

Audit of Forest Planning and Practices

**Revelstoke Community Forest
Corporation**

Tree Farm Licence 56



FPB/ARC/61

May 2004

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Report from the Board

A. Report from the Board

This is the Board's report on a compliance audit of Tree Farm Licence 56, held by Revelstoke Community Forest Corporation (RCFC). The licence is area-based and is located approximately 50 kilometres north of the City of Revelstoke in the Columbia Forest District (see map on page A-3).

The Report from the Auditor (Part C) provides further details on the location of the licence, the scope of the audit and the audit findings. The Report from the Auditor is based on the audit procedures described in Part B.¹

The audit examined RCFC's operational planning; timber harvesting; road construction, maintenance and deactivation; silviculture; and fire protection practices for the period from July 1, 2002, to July 18, 2003.

The Board considered the Report from the Auditor along with supporting audit evidence, and representations from RCFC and the Board affirms the auditor's report. With the exception of protection activities, RCFC's forest planning and practices complied with Code requirements in all significant respects.

The Board is very encouraged with RCFC's performance with meeting the planning process undertaken in the Revelstoke community, known locally as the Minister's Advisory Committee Plan. This plan addresses a range of values, including objectives for managing biodiversity and caribou, and is the product of strong community involvement in land use planning. The Board notes that RCFC has met its management plan commitments to manage for the principles and values in the MAC Plan. In effect, the auditee has committed to, and through the audit was found to be, adhering to this plan, which is presently government policy and not a legal obligation.

However, the audit did identify a significant non-compliance involving protection activities, resulting from deficiencies in firefighting equipment, fire-preparedness training and the fire-preparedness plan. While none of these deficiencies are in themselves significant, collectively they show a sufficient gap in meeting Code protection requirements to oblige the Board to make comment. Both the auditor and RCFC correctly observed that these deficiencies did not

¹ Part B of this document provides background information on the Board's audit program and the process followed by the Board in preparing its report.

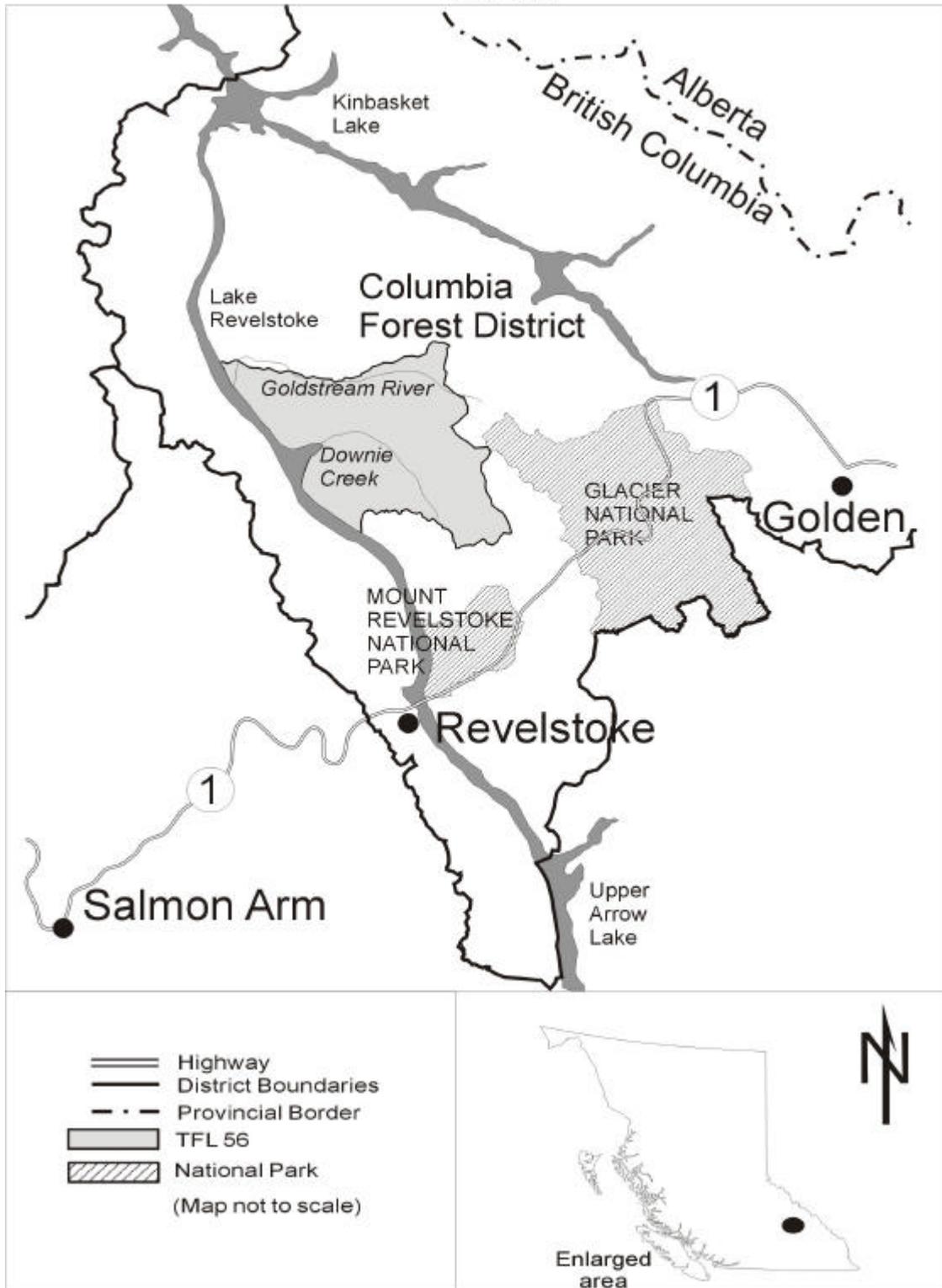
constitute a serious risk of environmental harm. It is important, and a simple process from the Board's perspective, to ensure that such basic regulatory requirements are met during fire season, especially considering the apparent increasing risk of fire in the province.

