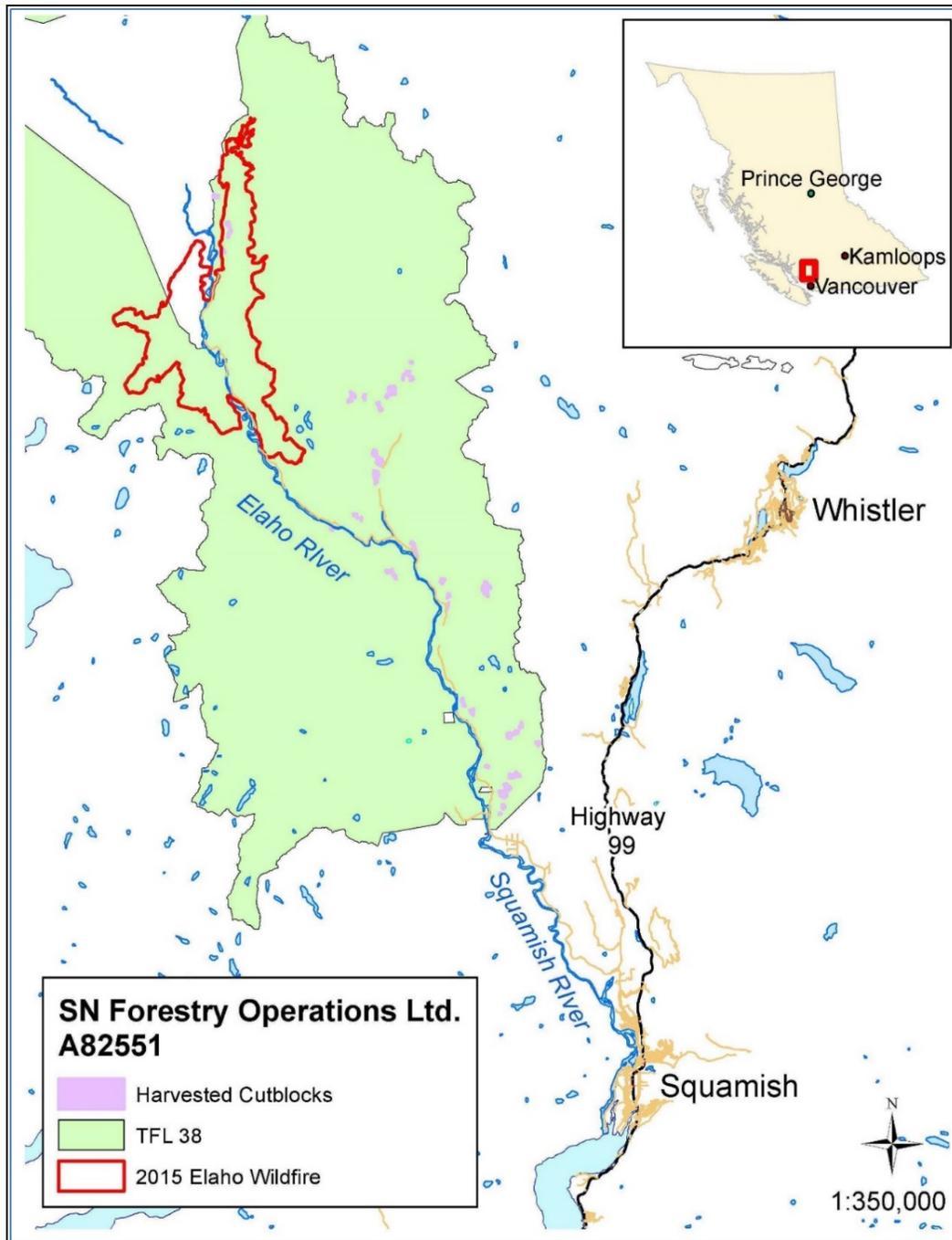
SN Forestry Operations Ltd. is owned by the Squamish Nation. The forestry licence to cut permits it to harvest 592 800 cubic metres of timber from within the boundaries of Tree Farm Licence (TFL) 38. The Squamish Nation also holds TFL 38.

The TFL is located north and west of Squamish. The Squamish and Elaho Rivers are the main rivers in the operating area. The terrain in the operating area varies from the flatter valley bottoms beside these rivers to steep and mountainous terrain typical of the coastal mountains. The main tree species are coastal western hemlock, subalpine fir, Douglas fir and western red cedar. Harvesting within the area has occurred since the 1950s, and some of these areas are now being harvested a second time.

In 2015, the Elaho wildfire burned over 12 500 hectares of TFL 38. Several cutblocks and plantations within the audit population were burned.

The operating area is subject to intensive car-based recreation, as it is accessible within a reasonable amount of time from the lower mainland. On a long weekend there can be more than 1000 people camping and recreating in the area. Four commercial white-water rafting businesses operate within TFL 38.

Map of the Audit Area



Audit Approach and Scope

This was a full scope compliance audit with a 25-month timeframe. All activities carried out between April 1, 2014, and June 3, 2016, were subject to audit, including harvesting, roads, silviculture, wildfire protection and associated planning.

