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Board Commentary

As part of its annual audit program, the Forest Practices Board conducted a full scope compliance audit of the Cheakamus Community Forest Limited Partnership (CCF) near Whistler, BC. The audit results are described in detail later in this report. This commentary provides the Board's views on an important issue identified in the audit involving a significant regulatory gap in the requirement to abate fire hazards following timber harvesting and forest fuel reduction treatments.

Auditors found hazards were not abated on 10 piles of logging slash created by the CCF. Two of the piles were located outside the boundary of the Resort Municipality of Whistler (RMOW) and the legal requirements under the *Wildfire Act* to abate hazards within two years of harvest apply. Failure to abate the hazards is a significant non-compliance with the *Wildfire Act*.

The remaining eight slash piles were located inside the RMOW boundary, where some requirements of the *Wildfire Act* are superseded by municipal bylaw 2201, which regulates things such as the use of campfires and fireworks in the municipality. The bylaw does not contain requirements to abate hazards following timber harvesting or forest fuel reduction treatments within a set time period. Because the *Wildfire Act* provisions do not apply inside the RMOW, this is not a non-compliance with the Act. However, the Board considers failure to abate fire hazards in a timely manner to be an unsound forest practice. Bylaw 2201 does not address when or how hazard abatement should occur following industrial operations and the Board believes this is a regulatory gap.

Failure to abate wildfire hazards puts public and private resources at significant risk. These slash piles are located in a part of the province where there is significant public use for recreation and other pursuits, which increases the risk of a human caused wildfire. If a fire starts, the values at risk in this area are enormous.

Wildfire hazards are increasing across the province. Harvesting as part of fuel management is increasingly common and good practices are needed to properly abate hazards.

Therefore, in accordance with section 131 of the *Forest and Range Practices Act* (FRPA), the Board is making the following recommendation:

1. The RMOW amend its bylaw 2201 to create a legal requirement for timely and effective hazard abatement following industrial operations that is equivalent or better than the requirements under the *Wildfire Act*.

In accordance with section 132 of FRPA, the Board requests that RMOW respond to this recommendation by October 31, 2022, indicating that:

- a) they accept the recommendations and describe how they will address or have addressed them; or
- b) they partially accept the recommendations and provide reasons why, and describe how they will address or have addressed them; or
- c) they do not accept the recommendations, and provide reasons why.

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 its 2021 compliance audit program, the Board randomly selected the Sea to Sky Natural Resource District as the location for a full scope compliance audit. Within the district, the Board selected community forest agreement K3V (CFA K3V), held by Cheakamus Community Forest Limited Partnership (CCF), 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.



Background

The Sea to Sky Natural Resource District is within the South Coast Region of the Ministry of Forests. The district is entirely located on the windward side of the Coast Range, where temperate rain forests of Howe Sound gradually transition to drier forests moving northward, away from the ocean. The topographic diversity ranges from wide valley bottoms to steep and rugged forested slopes to alpine habitats dominated by snow and ice. The most common tree species include Douglas-fir, western hemlock, western redcedar, red alder, amabilis fir, mountain hemlock, and yellow-cedar.

The communities of Squamish, Whistler and Pemberton are in the Sea to Sky Natural Resource District.

This audit took place within the territories of the Squamish and Lil'wat Nations. The Forest Practices Board recognizes their deep connection with the land that continues to this day.

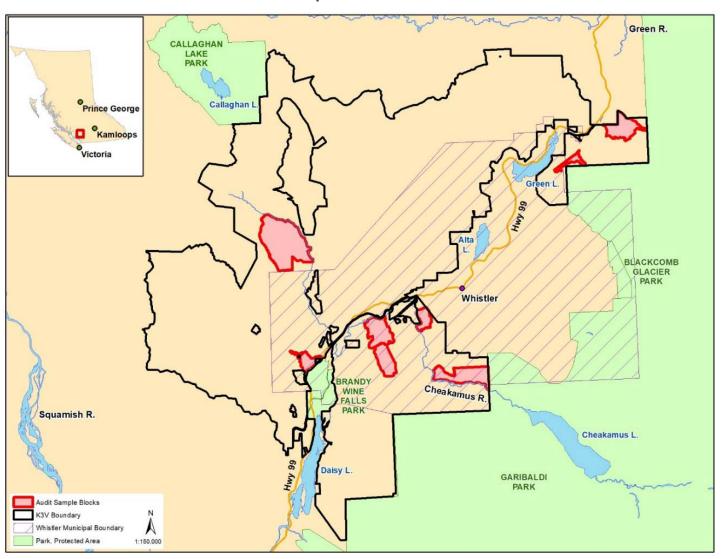
The Sea to Sky Natural Resource District is subdivided into 21 landscape units (LUs). CFA K3V is within the Whistler LU, and covers the area from Daisy Lake in the south to Wedgemount Creek and Showh Lakes in the north, mainly to the west of Highway 99.

