



**Forest
Practices
Board**

**Audit of Forest Planning and Practices
Fort St. James Community Forest
Corporation**

Community Forest Agreement K1D

FPB/ARC/188

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Board Commentary

The Forest Practices Board's annual audit program evaluates large and small forest and range licensees across the province. Since the inception of the community forest tenure, the Board has audited 13 of these community-held agreements. Eleven of those audits have found no significant issues. Overall, performance on community forests has been generally good.

The following audit of Community Forest Agreement (CFA) K1D held by the Fort St. James Community Forest Corporation, and managed by the KDL Group identifies issues related to operational planning, culvert construction, bridge construction and wildfire hazard assessments.

The Board wishes to recognize that KDL Group responded to the findings in a very positive, progressive and timely manner, exhibiting accountability and a commitment to stewardship and continuous improvement on behalf of the Fort St. James Community Forest Corporation.

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).

As part of its 2015 compliance audit program, the Board randomly selected the Fort St. James District for the location of a full scope compliance audit. Within the district, the Board selected Community Forest Agreement K1D for audit, which is held by the Fort St. James Community Forest Corporation.

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



Typical terrain in the Witch Lake operating area.

Background

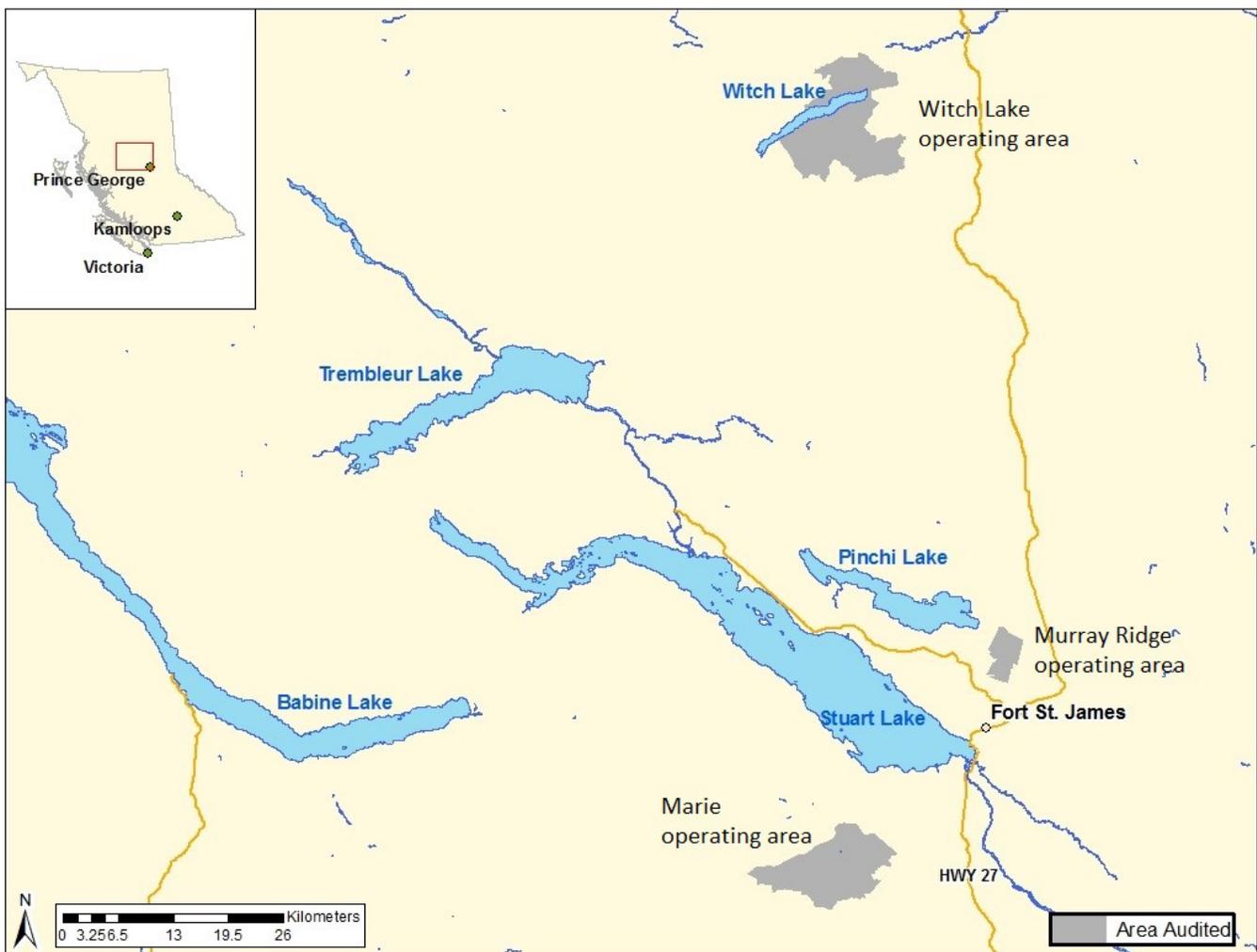
The Fort St. James Community Forest Corporation holds Community Forest Agreement K1D, which covers an area of 3 582 hectares and has an allowable annual cut of 23 895 cubic metres. The allowable annual cut was uplifted to 100 000 cubic metres from 2014 to 2016 to harvest beetle-killed wood.

