

Audit of Range Planning and Practices – Cascades District

Range Agreements for Grazing RAN076722, RAN076723, RAN076728, RAN076729, RAN077096

FPB/ARC/186 March 2016

Table of Contents

| Introduction | . 2 |
|---|-----|
| Audit Results – RAN076722 | . 4 |
| Background | ٨ |
| Audit Approach and Scope | |
| Planning and Practice Requirements Examined | |
| | |
| Audit Findings | |
| Audit Opinion | . S |
| Audit Results – RAN076723 | . 6 |
| Background | . 6 |
| Audit Approach and Scope | . 6 |
| Planning and Practice Requirements Examined | . 6 |
| Audit Findings | . 7 |
| Audit Opinion | . 7 |
| Audit Results – RAN076728 | . 9 |
| Background | Q |
| Audit Approach and Scope | |
| Planning and Practice Requirements Examined | |
| Audit Findings | |
| Audit Opinion | |
| • | |
| Audit Results – RAN076729 | 12 |
| Background | 12 |
| Audit Approach and Scope | |
| Planning and Practice Requirements Examined | |
| Audit Findings | |
| Audit Opinion | 14 |
| Audit Results – RAN077096 | 16 |
| Background | 16 |
| Audit Approach and Scope | |
| Planning and Practice Requirements Examined | |
| Audit Findings | |
| Audit Pindings | |
| | 10 |
| Appendix 1: Forest Practices Board Compliance Audit Process | 19 |

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 planning and practices of range agreement holders to ensure compliance with the *Forest and Range Practices Act* (FRPA).

As part of the Forest Practices Board's 2015 compliance audit program, the Board randomly selected the Cascades District as the location for a full scope compliance audit. Within the district, the Board selected five range agreements for grazing (RAN076722, RAN076723, RAN076728, RAN076729 and RAN077096).

With the exception of RAN076722, the range agreement areas are located southeast of Merritt, in close proximity to Highway 97C (Okanagan Connector), between Merritt and Aspen Grove (see Figure 1). RAN076722, the smallest of the range agreements audited, is located about 10 kilometres north of Princeton (see inset map in Figure 1).

In 2015, the four range agreement areas located near Merritt experienced a severe drought. The drought has reduced available forage and water for livestock. It is likely that severe drought conditions will continue to be a reality for the ranching sector in this and other areas of BC, suggesting that proactive steps, like advanced planning around stocking numbers and watering facilities, will be necessary to meet FRPA's requirements for the protection of the range resource.

This report explains what the Board audited and the findings for each range agreement. Detailed information about the Board's compliance audit process is provided in Appendix 1.

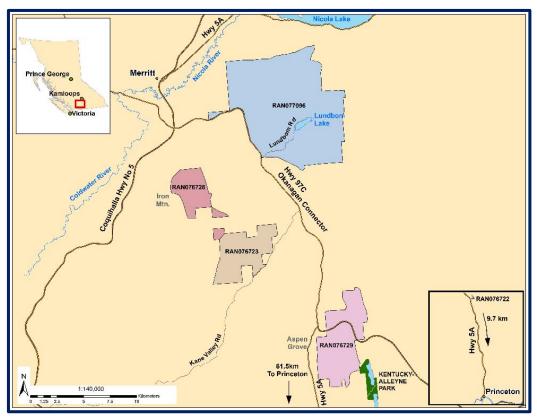


Figure 1. Map of Range Agreements Audited

Definitions of Common Terms

The following are definitions of some common terms used in this audit report.

Animal unit month (AUM): This is the quantity of forage consumed in a 30-day period by a 450-kilogram cow (with or without calf) or equivalent weight horse. Because bulls consume more forage than cows, they account for 1.5 AUMs for each 30-day period of grazing.

Definition of 'riparian area': FRPA requires that range practices protect riparian areas – areas adjacent only to streams and wetlands (as defined by FRPA) and lakes. Riparian vegetation adjacent to other waterbodies, like a seepage, are not included in FRPA's definition of *riparian area*. In this report, sites having these conditions are referred to as *non-classified riparian areas* and are similarly important for biodiversity, water storage and water filtration. Therefore, their protection contributes to sound range management.