The Sea to Sky Land & Resource Management Plan (LRMP) covers the entire natural resource district, providing broad land use direction for natural resource management in the plan area. CCF operates within the two land use zones designated for resource extraction in the LRMP. The LRMP also designates a third zone where forests are protected from resource extraction, which includes Callaghan Lake Park, Callaghan and Upper Soo Conservancies and Garibaldi Provincial Park (see map below).

In 2009, CCF was awarded CFA K3V, which is approximately 32 000 hectares in size. The initial allowable annual cut (AAC) was 20 000 cubic metres, and it increased to 21 000 cubic metres in March 2015. CCF harvested approximately 12 300 cubic metres during the two-year audit period, which is less than 30 percent of its allocation.

Tourism and recreation are important sectors in the local economy, and this is reflected in the management of CFA K3V. Whistler is world famous and people visit year-round. Important considerations for CCF in planning operations include maintaining or restoring the aesthetics and function of healthy forests. Another significant and ongoing challenge is managing access to recreational features.

Map of the Audit Area



Audit Approach and Scope

This was a full scope compliance audit with a two-year timeframe. Activities carried out in CFA K3V between August 1, 2019, and August 6, 2021, were eligible for audit. The activities included operational planning (involving the preparation of a forest stewardship plan (FSP)ⁱ and site plans), harvesting, road and crossing structure¹ construction, maintenance and deactivation, silviculture, and wildfire protection.

Auditors assessed these activities for compliance with FRPA, the Wildfire Act, and related regulations. Auditors' work involved interviewing the forestry manager of CFA K3V, conducting an office review of operational plans and silviculture records, and visiting sites to review field practices. Two forest professionals and one forest professional/ geoscientist made up the audit team. The audit team was in the field on August 4 to 5 and Sept 1, 2021.

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

Operational Planning

CCF operates within the area covered by the LRMP, approved by government in April 2008. The plan serves to assist government agencies and tenure holders by providing policy direction on the management of important land and resources in the LRMP area, and provides direction for the establishment of landscape level legal objectives. Since the plan was approved, legal orders have been issued to establish wildland areas, old growth management areas (OGMAs) and land use objectives for First Nations cultural places, First Nations cultural-management areas, floodplain-management areas, and riparian areas. CCF must meet the requirements of these orders.

The LRMP also identifies land use zones, and provides general management direction and objectives for old growth, access, cultural places, forest health, recreation, riparian areas, water, wildlife, visual quality, and wildfire to guide the management of resources across the landscape. LRMP direction is considered government policy, so CCF incorporated applicable elements of the LRMP into its operational plan, which is FSP 422.

Additionally, the Whistler Interpretive Forest (WIF) is within CFA K3V. The Order to Establish Objectives in the Whistler Interpretive Forest (1999) sets objectives for forest recreation and forest interpretation opportunities that CCF must address in FSP 422.

FSP 422 provides the link between on-the-ground forestry operations, government policy, and government objectives. CCF must ensure its' planning and practices are consistent with FSP 422.

Auditors examined FSP 422 for consistency with legal requirements, including content requirements, consistency with objectives set by the government, and LRMP direction.

Auditors also assessed whether site plans and other prescriptions accurately identified site conditions during harvesting, road, and silviculture field sampling.

¹ Crossing structures include bridges, log culverts, and culverts. A "major" structure meets one of these criteria:

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

Major culvert has a pipe diameter of 2 metres or greater or is a pipe arch or open bottom arch with a span greater than 2.13 metres.

