



Timber harvest planning and operating ground rules

Hinton Wood Products
Forest Management Plan/Agreement
Area-Specific Addendum

The logo for the province of Alberta, featuring the word "Alberta" in a stylized, cursive script font, followed by a small square icon.

Hinton Wood Products- A Division of West Fraser Mills Ltd. Timber Harvest Planning And Operating Ground Rules Forest Management Agreement-Specific Addendum-2023

2023

Hinton Wood Products- A Division of West Fraser Mills Ltd.

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

Hinton Wood Products

**ALBERTA
FORESTRY, PARKS AND
TOURISM**

ENDORSEMENTS

The Hinton Wood Products FMA Specific Addendum-Timber Harvest Planning and Operating Ground Rules, having been prepared in accordance with Section 16 (2) of FMA 8800025, and hereby endorsed this 27th day of April, 2023.

Hinton Wood Products- A Division of West Fraser Mills Ltd.

HIS MAJESTY THE KING in right of Alberta as represented by the Minister of Forestry, Parks and Tourism

Original Signed

Original Signed

Per:

Per:

Tyler Stenecker

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 April 1 of each year unless otherwise approved by Alberta.
- 4.1.3 The reforestation program shall be submitted on or before April 15 for silviculture operations commencing May 1.

4.2 Operational Ground Rules

4.2.1 Visual Impacts

GROUND RULE

- 4.2.1.1 VQO 1-3 areas shall be assessed and tactics shall be employed in the GDP to mitigate the impacts of harvesting and reforestation on visual quality.

4.2.2 Structure Retention

PURPOSE

To create temporary refuges for forest biota to re-colonize blocks.

To maintain snags and live residual trees in harvested areas for species that depend on these structures following natural disturbances.

To provide wildlife thermal and hiding cover within blocks throughout the rotation.

To provide wildlife travel corridors within large blocks and compartments.

DISCUSSION

Although many types of natural disturbance (fire, floods, avalanches, wind events, insects and disease infestations, and slumps) occur within Alberta's forests, fire is the most common. Virtually all trees within intense fires are killed, but following low and moderate-intensity fires many scattered live trees are present. In addition, within all fire types, fire "skips" or "islands" result in residual patches of live trees remaining within larger burned areas. Following other types of natural disturbances, even higher densities of live trees, and patches of live trees, are present. Approximately 30% of the birds and mammals living in Alberta's forests, nest, forage or find shelter within live trees that have a basal diameter greater than 20 cm. Many of these species are able to use single large live trees and residual patches of large live trees that remain after natural disturbances.

The retention of single trees and patches of large live trees in blocks makes the harvested areas more similar to burned areas. In addition, residual live trees may create some old forest attributes in young regenerating blocks. Many of the birds, mammals, insects, beetles, fungi and nonvascular plant species that live in recently disturbed forests require large snags for food and shelter. This unique biotic community

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changes rapidly as the snags fall and the downed logs are incorporated into the forest floor. Some species become rare within ten years following a fire, and many of the early colonizing species have disappeared by the time the stand is twenty years old.

Retaining some large snags within blocks creates habitat for some biota associated with naturally disturbed habitat. Additional large snags may be created, by retaining large live trees, as some of these trees will die throughout the rotation. To a large extent, however, it will be necessary to rely on natural disturbances to create abundant large snags for species that depend on this dead woody material.

Where larger blocks are created, it is important to retain a number of individual trees, snags and residual tree patches distributed across the block. These residual tree patches shall be located such that natural features, riparian areas, wildlife features, stand structure and composition, and proximity to standing forests are taken into account to maximize their utility or usefulness by the biotic community.

These ground rules describe the average number of patches per hectare of residual material that will be left within harvested areas of a landscape unit for those where this is not defined in a FMP. There may be zero patches of residual structure in any particular block as long as the amount identified in the timber supply analysis (TSA) is met across the landscape over time.

Current information suggests that ecological benefits are directly proportional to the amount of structure retention; ecological benefits increase with greater levels of structure retention. Larger patches of residual structure generally have more benefits than smaller patches (lower blowdown probability, interior forest characteristics, hiding and thermal cover) and patches generally have more benefit than individual stems.

GROUND RULES

- 4.2.2.1 1% of the area harvested (ha) will be retained as merchantable structure retention across the FMA.
 - 4.2.2.1.1 The GDP, if possible, and the AOP will show laid out structure retention proposed in the block. Structure retention will vary by block with some blocks containing zero structure and others containing greater amounts.
- 4.2.2.2 Merchantable volume retained shall be reported to Alberta in an acceptable manner.
- 4.2.2.3 Merchantable structure retention that contributes to the target shall be representative of the harvest area given the following priorities:
 - Priority 1 – Retain merchantable non-pine species (no MPB risk).
 - Priority 2 – Retain merchantable pine (moderate MPB risk).
- 4.2.2.4 Non-merchantable retention will not count towards the 1% target.
- 4.2.2.5 Retention shall be within the harvest block boundary.
 - 4.2.2.5.1 Proximal retention is not required but may be left as per the following:
 - a) Where a waterbody described in Tables 4 or 5 of Provincial OGR runs into or along the block and retention is left in addition to the required buffer.
 - b) Where sensitive sites defined in 2.8.9 of Provincial OGR are within 100m of the block boundary.
 - c) Proximal retention must be excluded from harvest for one rotation.
 - d) Proximal retention does not contribute to the harvest block retention target.