Measuring of riparian areas: In this audit, reference is made to linear metres of riparian area assessed or riparian areas that were impacted by range practices. In the case of streams, unless otherwise stated, the riparian area on each side of the stream over a specified distance is assessed as one unit (i.e., one riparian area and not two separate riparian areas). For example, the riparian area along 100 metres of stream is not reported as 200 metres of riparian area.

Assessment of riparian areas: Auditors assess compliance with requirements to protect riparian areas by completing a riparian health assessment, a variant of a widely adopted method referred to as a proper functioning condition assessment. The assessment determines the current condition of the riparian area as being functional, functional at risk or non-functional. A non-functional condition is considered by the Board as having a material adverse effect on the riparian area and, therefore is not compliant with section 30ⁱ of the *Range Planning and Practices Regulation* (RPPR).

Background

Range agreement RAN076722 is held by Michael Theal. The range agreement area is located adjacent to Highway 5, about 10 kilometres north of Princeton (see Figure 1). It is a small 5.1-hectare area with four AUMs authorized for grazing one horse between May 1 and October 1. The range agreement holder informed auditors that the area was not used for grazing in 2015.

Audit Approach and Scope

The audit was conducted in accordance with the Forest Practices Board's *Compliance Audit Reference Manual, Version 7.0, September 2012.* Audit assurance related to field practices was obtained by examining the majority of activities undertaken within the two-year audit period of September 1, 2013, to September 17, 2015.

One professional biologist, a professional agrologist / professional forester and a chartered professional accountant made up the audit team. Fieldwork took place on September 17, 2015.

Planning and Practice Requirements Examined

The audit examined range planning and practices for compliance with FRPA and the *Range Planning and Practices Regulation*. This included an examination of:

- 1. Compliance with range use plans (including the grazing schedule, which identifies the period of use, number of livestock and AUMs authorized for grazing; range use plan maps; and any amendments to the plans). Note: auditors did not assess compliance with range readiness criteria specified in the range use plan. The criteria are used to determine when grazing may start, but the audit took place towards the end of the grazing season.
- 2. Records maintained by range users (if applicable) and the Ministry of Forests, Lands and Natural Resource Operations (FLNR).
- 3. Compliance with range practice requirements where the values requiring protection exist on the range agreement area (e.g., not all areas have waterbodies that support fish or have drinking water sources). This includes requirements to protect riparian areas, upland areas, drinking water quality, licensed waterworks, fish habitat and maintenance of range developments.

Audit Findings

Required Content of the Range Use Plan

The approved range use plan is valid for the period of January 1, 2013, to December 31, 2017, and includes all required content.

Compliance with the Range Use Plan and Practice Requirements

Auditors found that the range agreement holder met the requirements of the range use plan for minimum stubble heights and maximum browse utilization, and actions to achieve desired plant communities. Also, the range agreement holder met the requirements to protect riparian and upland areas (Figure 2) and to maintain range developments.



Audit Opinion

In my opinion, the range planning and practices carried out under range

agreement RAN076722, held by Michael Theal, between September 1, 2013, and September 17, 2015, complied in all significant respects with the requirements of the *Forest and Range Practices Act* and the *Range Planning and Practices Regulation*, as of September 2015. No opinion is provided regarding range readiness criteria.

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 *Planning and Practices Examined, Audit Approach and Scope,* and *Audit Findings* 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 range planning and practices to support an overall evaluation of compliance with FRPA.

C R Moster

Christopher R. Mosher CPA, CA, EP(CEA) Director, Audits

Background

RAN076723 is held by John Anderson. The 1238-hectare range agreement area is located in the Kane Valley and overlaps the Kane Valley Cross-Country Ski Area (see Figure 1), which is administered by Recreation Sites and Trails BC.¹ The trails are primarily used for cross country skiing, but are also used for hiking, mountain biking and horseback riding during the period that coincides with the grazing season.

The range agreement area has 645 AUMs authorized for grazing between May 15 and October 15, and is managed as a single pasture, which is entirely fenced. The area is surrounded by both private and Crown land.