Timber Harvesting

CCF harvested two cutblocks during the audit period, both of which were treatments to modify forest fuels to reduce the risk of a wildfire starting or spreading. Auditors examined both of these cutblocks.

Road and Crossing Structure Construction, Maintenance and Deactivation

CCF did not construct any roads or crossing structures.

CCF maintained 66.8 kilometres of road and 11 crossing structures during the audit period. Auditors examined 25.7 kilometres of the maintained roads and 10 of the maintained crossing structures.

CCF did not deactivate any roads or crossing structures in CFA K3V during the audit period.

Silviculture Obligations and Activities

CCF planted one cutblock, brushed one cutblock, and had four cutblocks with regeneration obligations due during the audit period. There were no cutblocks with free-growing obligations due during the audit period.

Auditors examined all of the above cutblocks for compliance with annual reporting requirements and the chief forester's seed transfer guidelines.

Wildfire Protection

Auditors did not examine fire preparedness because there were no active operations encountered.

In most cases, timber harvesting triggers legal obligations under the *Wildfire Regulation* to conduct fire hazard assessments and abate identified hazards. In this case, the two harvested cutblocks were fuel management treatments, where an assessment of the fuels was part of the treatment prescriptions prepared by a forest professional. These prescriptions serve as fire hazard assessments and, if operations followed the prescription, then the hazard was abated.

Auditors examined fire hazard abatement in all cutblocks in the harvest and silviculture populations. CCF abated fire hazards on one harvest cutblock. The other cutblock was not completed, nor were operations active, due to the extreme fire risk at the time of the audit.

Findings

Wildfire Protection

Section 12.1 of the *Wildfire Regulation*ⁱⁱ states that a party must abate a fire hazard within two years of the start of harvesting to ensure that the risk of a fire starting on the site does not increase, and fire hazards do not make a fire's behavior worse or suppression efforts more difficult.

CCF did not abate 10 slash piles within the two-year timeframe. These slash piles were located throughout the community forest. However, eight piles were within the boundaries of the Resort Municipality of Whistler (RMOW), where RMOW bylaws supersede sections of the *Wildfire Act* and its regulations.² Thus, the requirement of the *Wildfire Regulation* to abate a fire hazard does not apply to the eight piles.

Within the area that the *Wildfire Act* applies, CCF had not abated two slash piles more than three years after harvesting commenced. The slash piles were located next to the Wedge Creek Forest Service Road, which is frequented by recreation traffic. Unregulated camping is common in the area during warmer weather and a

² The *Wildfire Regulation* specifies eight municipalities in section 2.1 as prescribed municipalities. Section 4(2) of the *Wildfire Act* and section 2.2 of the *Wildfire Regulation* set out criteria that a municipal bylaw, by a prescribed municipality, must meet in order to supersede sections 5, 6 of the *Wildfire Act* and sections 4-13, 16 and 18-27 of the *Wildfire Regulation*. RMOW is a municipality prescribed in the *Wildfire Act* and its bylaw 2201 meets the criteria prescribed in the legislation. Although the bylaw satisfies the criteria, it is not equivalent to the legislation and does not address the requirement for when or how hazard abatement will occur following industrial operations.

makeshift campfire ring was located immediately next to these slash piles. The potential for these slash piles to catch fire is very high. If a fire were to start in the slash piles or adjacent standing timber, these slash piles could make fire suppression efforts more difficult, and fire behavior could intensify, placing public safety and property at risk. This is a significant non-compliance with section 12.1 of the *Wildfire Regulation*.

Subsequent to the field audit, CCF reported to auditors it has since burned all 10 slash piles to the satisfaction of the forestry manager, who considers these hazards abated.

Operational Planning

The FSP and fuel management prescriptions were consistent with FRPA requirements. The FSP incorporated the requirements of government orders.

CCF met legal objectives and LRMP management direction, as specified in FSP 422, by avoiding constrained areas, or appropriately tailoring its activities to be consistent with the orders and direction. CCF did not operate within any OGMAs during the audit period.

CCF documentation shows that it shares fuel management plans with First Nations and other stakeholders.

Auditors had no concerns with operational planning.