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Bruce Fraser, PhD
Chair, Forest Practices Board

May 10, 2004

**Audit of Revelstoke Community
Forest Corp
TFL 56**



Forest Practices Board Compliance Audit Process

B. Forest Practices Board Compliance Audit Process

Background

The Forest Practices Board conducts audits of government and agreement-holders for compliance with the *Forest Practices Code of British Columbia Act* and regulations (the Code). The Board has the authority to conduct these periodic independent audits under section 176 of the *Forest Practices Code of British Columbia Act* (the Act). Compliance audits examine forest planning and practices to determine whether or not they meet Code requirements.

The Board undertakes both “limited scope” and “full scope” compliance audits. A limited scope audit examines selected forest practices (e.g., road construction, maintenance and deactivation; timber harvesting; or silviculture) and the related operational planning activities. A full scope audit examines all operational planning activities and forest practices.

The Board determines how many audits it will conduct in a year, and what type of audits (limited or full scope), based on budget and other considerations. The Board audits agreement-holders who have forest licences or other tenures under the *Forest Act* or the *Range Act*. The Board also audits government’s BC Timber Sales program (BCTS), which is administered by Ministry of Forests’ timber sales offices. Selection of agreement-holders and BCTS programs for audit is done randomly, using a computer program, to ensure a fair, unbiased selection of auditees.

Audit Standards

Audits by the Forest Practices Board are conducted in accordance with the auditing standards developed by the Board. These standards are consistent with generally accepted auditing standards.

The audits determine compliance with the Code based on criteria derived from the *Forest Practices Code of British Columbia Act* and its related regulations. Audit criteria are established for the evaluation or measurement of each practice regulated by the Code. The criteria reflect judgments about the level of performance that constitutes compliance with each requirement.

The standards and procedures for compliance audits are described in the Board’s *Compliance Audit Reference Manual*.

Audit Process

Conducting the Audit

Once the Board selects an audit and decides on its scope (limited scope or full scope), the audit period and the staff and resources required to conduct the audit are determined. Board staff also meet with the party being audited to discuss the logistics of the audit before commencing the work.

All the activities carried out during the period subject to audit are identified; for example, harvesting or replanting sites and building or deactivating road sections. The items that make up each forest activity are referred to as a “population.” For example, all sites harvested form the “timber harvesting population.” All road sections constructed form the “road construction population.” The populations are then sub-divided based on factors such as characteristics of the sites and potential severity of the consequences of non-compliance on the sites.