Most watercourses on the range agreement area have intermittent flows that mostly dry up after spring freshet. Water for livestock is obtained from seepage areas, some wetlands, a small dam on the west side of the area and from several dugouts.

Audit Approach and Scope

The audit was conducted in accordance with the Forest Practices Board's *Compliance Audit Reference Manual, Version 7.0, September 2012.* Audit assurance related to field practices was obtained by examining the majority of activities undertaken within the two-year audit period of September 1, 2013, to September 15, 2015.

One professional biologist, a professional agrologist/professional forester and a chartered professional accountant made up the audit team. Fieldwork took place on September 15, 2015.

Planning and Practice Requirements Examined

The audit examined range planning and practices for compliance with FRPA and the *Range Planning and Practices Regulation*. This included an examination of:

- 1. Compliance with range use plans (including the grazing schedule, which identifies the period of use, number of livestock and AUMs authorized for grazing; range use plan maps; and any amendments to the plans). Note: auditors did not assess compliance with range readiness criteria specified in the range use plan. The criteria are used to determine when grazing may start, but the audit took place towards the end of the grazing season.
- 2. Records maintained by range users (if applicable) and FLNR.
- 3. Compliance with range practice requirements where the values requiring protection exist on the range agreement area (e.g., not all areas have waterbodies that support fish or have drinking water sources). This includes requirements to protect riparian areas, upland areas, drinking water quality, licensed waterworks, fish habitat and maintenance of range developments.

¹ Recreation Sites and Trails BC is an operational program within FLNR.

Audit Findings

Required Content of the Range Use Plan

The approved range use plan includes all required content. The plan is valid for the period January 1, 2012, to December 31, 2016.

Compliance with the Range Use Plan and Practice Requirements

Auditors found that the range agreement holder met the requirements of the range use plan, including the grazing schedule, stubble heights, actions to establish or maintain desired plant communities and actions to address issues identified by the Minister.

The range agreement holder generally met FRPA's requirements to protect riparian areas, drinking water quality, licensed waterworks and fish habitat. The range agreement holder also met requirements to maintain range developments. However, in the south part of the range agreement area, auditors noted that one section of the range fence was not located on the mapped agreement area boundary, resulting in an area of about 15 hectares where grazing is not authorized. FLNR are aware of the situation and are in the process of including the area in the range agreement holder's *Range Act* agreement.

Upland areas

The range agreement holder met FRPA's requirements to protect upland areas. However, one upland area (Figure 3) showed signs of heavy use by livestock and is functionally at risk. Continued heavy use may cause further decline of the upland area.

Voluntary AUM reduction

During the 2015 grazing season, the range agreement holder voluntarily reduced the number of authorized AUMs on Crown range by about 10 percent, in response to severe drought conditions in the Nicola Valley. Auditors believe the action likely reduced livestock impacts to the range resource.



Figure 3. This 6-hectare upland area shows signs of heavy use by livestock.

Audit Opinion

In my opinion, the range planning and practices carried out under range agreement RAN076723, held by John Anderson, between September 1, 2013, and September 15, 2015, complied in all significant respects with the requirements of the *Forest and Range Practices Act* and the *Range Planning and Practices Regulation*, as of September 2015. No opinion is provided regarding range readiness criteria.

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 *Planning and Practices Examined, Audit Approach and Scope,* and *Audit Findings* 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 range planning and practices to support an overall evaluation of compliance with FRPA.

C R Moster

Christopher R. Mosher CPA, CA, EP(CEA) Director, Audits

Background

RAN076728 is held by Carey and Iver Hoigaard. This 811-hectare range agreement area is located in the Iron Mountain area just south of Merritt (see Figure 1), and has 344 AUMs authorized for grazing. There are four pastures on the agreement area and livestock are rotated between the pastures through the grazing season, which extends from May 20 to September 30.

The range agreement area is entirely forested and a substantial portion has been previously harvested and is regenerating. Most livestock use occurs in the east and south portions of the area, which generally coincides with the most recent harvest activity.

The majority of the range tenure is designated as a recreation area administered by Recreation Sites and Trails BC. The primary purpose of the recreation area is to provide opportunities for mountain biking and hiking. The established trail network is in an area that receives little use by livestock.