Timber Harvesting

CCF only conducted fuel management treatments during the audit period, which included thinning and pruning forest stands and removing slash along the Cheakamus Forest Service Road to reduce fuel density, lessen potential wildfire intensity and slow its rate of spread. Auditors found that pre-treatment planning and harvest execution met all legal requirements.

Harvest boundary locations excluded streams from the harvest areas. Logging contractors retained streamside vegetation and established machine-free zones within riparian management areas.

Practices were consistent with fuel management prescriptions and there were no issues with timber harvesting.

Road and Major Structure Construction, Maintenance and Deactivation

CCF did not build or deactivate any roads in the audit period. It is responsible for maintenance on 66.8 kilometres of road, of which 56.2 kilometres is considered wilderness status. These roads are not suitable for industrial traffic. All 11 crossing structures are on wilderness status roads.

Auditors found that road and structure maintenance complied with legislation for wilderness status roads. There were no issues with the 10.6 kilometres of active industrial roads.

Silviculture Activities and Obligations

CCF planted suitable tree species and stock, met regeneration requirements and planted seedlings consistent with the chief forester's seed transfer limits.

All annual reporting obligations were up to date.

Auditors found that silviculture activities and obligations complied with legislation.

Audit Opinion

In my opinion, except for the fire hazard abatement issue described below, the operational planning, timber harvesting, road maintenance, and silviculture activities carried out by Cheakamus Community Forest Limited Partnership on community forest agreement K3V between August 1, 2019, and August 6, 2021, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations, as of August 2021. There is no opinion provided for fire preparedness, or road and major structure construction or 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.

As described in the *Wildfire Protection* section of the report, the audit identified a significant non-compliance related to hazard abatement.

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 the Forest and Range Practices Act and the Wildfire Act.

Daryl Spencer, RPF

Manager, Audits and Investigations

Kelowna, British Columbia

May 2, 2022

Appendix 1: Forest Practices Board's Compliance Audit Process

Background

The Forest Practices Board conducts audits of government and agreement-holders under section 122 of the *Forest and Range Practices Act* (FRPA) and section 68 of the *Wildfire* Act. Compliance audits examine forest or range planning and practices to determine whether or not they comply with the applicable requirements of FRPA and the *Wildfire* Act. The Board conducts 6-8 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 the Board's strategic priorities, and the type of audit is determined. At this stage, auditors choose the auditee(s) that best suit(s) the selected risk and priorities.

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, auditors 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 1 of the 12 BCTS business areas in the province is selected randomly for audit. The audit selections are not based on past performance.

Only those licensees or BCTS operations 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, replanting, road construction, road deactivation). 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.

The auditors select a separate sample 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 also consider factors such as geographic distribution and values potentially affected by activities to ensure an adequate sample.

Auditors' work includes interviewing licensee staff, reviewing the auditee's applicable plans, reviewing applicable government orders, assessing some features from helicopters and measuring specific features like riparian reserve zone widths 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 responsible Minister(s).

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 opportunity to make representations allows 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

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 its FSP, BCTS is 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.

" Hazard abatement: qualified holders

- 12.1 (1) In this section, "abatement area" means each area within which the industrial activity or prescribed activity takes place in each consecutive 12 month period that occurs after the date the activity begins.
- (2) The following periods are prescribed as the periods in which a person described in section 7 (2) of the Act who is a qualified holder must abate fire hazards of which the person is aware or ought reasonably to be aware:
 - (a) for each abatement area within an area described in section 11 (2) (a) of this regulation, a period of 24 months, beginning on the date the industrial activity or prescribed activity begins in the abatement area,
 - (b) for each abatement area within an area other than an area described in section 11 (2) (a) of this regulation,
 - (i) a period of 30 months, beginning on the date the industrial activity or prescribed activity begins in the abatement area, or
 - (ii) the period specified by a professional forester or registered forest technologist.
- (3) A person required to abate a fire hazard under section 7 (2) of the Act who is a qualified holder must reduce the fuel hazard on the site of the industrial activity or prescribed activity
 - (a) as necessary to ensure that carrying out the activity
 - (i) does not increase the risk of a fire starting on the site, and
 - (ii) if a fire were to start, would not increase the fire behaviour or fire suppression associated with the fire, or
 - (b) as specified by a professional forester or registered forest technologist.



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