Timber harvest planning and operating ground rules

ANC Timber Ltd. Forest Management Plan/Agreement Area-Specific Addendum

Albertan

2024

ANC Timber Ltd.

FOREST MANAGEMENT AGREEMENT SPECIFIC ADDENDUM-TIMBER HARVEST PLANNING AND OPERATING GROUND RULES

ANC Timber Ltd.

ALBERTA FORESTRY AND PARKS

ENDORSEMENTS

ANC Timber Ltd. FMA Specific Addendum-Timber Harvest Planning and Operating Ground Rules, having been prepared in accordance with Section 16 (2) of FMA O.C. 8900026, and hereby endorsed this 1st day of May, 2024. The Executive Director of Forest Stewardship and Trade Branch has determined these ground rules will apply to all operations within FMA 8900026.

ANC Timber Ltd.	HIS MAJESTY THE KING in right of Alberta as represented by the Minister of Forestry and Parks	
Per: Original Signed	Per: Original Signed	
Ian Daisley	Ken Greenway	
(print name)	(print name)	
Woodlands Manager	Executive Director	
(title)	(title)	

Preamble

The Timber Harvest Planning and Operating Ground Rules – FMA Specific Addendum (the "Addendum") is a reference manual that provides regulatory guidance and direction to be used by timber harvest planners, forest operators and other forestry professionals involved in implementing forest management plans (FMP). Items within the Addendum are required for implementation of unique or specific strategies within the FMP and/or are specific to an individual FMA. The Addendum will work in concert with the standardized Provincial Timber Harvest Planning and Operating Ground Rules (Provincial OGR). The Addendum is Section 4 to Sections 1, 2 and 3 in the Provincial OGR. Rules found in the Addendum will supersede those found in the Provincial OGR when they address the same objective.

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Introduction

These Addendum Ground Rules will supersede rules in the Provincial OGR where there are rules addressing the same objective.

Authorizations and Legislation This Agreement inures to the benefit of and is binding upon the Crown and His heirs, successors and assigns, and the Company and its successors and assigns.

4.1 Timber Harvest and Reforestation Planning Requirements

GROUND RULES

- 4.1.1 The GDP submission date is May 1 of each year unless otherwise approved by Alberta.
- 4.1.2 The AOP submission date is May 1 of each year unless otherwise approved by Alberta.
- 4.1.3 The reforestation program date is May 1 of each year unless otherwise approved by Alberta.

4.2 Operational Ground Rules

4.2.1 Visual Impacts

PURPOSE

• To manage the visual impact of timber operations on the forest landscape.

DISCUSSION

The objective is to mitigate the impact of timber operations on the visual quality of the forest landscape by:

- Identifying the location of forest landscapes and other areas of high visual and scenic value, and objectives for their management;
- Addressing visual quality issues in the FMP.

Areas considered highly sensitive are those:

- a) Within, adjacent to or viewed from recreational sites and tourist developments;
- b) Seen from elevated viewpoints;
- c) Adjacent to or viewed from major travel corridors (roads, lakes and rivers); rural/urban forest interface and site-specific areas identified during the referral and public review process; or
- d) Adjacent to primary and secondary highways in Alberta.

Tactics to reduce the impacts of timber harvest and reforestation on visual quality may include: retention of forest structure and lesser vegetation at strategic vantage points in the harvest area, modification of harvest area design, low impact scarification techniques, vegetative buffers, and utilizing natural topography.

GROUND RULE

4.2.1.1 Highly sensitive areas have been assessed in the FMP and any special tactics required have been identified therein. Additional tactics may be employed where stakeholders or Indigenous values are identified in the planning process.

4.2.2 Structure Retention

PURPOSE

- To create temporary refuge and habitat for forest biota associated with early seral habitat
- To provide wildlife thermal and hiding cover within harvest units throughout the rotation.
- To provide wildlife travel corridors within large harvest areas and compartments.
- Create a forest structure that contributes towards the emulation of natural disturbance

DISCUSSION

Although many types of natural disturbance (fire, floods, wind events, pest events) occur within Alberta's forests, fire is the most common. Historically all trees are killed within intense fires but, following low and moderate-intensity fires, many scattered live trees are present post disturbance. In addition, within all fire types, fire skips result in residual patches of live trees remaining within burned areas. MPB has emerged as a threat to the forests of Alberta and as a result accelerated harvest levels have been approved. The concern about retention of pine trees creating refuges for MPB and exacerbating the spread of MPB has led to increased emphasis on the retention of non-pine species to compensate for the removal of pine. D. Andison (March, 2001) suggests that fires in the boreal forest are commonly referred to as "events". They tend to be memorable, occur over a very short period of time, and leave behind a mosaic of burnt and un-burnt patches. The relationship between events and their constituent patches is vital to ANC Timber's approach to residual structure retention.