For each population, the auditors choose the most efficient means of obtaining information to conclude whether there is compliance with the Code. Because of limited resources, auditors usually rely upon sampling to obtain audit evidence, rather than inspecting all activities.

Individual sites and forest practices within each population have different characteristics, such as the type of terrain or type of yarding. Each population is divided into distinct sub-populations on the basis of common characteristics (e.g., steep ground vs. flat ground). A separate sample is 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 the sub-population where the risk of non-compliance is greater.

Audit work in the field includes assessments from the air using helicopters and intensive ground procedures, such as measuring specific features like road or riparian reserve zone width. The audit teams generally spend one to two weeks in the field.

Evaluating the Results

The Board recognizes that compliance with the many requirements of the Code 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.

Auditors collect, analyze, interpret and document information to determine the audit results. The audit team, composed of professionals and technical experts, first determines whether forest practices are in compliance with Code requirements. For those practices considered to not be in compliance, the audit team then evaluates the degree to which the practices are judged not in compliance. The significance of the non-compliance is determined based on a number of criteria, including the magnitude of the event, the frequency of its occurrence and the severity of the consequences.

As part of the assessment process, auditors categorize their findings into the following levels of compliance:

Compliance – where the auditor finds that practices meet Code requirements.

Not significant non-compliance – where the auditor, upon reaching a non-compliance conclusion, determines that a non-compliance event, or the accumulation and consequences of a number of non-compliance events, is not significant and is not considered worthy of reporting.

Significant non-compliance – where the auditor determines that the event or condition, or the accumulation and consequences of a number of non-compliance events or conditions, 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 the non-compliance. A significant breach can also result from the cumulative effect of a number of non-compliance events or conditions.

Identification of a possible significant breach requires the auditor to conduct tests to confirm whether or not there has been a breach. 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 Ministers of Forests, Energy and Mines, and Water, Land and Air Protection.

Reporting

Based on the above evaluation, the auditor then prepares the “Report from the Auditor” for submission to the Board. The party being audited is given a draft of the report before it is submitted to the Board so that the party is fully aware of the findings. The auditee is also kept fully informed of the audit findings throughout the process, and is given opportunities to provide additional relevant information and to ensure the auditor has complete and correct information.

Once the auditor submits the 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 to the public and government. The representations allow parties that may potentially be adversely affected to present their views to the Board.

At the discretion of the Board, representations may be written or oral. The Board will generally decide on written representations, unless the circumstances strongly support the need for an oral hearing.

The Board then reviews the report from the auditor and the representations from parties that may potentially be adversely affected before preparing its final report, which includes the Board’s conclusions and, if appropriate, recommendations.

If the Board’s conclusions or recommendations result in newly adversely affected parties or persons, additional offers of representations would be required.

Once the representations have been completed, the report is finalized and released: first to the auditee and then to the public and government.

Report from the Auditor

C. Report from the Auditor

1.0 Introduction

As part of the Forest Practices Board's 2003 compliance audit program, Tree Farm Licence (TFL) 56 was selected for audit from the population of major licences within the Southern Interior Forest Region. The licence, held by the Revelstoke Community Forest Corporation (RCFC), was selected randomly and not on the basis of location or level of performance.

TFL 56 is an area-based licence, located approximately 50 kilometres north of the City of Revelstoke in the southern portion of the Goldstream drainage and the entire Downie Creek drainage, in the Columbia Mountains. The TFL consists of a gross land base of 120,000 hectares, of which 59,000 hectares are forested. The timber harvesting land base is 33,700 hectares, including 12,000 hectares that are reserved to meet wildlife and biodiversity requirements. The allowable annual cut is set at 88,520 cubic metres per year, which



includes 10,000 cubic metres per year for timber above the 1994 operability line, i.e. in areas of forestland previously considered physically or economically inaccessible. Also included on the TFL is a BC Timber Sales Program cut of 12,000 cubic metres per year, which was not audited. RCFC estimate that it harvested approximately 88,000 cubic metres during the audit period.