The community forest is governed by the municipal council, consisting of the Mayor and four councillors. Council has contracted with KDL Group, to manage the community forest operations.

The community forest agreement tenure area is located near Fort St. James, and consists of three operating areas—Witch Lake, Murray Ridge and Marie.

The terrain in the operating areas varies from gentle, rolling hills in the Marie area, to low lying mountains in the Murray Ridge and Witch Lake areas. The areas feature two biogeoclimatic zones: sub-boreal spruce and Engelmann spruce-subalpine fir.

Map of the Audit Area



Audit Approach and Scope

This was a full scope compliance audit with a two-year timeframe. All activities carried out between August 1, 2013, and August 21, 2015, were subject to audit, including harvesting, roads, silviculture, wildfire protection and associated planning.

Auditors assessed these activities for compliance with FRPA, WA and applicable regulations. 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*.

Three forest professionals, one professional engineer and a chartered professional accountant made up the audit team. The team was in the field with KDL staff from August 17 to 18, 2015. Sites were accessed by truck and helicopter.

Planning and Practices Examined

Operational Planning

The Fort St. James Community Forest is managed by KDL and has two forest stewardship plansⁱ (FSPs) that cover the licence area. One FSP covers the Murray Ridge and Marie operating areas (collectively called the Cunningham Forest Development Unit (FDU)) and the other covers the Witch Lake FDU. Both FSPs have expiry dates of September 23, 2017, and the intention is to combine the two plans in the future.

There is a land and resource management plan (LRMP)ⁱⁱ and a sustainable resource management plan (SRMP)ⁱⁱⁱ for the Fort St. James District, and there have been legal orders established for aspects of these plans. The order establishing scenic areas is the only one that applies to the community forest's FDUs. The FSP also includes a district lakeshore management policy.

The FSPs and stand-level site plans were examined to ensure that they met legislative requirements, including relevant legal orders. Auditors also considered site plans during harvesting, road and silviculture field sampling to ensure that they accurately identified site conditions.

Timber Harvesting

KDL harvested seven cutblocks in the Witch Lake FDU and auditors examined all seven.

Road and Bridge Construction, Maintenance and Deactivation

During the audit period, KDL constructed 22 kilometres of road and was responsible for maintaining 114 kilometres of road. Auditors examined 15 kilometres of new road and 33 kilometres of maintained road. In-block seasonal road deactivation was included in the maintenance population. KDL did not permanently deactivate any roads within the audit period.

KDL constructed three bridges and one wooden box culvert and was responsible for maintenance of an additional four bridges. KDL also deactivated one bridge. Auditors examined all of these structures.

Silviculture Obligations and Activities

KDL planted 1 cutblock and had regeneration obligations due or declared on 13 cutblocks. There were no site preparation activities. The community forest licence has not been active long enough for any free-growing obligations and there were no brushing activities.