Auditors assessed these activities for compliance with FRPA, the WA and applicable regulations. Auditors interviewed company employees and Ministry compliance and enforcement staff, reviewed forest stewardship plans and site plans, assessed silviculture records and conducted field visits. Sites were accessed by truck.

The standards and procedures used to carry out this audit are set out in the Board's *Compliance Audit Reference Manual, Version 7.0, September 2012*.

Two forest professionals, one professional engineer and a chartered professional accountant made up the audit team. The team was in the field from May 30 to June 3, 2016.

Planning and Practices Examined

Operational Planning

SN Forestry planned its activities in a 2007 forest stewardship planⁱ (FSP) for both TFL 38 and FLTC A82551. In 2013, the district manager extended the term of the plan to December 2017.

Government has established land use objectives for the operating area in the Sea to Sky land and resource management plan. Objectives are aimed at conserving and protecting certain heritage resources such as cultural sites and village sites, to support First Nations' food, social, ceremonial and spiritual use of the forest. There is also an objective to maintain the functional integrity of floodplain management areas.

There are also several government orders covering moose, mountain goat and deer winter range, habitat for species at risk, old growth management areas and visual quality. The FSP and stand-level site plans were examined to ensure that they met legislative requirements including, relevant orders and the land use plan. Auditors also considered site plans during harvesting, road and silviculture field sampling to ensure that they accurately identified site conditions.

Timber Harvesting

Auditors examined 33 of the 39 cutblocks harvested by SN Forestry.

Road Construction, Maintenance and Deactivation

During the audit period, SN Forestry constructed 14 kilometres of road and was responsible for maintaining 30 kilometres of road permit roads. Auditors examined all of the new road and 15 kilometres of the maintained roads. In-block seasonal road deactivation was considered part of the maintenance population. SN Forestry did not permanently deactivate any roads within the audit period.

SN Forestry did not construct any bridges and it was not responsible for maintaining any bridges during the audit period.

Silviculture Obligations and Activities

SN Forestry planted 47 cutblocks during the audit period. Regeneration obligations were due on 24 cutblocks. As the licence is relatively new, there are no free-growing obligations due yet.

Auditors examined 21 planted cutblocks and 12 cutblocks with regeneration obligations due.

There were no other silviculture activities in the audit period.

Wildfire Protection

Auditors encountered four active work sites and examined fire preparedness. Auditors examined fire hazard assessment and abatement activities and obligations on the 33 cutblocks in the harvest sample.

Findings

The audit found that SN Forestry's planning and activities complied with FRPA and the WA as of June 2016.

Operational Planning

The FSP contained the legally required information and addressed the Sea to Sky land and resource management plan and legal orders that apply to forest practices in the audit area. The site plans accurately identified resource features and specified how they should be protected. There were no concerns identified with operational planning.

Harvesting

Harvesting was conducted in accordance with the requirements of legislation and site plans. Soil disturbance was well managed and within limits, and natural drainage patterns were maintained. Wildlife tree patches were retained as prescribed and most blocks featured additional tree retention.

Harvesting activities were consistent with requirements.

Road Construction and Maintenance

Road Construction

Most of the access to harvest blocks was provided by short spurs, which were either new construction or reactivation of older roads. Road locations varied from lower valley bottom gentle terrain to higher elevation slopes with steeper grades and a high percentage of rock within the road prism, resulting in some difficult and challenging construction techniques.

Natural surface drainage was well maintained with adequate culvert sizing and placement.

Roads were constructed according to plans and there were no issues.

Road Maintenance

SN Forestry's roads were stable and natural surface drainage patterns were maintained and no road maintenance issues were identified.

Silviculture Activities and Obligations

SN Forestry plants at the first opportunity following harvest and it complied with the *Chief Foresters Guidelines for Seed Transfer*. Four previously planted cutblocks were burned in the 2015 Elaho wildfire and the licensee is currently requesting relief from government for free-growing obligations on those blocks, consistent with section 108 of FRPA. There were no concerns with planting or meeting regeneration obligations.

Wildfire Protection

Workers on all of the active worksites encountered were prepared for a wildfire with adequate fire tools and fire suppression systems where required. SN Forestry collects rainfall data at each worksite and prepares a custom fire danger rating based on data from appropriate weather stations.

A forest professional assesses the fire hazard for each cutblock and specifies the required treatment. For hazard abatement, SN Forestry piles and burns slash on completed cutblocks.

There were no issues with fire preparedness, hazard assessment or abatement.

Audit Opinion

In my opinion, the operational planning, timber harvesting, road construction and maintenance, silviculture, and fire protection activities carried out by SN Forestry Operations Ltd. on Forestry Licence to Cut A82551 between April 1, 2014, and June 3, 2016, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations as of June 2016. No opinion is expressed with respect to 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 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 the WA.



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Director, Audits

Victoria, British Columbia
August 19, 2016

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 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 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 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 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 from the timber harvesting population and all road sections constructed from 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.

Unsound Practice – where the auditor identifies a significant practice that, although found to be in compliance with FRPA or WA, is considered to not 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, 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.

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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