4.2.2.6 Structure retention includes all patches -> .04ha.

4.2.2.6.1 Patches -> .04ha will be measured using either GPS or aerial photography and summarized in the HWP annual report.

4.2.2.7 Large patches (≥ 1 ha) will be laid out and identified in the GDP, if possible, and in the AOP.

4.2.2.8 In addition to merchantable structure retention, individual non-merchantable trees may be left where silviculturally and operationally feasible and where worker safety is not compromised.

4.2.2.9 HWP may create stubs anywhere within the harvested area to supplement snag densities, aid in wind-firmness of residual patches or for use as rub posts (see section 2.4 of Provincial OGR).

4.2.2.10 Operational buffers on shallow open water or semi-permanent marsh will count fully towards retention targets if internal to the harvest opening.

4.2.3 Species of Special Management Concern

Bull Trout

DISCUSSION

Bull Trout are classified as “Threatened” under the Alberta Wildlife Act. One of the greatest contributing factors threatening this species related to the forest industry is the density of linear features (e.g., Class I-IV roads, skid trails, and all pre-existing access). Development of the GDP and AOP must focus on ensuring that best management practices related to construction, maintenance and reclamation of roads is in place, with the primary intent being the protection of fish habitat and productivity. This is achieved through the maintenance of natural hydrologic processes, avoiding erosion, and increasing protection of streams where risks to this species are identified.

Timber harvest planning and operating ground rules must reflect the sensitive nature of this species. These operating rules serve three primary purposes:

- a) protection of the long-term integrity, connectivity, productivity and access of bull trout to the spawning, rearing, feeding and over wintering habitat within the watershed;
- b) protection of water quality and quantity that provide a key component of the habitat that supports native fish species within watersheds (e.g. temperature, dissolved oxygen content, natural sediment, avoidance of anthropogenic sedimentation and productivity) to ensure the continued occupancy and use of historical watersheds by this species; and
- c) minimize the industrial footprint and density of linear features intersecting watercourses within bull trout watersheds to reduce the potential for secondary disturbance and mortality from recreational use.

GROUND RULES

4.2.3.1 The GDP and AOP shall describe the harvesting program that will create the desired future forest, taking into consideration the full range of values including habitat for species of special management concern.

4.2.3.2 Locations of existing bull trout can be identified using the Fisheries and Wildlife Management Information System (FWMIS), and the associated Fish and Wildlife Internet Mapping Tool (FWMIT). Within these identified areas:

4.2.3.2.1 Operational planning by the company should incorporate the use of Alberta's Wet Areas Mapping tool to identify areas that are sensitive to disturbance. Field confirmation of these sites including depth to water, potential disruption of groundwater flows, and areas at high risk of erosion in wet or riparian areas can be a useful tool in determining road and crossing location.

4.2.3.2.2 Where crossing of wet areas cannot be avoided, the operator shall ensure that the forest floor remains intact ensuring that normal ground water flows are maintained after reclamation.

Access management within Woodland Caribou, Grizzly Bear, and Key Wildlife and Biodiversity Zones

GROUND RULES

4.2.3.3 Where existing disturbances exist, new roads must follow existing disturbances that are suitable for the access need.

4.2.3.4 AOP roads that are built sooner than one year prior to harvesting operations will be deactivated until operations commence.

4.2.3.5 Temporary roads shall be deactivated or reclaimed (and potentially reforested) within 18 months of completion of harvesting and hauling operations, unless otherwise agreed to in the operating schedule (AOP).

4.2.4 Soils

HWP 2014 FMP (Approved 2017) Chapter 7 Section 7.3 Table 85 contains commitments to plant roads and landings. OGR 2.15.11 requires all companies to decompact where necessary. Therefore there is no requirement to meet OGR 2.13.1.

4.2.5 Road Construction, Maintenance and Reclamation

GROUND RULES

- 4.2.5.1 Roads and skid trails shall be placed in locations and constructed so that soil erosion, damage to streambeds and sedimentation of watercourses are minimized. Use of skid trails requires notification (e-mail is acceptable) to Alberta including a map (or otherwise) with skid trail location

4.3 Monitoring and Reporting

GROUND RULE

- 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 Edson Forest Area.