An area relationship between patches and fire events exists. Since most events are composed of a number of disturbance patches, we expect large events to be even more prominent on the landscape. For instance, disturbance patches greater than 2,000 hectares occupy 71% of the Upper Foothills landscape, while disturbance events greater than 2,000 hectares occupy 90% of the Upper Foothills landscape (Andison, March 2001).

It is not possible to create compartments with as high a density of large snags as are found after fire. However, retaining some large snags and large downed logs within harvest areas and compartments creates habitat for some of the biota associated with disturbed habitat. Additional large snags may be created by retaining large live trees, as some of these trees will die throughout the rotation. Current residual structure in the FMA area indicates that considerable opportunity exists for retaining residual structure post-harvest. Refer to Table 2-10 in the FMP for a summary of the categories of tree types that can be retained post-harvest in order to ensure appropriate levels of structure remain after logging. The current plan indicates that at least 39% of the landbase within the DFA will not be scheduled for harvest within the 200 year planning horizon.

GROUND RULES

- 4.2.2.1 Retention target of 1% of merchantable timber by volume (within harvest areas) across the FMA and shall be representative of the species composition and timber profile of the original stand. The 1% target will be applied to each forest operator on an annual basis per FMU.
 4.2.2.1.1 Operational buffers on shallow open water or semi-permanent marsh will count fully towards retention targets if internal to the harvest opening.
- 4.2.2.2 A variety of tree sizes may be left for retention as single trees, in clumps (more than 3 trees but less than 0.2 Ha), or as patches within a harvest area. Trees that are crooked and heavily branched will be preferably left;
 a) Clumps of trees will preferentially be left in areas that have a steep slope, excessive moisture, or natural
- openings.
- 4.2.2.3 Where possible, snags will be left in groups of 2 or more and may be incorporated as part of a retention patch. Snag retention will be prioritized as follows: existing snags where worker safety is not compromised;
 - a) trees with evidence of an existing cavity; and
 - b) snags or live trees that exhibit windfirm characteristics.
- 4.2.2.4 Other considerations in determining when and where structure should be left in block include wildlife zones, proximity to large watercourses or lakes, harvest area size, line of sight issues, distance to hiding cover and probability of remaining standing over time.
- 4.2.2.5 All structure retention, including snags that are left during active harvest operations shall also be avoided and/or protected throughout all phases of silviculture treatments while considering worker safety.

- 4.2.2.6 Merchantable trees used for residual structure retention are considered as Allowable Cut Drain. The method used to determine amount of volume retained must be defensible and auditable.
 - a) Amount of merchantable volume retained will be reported by the individual Forest Operators on an annual basis using a TM7 Form;
 - b) Quota holders must also report retention volumes to ANC Timber Ltd. for Stewardship Report requirements.
- 4.2.2.7 Retention target (1% as per 4.2.2.1.) will be compared with the actual volume retained summaries of structure retention accomplishments in the required Stewardship Report.

4.2.3 Soils

ANC FMP 2011 Section 7.4 includes provisions for reforestation of temporary roads and landings created by timber harvesting operations. OGR 2.15.11 requires all companies to de-compact where necessary. Ground Rule 2.13.1 of 2023 Provincial OGR is, therefore, not applicable.

4.2.4 Aquatic and Riparian Area Protection GROUND RULES

- 4.2.4.1 The Transitional watercourse classification as per 2.17- Table 4 of Provincial OGR will not be used.
 - 4.2.4.1.1 Small permanent watercourses will share the classification attributes of Table 4 with exception that minimum channel width will be 0.5m.
 - 4.2.4.1.2 Intermittent watercourses will share the classification attributes of Table 4 with exception that channel width will be less than 0.5m.

4.2.5 Water Crossings

GROUND RULE

4.2.5.1 Low profile crossings may be used where bank protection is achieved through simple freezing in during frozen conditions. These crossings may be used on Ephemerals and Intermittents in frozen conditions. Low Profile crossings shall not be used on intermittent watercourses identified as Athabasca Rainbow Trout critical habitat.

4.3 Monitoring and Reporting

GROUND RULES

- 4.3.1 Summary information submitted annually as per 3.1.4 of Provincial OGR must be in a format mutually agreed to by the companies and the Whitecourt Forest Area.
- 4.3.2 Quota Holders are to provide, annually, the FMA holder with as built block shapes as well as deleted and deferred polygons either directly or through Alberta.

Glossary

Low profile crossing

Used to cross non-flowing water courses with minimal to non-existent banks in frozen conditions on temporary harvest roads. They are largely frozen in place with minimal to no disturbance to vegetation or soil. There are no logs, dirt or geotextile used in their construction and off-site snow or ice is not introduced.