Audit Approach and Scope

The audit was conducted in accordance with the Forest Practices Board's *Compliance Audit Reference Manual, Version 7.0, September 2012.* Audit assurance related to field practices was obtained by examining the majority of activities undertaken within the two-year audit period of September 1, 2013, to September 17, 2015.

One professional biologist, a professional agrologist/professional forester and a chartered professional accountant made up the audit team. Fieldwork took place on September 17, 2015.

Planning and Practice Requirements Examined

The audit examined range planning and practices for compliance with FRPA and the *Range Planning and Practices Regulation*. This included an examination of:

- 1. Compliance with range use plans (including the grazing schedule, which identifies the period of use, number of livestock and AUMs authorized for grazing; range use plan maps; and any amendments to the plans). Note: auditors did not assess compliance with range readiness criteria specified in the range use plan. The criteria are used to determine when grazing may start, but the audit took place towards the end of the grazing season.
- 2. Records maintained by range users (if applicable) and FLNR.
- 3. Compliance with range practice requirements where the values requiring protection exist on the range agreement area (e.g., not all areas have waterbodies that support fish or have drinking water sources). This includes requirements to protect riparian areas, upland areas, drinking water quality, licensed waterworks, fish habitat and maintenance of range developments.

Audit Findings

Required Content of the Range Use Plan

The approved range use plan is in effect for the period from January 1, 2013, to December 31, 2017, and includes all required content.

Compliance with the Range Use Plan and Practice Requirements

The range agreement holder met requirements in the range use plan including the grazing schedule, stubble heights, maximum browse utilization and actions to address issues identified by the Minister.

Auditors found that livestock use met FRPA's requirements to protect upland areas, drinking water quality, licensed waterworks and fish habitat. Requirements to maintain range developments were generally met.

Riparian areas

The range agreement holder generally met the requirement to protect riparian areas, however auditors noted some areas of concern. Approximately 130 metres of riparian area was non-functional (see Figure 4), which is a non-compliance with FRPA's requirements to protect riparian areas (see endnote i). Auditors found an additional 100 metres of riparian area to be functional but at risk, and another 100 metres of non-classified riparian area was also functional but at risk. Overall, these riparian segments represent a small portion of the approximately 2 kilometres of riparian areas assessed. In view of the extent and degree of impact to the riparian segments, auditors consider this an area requiring improvement.



Figure 4. A non-functional riparian area.

Audit Opinion

In my opinion, the range planning and practices carried out under range agreement RAN076728, held by Carey and Iver Hoiggard, between September 1, 2013, and September 17, 2015, complied in all significant respects with the requirements of the *Forest and Range Practices Act* and the *Range Planning and Practices Regulation*, as of September 2015. There is no opinion provided regarding range readiness criteria.

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.

Without qualifying my opinion, I draw attention to the *Riparian areas* section of the report, which describes an area requiring improvement.

The *Planning and Practices Examined, Audit Approach and Scope,* and *Audit Findings* 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 range planning and practices to support an overall evaluation of compliance with FRPA.

C R Moster

Christopher R. Mosher CPA, CA, EP(CEA) Director, Audits

Background

RAN076729 is held by Willow Heights Ranch Ltd., Gordon McLeod and GL Scott McLeod. This range agreement area, located just east of Aspen Grove, has an area of 1725 hectares with 1011 AUMs authorized for grazing.

The range agreement area is bisected by Highway 97 (Okanagan Connector). Access to the area is limited, as it is mostly surrounded by private land. The range agreement area is mostly forested, interspersed with native grasslands and wetland complexes. There has been no recent forest activity on the range agreement area, although a transmission line corridor runs through it from north to south (transmission corridors are usually part of the range agreement area).

Range use on the agreement area is managed under a rotational grazing strategy where livestock are moved between four fenced pastures through the grazing season (May 10 to October 31). The schedule of pasture use alternates between odd and even years.

Audit Approach and Scope

The audit was conducted in accordance with the Forest Practices Board's *Compliance Audit Reference Manual, Version 7.0, September 2012.* Audit assurance related to field practices was obtained by examining the majority of activities undertaken within the two-year audit period of September 1, 2013, to September 16, 2015.