Auditors examined the 1 planted cutblock and 13 cutblocks with regeneration obligations due.

Wildfire Protection

Auditors examined fire hazard assessment and abatement activities, and obligations on the seven cutblocks in the harvest sample.

Audit Findings

The audit found that, except for operational planning and culvert construction, the activities complied with FRPA and the WA. The two activities with issues are discussed below.

The audit also identified unsound forest practices related to bridge construction and an area requiring improvement related to fire hazard assessments.

Operational Planning

Relevant LRMP and SRMP sections and legal orders were incorporated into the planning, and the FSP was consistent with legislated requirements. However, auditors noted the stocking standards in the site plans were not consistent with the stocking standards stated in the FSP. This is a non-compliance with FRPA section 10(2)(b),^{iv} which requires that site plans be consistent with the FSP. Although the inconsistency was a single issue, it was repeated in 11 of 20 site plans audited. In addition, several of the site plans audited were also missing information and were not signed and sealed. As these issues are pervasive, this is considered a significant non-compliance.

Subsequent to the audit, KDL told auditors it has since amended all site plans to be consistent with the stocking standards in the FSP.

Culvert Construction

During construction of a 5.4 metre wooden box culvert over a S4 fish-bearing stream, the stream channel was infilled with debris and soil.

Section 55^v of the *Forest Planning and Practices Regulation* requires a person who builds a stream crossing as part of a road to build the structure in a manner that protects the stream channel and bank immediately above and below the stream crossing. As a portion of this small stream immediately above the crossing was filled in, impacting the stream channel and bank, this non-compliance is considered significant.

Subsequent to the audit, KDL cleared the debris from the stream.

Bridge Construction

KDL constructed three bridges during the timeframe of this audit. Overall, the bridges were constructed appropriately and as-built drawings were prepared as required by legislation. However, the as-built drawings were lacking in detail and were not up to acceptable standards.^{vi} As-built drawings should:

- reference the structure identification (fabrication information), which properly determines the load rating;
- include footing base and deck elevations and actual attained road grades;
- include lock-block information if lock-blocks are used;
- include dimensions of sill timbers;
- identify scour protections / rip rap; and
- include record drawings that are signed and sealed by the consulting registered professional.

As both as-built drawings missed most of these items, this is considered an unsound practice.

Subsequent to the audit, KDL told the auditors it engaged an engineering firm to conduct a professional development training session for all KDL forestry staff to improve bridge construction practices.

Wildfire Protection

Auditors encountered one active harvesting operation and examined fire preparedness at the site. Workers were adequately prepared with the appropriate equipment for fighting a wildfire and met the requirements of the WA.

Auditors examined fire hazard assessment and abatement activities on the seven cutblocks in the harvesting population. KDL does not conduct formal fire hazard assessments. Its standard practice is to pile and burn roadside slash to abate any fire hazard.

The WA and the *Wildfire Regulation*, however, require licensees to assess the fire hazard, including the fuel hazard and the associated risk of a fire starting or spreading. Furthermore, the licensee must provide a copy of a fire hazard assessment to an official when requested.^{vii}

In this case, KDL is abating the hazard as a standard practice. However, it cannot demonstrate that it has been diligent in assessing the hazard, which is a non-compliance with legislation. This non-compliance is not considered significant, since fire hazards are being abated in an effective and timely manner. As a result, this is an area requiring improvement.

Subsequent to the audit, KDL told the auditors it has since completed hazard assessments on all blocks and now has a system in place to track assessments.

Harvesting

Harvesting was conducted in accordance with the requirements of legislation and site plans, and no issues were noted.

Road and Bridge Construction, Maintenance and Deactivation

Other than the issues noted above in *Culvert Construction* and *Bridge Construction* sections, there were no concerns noted with respect to road construction and maintenance, or bridge construction, maintenance or deactivation.

Silviculture Activities and Obligations

KDL had one block in the Murray Ridge area that was planted during the audit period and no concerns were noted.