The climatic conditions in the interior wet belt are favourable for tree growth, and have produced stands of cedar, hemlock, spruce and balsam along with minor components of Douglas fir and white pine. The area is used for a variety of outdoor recreation pursuits from nature study through to snowmobiling and mountain climbing. Wildlife on TFL 56 includes populations of mountain caribou, grizzly bear, and wolverines, as well as moose, deer, mountain goat, black bear and wolves, Heli-skiing and heli-hiking are popular activities in the area, and two ski-lodges are

located adjacent to the TFL. This wide variety of resources and resource users necessitates a strong commitment from RCFC, reflected in its strategic planning documentation and

practices, to build on its community structure and manage the land base for all users and all values.

Higher Level Plans

In July 1997, the government approved the *Kootenay-Boundary Land Use Plan* (KBLUP) implementation strategy, and has since designated components a higher level planⁱ (HLP) under the Forest Practices Code. However, despite being in the land base covered by the KBLUP, TFL 56 is not subject to the requirements of the HLP. The community in Revelstoke underwent a land use planning process for their immediate area, and devised the Revelstoke and Area Land Use Planning Recommendations, known as the Minister's Advisory Committee, or MAC Plan, which delineated important areas and management goals for mountain caribou habitat, biodiversity corridors, winter ungulate range and other forest values. Although endorsed by government, the MAC Plan is not yet approved as an HLP. The only HLPs in effect for TFL 56 are plans for recreation areas, the Keystone Standard Basin Local Resource Use Plan, and the Lake Revelstoke Reservoir Integrated Recreation Plan.

Under Section 35 of the *Forest Act*, a management plan is required prior to a TFL being awarded. The purpose of a management plan is to identify, and propose for approval by the chief forester, the management objectives for the timber and non-timber resources within the TFL and the related strategies to achieve those objectives. The management plan is a strategic five-year plan, and operations conducted under the TFL must be consistent with this plan's objectives and strategies. The values reflected in the MAC Plan have been included in RCFC's management plan for TFL 56, which now stands at version #3.

The provincial deputy chief forester approved management plan #3 for TFL 56 in April 2001, and ensured that the total cut level remained at 100,000 cubic metres per year for the following 5 years. The combination of a cut level that includes the commitment to harvest above the old operability line, and old growth retention combined with RCFC's strong biodiversity considerations, is exerting pressure on RCFC to log in non-traditional areas.

2.0 Audit Scope

Scope

The audit examined RCFC's planning, field activities and obligations in the areas of operational planning (including the forest development plan,ⁱⁱ silviculture prescriptions,ⁱⁱⁱ and site plans^{iv}); timber harvesting; silviculture; fire protection; and the construction, maintenance and deactivation of roads. These activities were assessed for compliance with the *Forest Practices Code of British Columbia Act* and related regulations (the Code). The period for which activities were examined was July 1, 2002, to July 18, 2003.

The activities and obligations carried out by RCFC during the audit period, and therefore subject to audit, were:

- harvesting of 21 cutblocks
- design and layout of 2 road sections totalling 0.7 kilometres
- construction of 11 road sections totalling 11.4 kilometres
- maintenance of 469.7 kilometres of road, involving activities such as road surfacing and cleaning culverts and ditches
- permanent and semi-permanent deactivation of 11 road sections totalling 9.3 kilometres
- maintenance of 17 bridges, including 7 bridges on forest service roads
- planting on 17 cutblocks
- brushing on 67 cutblocks
- regeneration obligations for 110 cutblocks
- free-growing obligations for 42 cutblock
- protection activities including fire-preparedness planning, fuel management and hazard abatement

The activities carried out in the audit period were approved in RCFC's 2001 - 2005 forest development plan (FDP). The term of the FDP approval was extended by one year, through an extension amendment, to June 21, 2004. The audit scope included an assessment of the FDP for compliance with the Code, and consistency of the values in the FDP for TFL 56 with the MAC Plan, the management plan for TFL 56, and the objectives of the designated higher level plans for recreation areas.

RCFC did not construct any bridges during the audit period.

Section 3 of this report describes the audit of these activities and the audit results. The Board's audit reference manual, *Compliance Audit Reference Manual, Version 6.0, May 2003*, sets out the standards and procedures that were used to carry out this audit.