One professional biologist, a professional agrologist/professional forester and a chartered professional accountant made up the audit team. Fieldwork took place on September 16, 2015.

Planning and Practice Requirements Examined

The audit examined range planning and practices for compliance with FRPA and the *Range Planning and Practices Regulation*. This included an examination of:

- 1. Compliance with range use plans (including the grazing schedule, which identifies the period of use, number of livestock and AUMs authorized for grazing; range use plan maps; and any amendments to the plans). Note: auditors did not assess compliance with range readiness criteria specified in the range use plan. The criteria are used to determine when grazing may start, but the audit took place towards the end of the grazing season.
- 2. Records maintained by range users (if applicable) and FLNR.
- 3. Compliance with range practice requirements where the values requiring protection exist on the range agreement area (e.g., not all areas have waterbodies that support fish or have drinking water sources). This includes requirements to protect riparian areas, upland areas, drinking water quality, licensed waterworks, fish habitat and maintenance of range developments.

Audit Findings

Required Content of the Range Use Plan

The approved range use plan includes all required content. The plan took effect on January 1, 2012, and expires on December 31, 2016.

Compliance with the Range Use Plan and Practice Requirements

The range agreement holder generally met requirements in the range use plan for stubble heights, maximum browse utilization and actions to address issues identified by the minister. Auditors also found that requirements for the protection of drinking water, licensed waterworks, upland areas and fish habitat were met.

Riparian areas

Auditors examined about three linear kilometres of riparian area adjacent to streams, lakes and wetlands across the range agreement area. All of the riparian areas examined, except one, were fully functional, showing little to no use by livestock.

On one stream located in the Centre pasture, auditors found the riparian area adjacent to 200 metres of non-fish bearing stream is showing signs of heavy use by livestock. Along an additional 400 metres of the same stream, livestock use has impacted the riparian area to the extent that it is no longer functional (Figure 5). Over the 400 metres, the range agreement holder is in non-compliance with FRPA's requirements to protect riparian areas (see endnote i). The non-compliance is significant due to the length of riparian area affected and the high degree of impact.



Figure 5. A non-functional riparian area.

Grazing schedule

FRPA requires range agreement holders to ensure that grazing follows the range use plan.ⁱⁱ Auditors found that livestock numbers, their age class and schedule of use on the range agreement area were materially different than authorized in the grazing schedule in the range use plan. For example, on September 16, auditors observed livestock in the Centre pasture, but for 2015 (identified as an odd year in the schedule), livestock were to be in the pasture only between July 11 and August 20. The range agreement holder told auditors that, for various reasons, he has not been following the grazing schedule, but did not advise FLNR or make the required amendments to the schedule.

The grazing schedule is a vital component of a range use plan because it sets out the number of livestock, age class, time of use and location where livestock are permitted to graze within the range agreement area. In this case, the non-compliance is not significant because the number of authorized

AUMs was not exceeded and there was no evidence that varying the grazing schedule caused impacts to the range resource. However, adherence to the grazing schedule is an area requiring improvement.

Grazing on Crown land adjacent to the range agreement area

Auditors examined parts of all four pastures, including about three kilometres of fence, and found the range agreement holder generally met FRPA's requirements to maintain range developments. However, in a portion of one pasture (see Figure 6), auditors found the range fence was not located on the mapped range agreement area boundary, but rather, along the perimeter of an adjacent and vacant parcel of Crown land. In effect, this enabled the range agreement holder to graze livestock on about 100 hectares (equivalent to about 6 percent of the range agreement area) of Crown land without authorization, which is a non-compliance with FRPA.ⁱⁱⁱ

It is the responsibility of range agreement holders to ensure that livestock use is generally consistent with their *Range Act* agreement. However, since auditors observed that the 100 hectares of adjacent land showed little use by livestock, this is considered an area requiring improvement.

Subsequent to the audit, the range agreement holder met with FLNR to begin the process of including the 100 hectares into the *Range Act* agreement boundary.