For regeneration obligations, other than the issues noted above in the *Operational Planning* section, reporting was adequate and no concerns were noted in the field portion of this audit.

Audit Opinion

In my opinion, except for the issues identified below, the operational planning, timber harvesting, road construction and maintenance, silviculture and fire protection activities carried out on CFA K1D, held by the Fort St. James Community Forest Corporation, between August 1, 2013, and August 21, 2015, complied in all significant respects with the requirements of the *Forest and Range Practices Act*, the *Wildfire Act* and related regulations, as of August 2015. 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.

As described in the *Operational Planning* section of the report, the audit identified a significant non-compliance related to stocking standard inconsistency between the FSP and site plans.

As described in the *Culvert Construction* section of the report, the audit identified a situation of significant non-compliance related to not protecting a stream channel.

Without further qualifying my opinion, I draw attention to the *Bridge Construction* section of the report, which identifies unsound forest practices related to the preparation of as-built drawings.

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

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 CPA, CA, EP(CEA)
Director, Audits

Victoria, British Columbia
April 13, 2016

Appendix 1: Forest Practices Board Compliance Audit Process

Background

The Forest Practices Board conducts audits of government and range 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 range agreement holders. This section describes the process for selecting range agreement holders to audit. The Board also audits the government's BC Timber Sales Program (BCTS). This section describes the process for selecting range 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 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.

Unsound Practice – where the auditor identifies a significant practice that, although found to be in compliance with FRPA or WA, 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, 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

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 cutblocks. FSPs can have a term of up to five years.

ⁱⁱ Link to the Fort St. James LRMP: https://www.for.gov.bc.ca/tasb/slrp/pdf/LRMP/Fort%20St%20James_LRMP.pdf

ⁱⁱⁱ Link to the Fort St. James SFMP: <https://www.for.gov.bc.ca/tasb/slrp/plan96.html>

^{iv} **Site plans for cutblocks and roads**

10 (1) Except in prescribed circumstances, the holder of a forest stewardship plan must prepare a site plan in accordance with prescribed requirements for any

- (a) cutblock before the start of timber harvesting on the cutblock, and
- (b) road before the start of timber harvesting related to the road's construction.

(2) A site plan must

- (a) identify the approximate locations of cutblocks and roads,
- (b) be consistent with the forest stewardship plan, this Act and the regulations, and
- (c) identify how the intended results or strategies described in the forest stewardship plan apply to the site.

(3) A site plan may apply to one or more cutblocks and roads whether within the area of one or more forest stewardship plans.

^v **Stream crossings**

55 (1) An authorized person who builds a stream crossing as part of a road, a temporary access structure or permanent access structure must locate, build and use the crossing in a manner that

- (a) protects the stream channel and stream bank immediately above and below the stream crossing, and
- (b) mitigates disturbance to the stream channel and stream bank at the crossing.

(2) An authorized person who builds a stream crossing as part of a temporary access structure must remove the crossing when it is no longer required by the person.

^{vi} Acceptable Standards as per Section 4.5 As Built/Record Drawings and Other Documentation of the APEGBC & ABCFP - June 2014 *Guidelines for Professional Services in the Forest Sector—Crossings* (<https://www.apeg.bc.ca/getmedia/97dcbad3-5482-416a-9bc0-55b3c662e71a/APEGBC-Guidelines-for-Forest-Sector-Crossings.pdf.aspx>)

^{vii} **Wildfire Act: Hazard assessment and abatement**

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.

(2) A person, other than a person who is in a prescribed class of persons referred to in subsection (2.1), carrying out an industrial activity or a prescribed activity, must, within a prescribed time period and to the prescribed extent, abate a fire hazard of which the person is aware or ought reasonably to be aware.

Wildfire Regulation: Hazard Assessment

11 (4) A person required to conduct a fire hazard assessment under section 7 (1) of the Act must

- (a) ensure that the fire hazard assessment includes an assessment of the fuel hazard and its associated risk of a fire starting or spreading, and
- (b) provide a copy of the fire hazard assessment when requested to do so by an official.



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