3.0 Audit Results

Planning and practices examined

The audit work on selected roads and cutblocks included ground-based procedures and assessments from the air using a helicopter. The audit examined:

- harvesting of 21 cutblocks and related silviculture prescriptions and site plans
- construction of 11 road sections totalling 10.9 kilometres
- maintenance of 118.2 kilometres of road
- permanent and semi-permanent deactivation of 8 road sections totalling 7.9 kilometres
- maintenance of 10 bridges
- planting on 2 cutblocks

- brushing on 8 cutblocks
- regeneration obligations for 11 cutblocks
- free-growing obligations for 12 cutblocks
- protection activities including fire-preparedness planning, fuel management and hazard abatement

The audit included assessing the 2001-2005 forest development plan for compliance with the Code and consistency with objectives set in the Revelstoke and Area Land Use Planning Final Recommendations and the TFL 56 management plan.

Overall Findings

The audit found that RCFC's planning and field activities complied, in all significant respects, with Code requirements for operational planning; timber harvesting; silviculture; and road construction, maintenance and deactivation activities.

The audit identified a situation of significant non-compliance related to firefighting equipment, training and preparedness.

During the audit, five industrial work sites were inspected for firefighting tools and equipment. At four of the sites inspected, firefighting tools and equipment were not sufficient to meet the requirements of the Forest Practices Code. When considered individually, the missing fire tools would not be considered as significant; however, from a program level, the deficiencies accumulate to a pervasive condition for RCFC. The deficiencies included a lack of shovels and pulaskis, one missing and one discharged fire extinguisher and a missing hand pump. At one site, neither the equipment operator nor the assistant had the required training. In addition, the fire preparedness plan was missing key requirements and the central fire tool cache was missing tools necessary to meet Code standards. Firefighting tools and equipment are required to be on-site during the fire season, from April 1 to October 30, and the plan and the cache are required to be operational. Overall, the equipment, central fire cache and plan deficiencies were considered significant, given the pervasiveness of the non-compliances, and the requirements of the legislation.

4.0 Audit Opinion

In my opinion, except for the significant non-compliance described below, the operational planning; timber harvesting; road construction, maintenance and deactivation; and silviculture activities carried out by Revelstoke Community Forest Corporation on Tree Farm Licence 56, from July 1, 2002, to July 18, 2003, were in compliance, in all significant respects, with the requirements of the Forest Practices Code as of July 2003.

As noted in section 3, the audit identified a situation of significant non-compliance involving protection activities. There were shortages in the level of required firefighting equipment on site and in the central tool cache, as well as a lack of training and deficiencies in the fire-preparedness plan.

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.

Sections 2 and 3 of this report from the auditor describe the basis of the audit work performed in reaching this opinion. 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 the Code.

A handwritten signature in black ink, appearing to read "Grant Loeb". The signature is fluid and cursive, with the first name "Grant" and last name "Loeb" clearly distinguishable.

Grant Loeb RPF
Auditor of Record
Victoria, British Columbia

March 26, 2004

ⁱ A higher level plan is a forest resource management objective that is established as legally binding by a written order. The objective applies to a resource management zone, landscape unit, sensitive area, recreation site, recreation trail, or interpretive forest site. Higher level plans are a provision of the *Forest Practices Code of British Columbia Act* that give direction to operational plans.

ⁱⁱ A forest development plan is an operational plan that provides the public and government agencies with information about the location of proposed roads and cutblocks for harvesting timber over a period of at least five years. The plan must specify measures that will be carried out to protect forest resources. It must also be consistent with any higher level plans. Site-specific plans are required to be consistent with the forest development plan.

ⁱⁱⁱ A silviculture prescription is a site-specific operational plan that describes the forest management objectives for an area to be harvested (a cutblock). The silviculture prescriptions examined in the audit are required to describe the management activities proposed to maintain the inherent productivity of the site, accommodate all resource values, including biological diversity, and produce a free-growing stand capable of meeting stated management objectives. Silviculture prescriptions must be consistent with forest development plans that encompass the area to which the prescription applies.

^{iv} A site plan is a site specific plan that is required in place of a silviculture prescription as of December 17, 2002, except where there is already an existing silviculture prescription. The site plan contains many of the same elements as a silviculture prescription and is designed to identify resource values and define what a free-growing stand will be on that site. However, it is not an operational plan under the Code and does not require review or approval by government to be implemented.