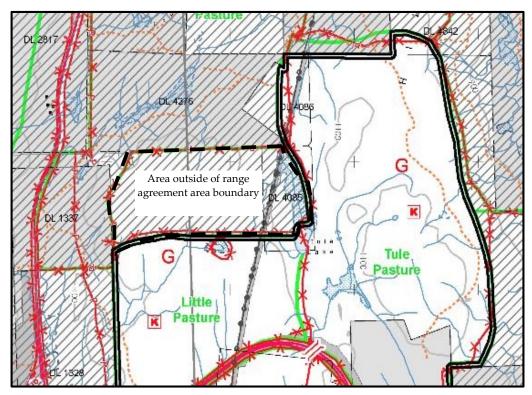


Figure 6. About 100 hectares of Crown land at the north end of the range agreement area is being used by the range agreement holder without authority. Range agreement holders should ensure that livestock use of Crown land is generally consistent with their Range Act agreement.

Audit Opinion

In my opinion, except for the riparian areas issue discussed below, the range planning and practices carried out under range agreement RAN076729 held by Willow Heights Ranch Ltd., Gordon McLeod and GL Scott McLeod, between September 1, 2013, and September 16, 2015, complied in all significant respects with the requirements of the *Forest and Range Practices Act* and the *Range Planning and Practices Regulation*, as of September 2015. There is no opinion provided regarding range readiness criteria.

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 *Riparian areas* section of the report, the audit identified a situation of significant non-compliance related to the protection of 400 metres of riparian area.

Without further qualifying my opinion, I draw attention to the *Grazing schedule* and *Grazing on Crown land adjacent to the range agreement area* sections of the report, which describe two areas requiring improvement.

The *Planning and Practices Examined, Audit Approach and Scope,* and *Audit Findings* 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 range planning and practices to support an overall evaluation of compliance with FRPA.

C R Moster

Christopher R. Mosher CPA, CA, EP(CEA) Director, Audits

Background

RAN077096 is held by Chutter Ranch Ltd. This 5544-hectare range agreement area is located southwest of Merritt. The northern two-thirds of the range agreement area is comprised of mostly grasslands with a mosaic of forest patches. The southern one third of the area is mostly forested with previous harvesting activity. A 175-metre wide transmission corridor is situated on this part of the range tenure.

There are 16 mostly fenced pastures on the range agreement area with 4474 AUMs authorized for grazing. Currently, about 2877 AUMs are being utilized, due to a reduction of available forage on the tenure. The range agreement holder employs a complex rest-rotation grazing strategy and the order of pasture use through the grazing season (May 1 to October 31) alternates between odd and even years.

Most of the range tenure overlaps a recreation area administered by Recreation Sites and Trails BC. The high-use recreation area includes designated campsites and horse corrals at Lundbom Lake, and trails for horses, mountain biking, snowmobiles and cross-country skiing. This range agreement area, similar to other grassland ecosystems within the district, is experiencing a significant and rapid spread of invasive plants (mostly knapweed), which is likely being exacerbated by the high number of recreational users on the range agreement area (Figure 7).



Figure 7. The spread of invasive plants, like knapweed as shown in this photo (dark patches are knapweed), are a significant threat to the range land condition on this range agreement area.

Audit Approach and Scope

The audit was conducted in accordance with the Forest Practices Board's *Compliance Audit Reference Manual, Version 7.0, September 2012.* Audit assurance related to field practices was obtained by examining the majority of activities undertaken within the two-year audit period of September 1, 2013, to September 18, 2015.

One professional biologist, a professional agrologist/professional forester and a chartered professional accountant made up the audit team. Fieldwork took place on September 14 and 18, 2015.

Planning and Practice Requirements Examined

The audit examined range planning and practices for compliance with FRPA and the *Range Planning and Practices Regulation*. This included an examination of:

- 1. Compliance with range use plans (including the grazing schedule, which identifies the period of use, number of livestock and AUMs authorized for grazing; range use plan maps; and any amendments to the plans) Note: auditors did not assess compliance with range readiness criteria specified in the range use plan. The criteria are used to determine when grazing may start, but the audit took place towards the end of the grazing season.
- 2. Records maintained by range users (if applicable) and FLNR.
- 3. Compliance with range practice requirements where the values requiring protection exist on the range agreement area (e.g., not all areas have waterbodies that support fish or have drinking water sources). This includes requirements to protect riparian areas, upland areas, drinking water quality, licensed waterworks, fish habitat and maintenance of range developments.

Audit Findings

Required Content of the Range Use Plan

The approved range use plan includes all required content. The plan took effect on January 1, 2012, and expires on December 31, 2016.

Compliance with the Range Use Plan and Practice Requirements

The range agreement holder met requirements in the range use plan for stubble heights, maximum browse utilization and actions to address issues identified by the minister. The range agreement holder also met FRPA's requirements for the protection of fish habitat, riparian areas, drinking water quality and licensed waterworks.

Upland areas

The range agreement holder generally met FRPA's requirements to protect upland areas on the 10 pastures examined (there are a total of 15 pastures). However, in a 30-hectare portion of the Tent pasture, which has an area of 740 hectares, the upland area is functional but at risk (Figure 8). In addition to the range agreement holder's livestock, there are several factors contributing to the declining condition of the upland area, including use of the area



Figure 8. Upland area functionally at risk. Note the low stubble height of grasses and, although not visible, there are patches of bare soil. If not addressed, the upland condition will continue to decline, increasing soil loss due to erosion and soil moisture.

by recreational vehicles and use by livestock from adjacent private land. The range agreement holder is working with FLNR to develop a long-term solution for the protection of this portion of the Tent pasture.

Voluntary AUM reduction

In 2011, the range agreement holder voluntarily entered into an agreement with FLNR to reduce the number of authorized AUMs on the range agreement area from 4474 to 2877 AUMs (about 36 percent), to compensate for insufficient forage availability. In 2014, the range agreement holder was granted an additional 3-year extension to the AUM reduction. The voluntary steps taken by the range agreement holder will likely reduce impacts to the range resource.

Range developments

The range agreement holder met FRPA's requirements to maintain range developments. Auditors observed several range developments that were planned and implemented by the range agreement holder. In one pasture with no natural water sources, the range agreement holder uses two large holding tanks to provide water for livestock (Figure 9). In another area, the range agreement holder installed fencing adjacent to a lake designated by the provincial government as a special fishery for physically challenged youth.



Figure 9. This large holding tank was purchased and installed by the range agreement holder and provides drinking water for livestock in a pasture where no other water sources are available.

Audit Opinion

In my opinion, the range planning and practices carried out under range agreement RAN077096 held by Chutter Ranch Ltd., between September 1, 2013, and September 18, 2015, complied in all significant respects with the requirements of the *Forest and Range Practices Act* and the *Range Planning and Practices Regulation*, as of September 2015. There is no opinion provided regarding range readiness criteria.

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 *Planning and Practices Examined, Audit Approach and Scope,* and *Audit Findings* 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 range planning and practices to support an overall evaluation of compliance with FRPA.

C R Moster

Christopher R. Mosher CPA, CA, EP(CEA) Director, Audits

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.

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.

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

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 Range Planning and Practices Regulation: Riparian areas

- (a) withstand normal peak flow events without accelerated soil loss, channel movement or bank movement, (b) filter runoff,
- (c) store and safely release water, and
- (d) conserve wildlife habitat values in the area.

ⁱⁱ Forest and Range Practices Act: General

45 (1) A person who grazes livestock, cuts hay or carries out or maintains a range development on Crown range must do so in accordance with

- (a) this Act, the regulations and the standards, and
- (b) the applicable range use or range stewardship plan.
- iii Forest and Range Practices Act: Unauthorized range activities
- 50 (1) A person must not cause or permit livestock to be driven on or to graze on Crown range unless
 - (a) authorized to do so under an agreement under the *Range Act* or under the regulations under this Act, and (b) the person acts in accordance with this Act, the regulations, the standards and any applicable range use plan or range stewardship plan.

³⁰ A range agreement holder must not carry out a range practice if it would result in a material adverse affect on the ability of the riparian area to



PO Box 9905 Stn Prov Govt Victoria, BC V8X 9R1 Canada Tel. 250.213.4700 | Fax 250.213.4725 | Toll Free 1.800.994.5899 For more information on the Board, please visit our website at: www.bcfpb.ca