

6-Apr-23

Forest Harvest Plan

PU093224



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Report

1.0 Introduction

Alberta – Pacific Forest Industries Inc. (Alberta–Pacific) has prepared a Forest Harvest Plan (FHP) for the harvest of stands within Planning Unit 093224

The Planning Unit is located within Forest Management Unit (FMU) S22 north of the community Chipewyan Lake and accessed east of the Al-Pac "North Osi Road".

Copies of this Forest Harvest Plan are available on the Alberta–Pacific website, at www.alpac.ca.

2.0 General Planning Unit Information / Design Considerations

This FHP has been validated by a Registered Forestry Professional from Alberta-Pacific.

This FHP includes maps and reports that clearly show and document the planned harvest area boundaries, roads and water crossings within the Planning Unit.

This plan is being submitted for appraisal, for a 5-year FHP approval under the 2022-2023 Alberta-Pacific Annual Operating Plan (AOP).

2.1 Operating Ground Rules

This Planning Unit is designed in accordance with the Timber Harvest Planning and Operating Ground Rules - Northeast Alberta Regional Area-Specific Addendum (OGRs). Alberta—Pacific is requesting certain deviations from the OGRs, due to field verified factors. These requests, along with corresponding information are listed under the section "OGR Deviations".

3.0 Maps

Individual block maps have been included in the submission package, outlining the information pertinent to these blocks. A Planning Unit overview map and a Spatial Harvest Sequence (SHS) Planning Unit map have been included in the submission package. These maps can be viewed in the *Appendices* of this document.

4.0 Block Information

A *Block Summary Table* has been included below outlining the expected volumes of the harvest area.

4.1 Utilization

Deciduous and coniferous stands will adhere to the 15/10 utilization standard

4.2 Field verification

Field verification was conducted to assess the timber quality, potential sensitive and historical sites, operability of the harvest area, and classification of water courses within the Planning Unit boundary. Where applicable, the findings of the layout team have been noted in the corresponding section of this report.

4.3 Understory Assessment

White Spruce understory within deciduous landbase will be protected utilizing high effort understory protection in stands identified as greater than 600stems/ha by the Alberta Vegetation Inventory (AVI), as well as any potential areas found to have understory present that is not identified by the AVI. Any deciduous blocks found to have understory amounting to between 400 stems/ha and 600 stems/ha will be protected utilizing the avoidance method.

Blocks requiring understory protection or understory avoidance are noted within the *Block Summary Table*.

Block Summary Table

(Values rounded to whole numbers)

 $\frac{Table\ 1:\ Block\ Summary\ Table}{This\ table\ provides\ a\ brief\ description\ of\ the\ proposed\ harvest\ blocks\ within\ the\ Planning\ Unit.}$

	Deciduous Blocks					
Source ID	Opening Number	Harvest Season (Frozen/ Non- Frozen)	Area (ha)	Deciduous Volume (m³)	Incidental Conifer Volume (m³)	Total Volume (m³)
FB09322409171	4220930917	Non-Frozen	16	2,174	1,479	3,654
FB09322407581	4220930758	Frozen	67	12,043	6,158	18,201
FB09322408191	4220930819	Non-Frozen	16	3,651	915	4,566
FB09322417091	4220931709	Frozen	3	654	176	830
FB09322419601	4220931960	Frozen	6	1,335	347	1,683
FB09322420011	4220932001	Frozen	9	1,288	481	1,769
FB09322417461	4220931746	Frozen	62	10,759	4,962	15,721
FB09322417581	4220931758	Frozen	4	577	198	775
FB09322405671	4220930567	Frozen	14	2,115	1,656	3,771
FB09322408651	4220930865	Non-Frozen	85	15,600	7,665	23,265
FB09322417811	4220931781	Frozen	35	7,139	2,435	9,574
FB09322404311	4220930431	Non-Frozen	9	1,690	343	2,033
FB09322405821	4220930582	Non-Frozen	46	12,677	3,283	15,960
FB09322418741	4220931874	Non-Frozen	64	14,036	4,693	18,729
FB09322405171	4220930517	Non-Frozen	73	17,785	3,600	21,385
FB09322406891	4220930689	Non-Frozen	48	10,383	2,406	12,790
FB09322406911	4220930691	Non-Frozen	7	1,640	387	2,027
FB09322405131	4220930513	Non-Frozen	27	7,246	1,535	8,781

	Area (ha)	Deciduous Volume (m³)	Incidental Conifer Volume (m³)	Total Volume (m³)
Totals	591	122,793	42,719	165,512

^{*}Understory Block: White Spruce understory within deciduous landbase will be protected utilizing high effort understory protection in stands identified as greater than 600 stems/ha.

Any blocks found to have understory amounting to between 400 stems/ha and 600 stems/ha will be protected utilizing the avoidance method.

Coniferous Blocks						
Source ID	Opening Number	Harvest Season	Area (ha)	Conifer Volume (m³)	Incidental Deciduous Volume (m³)	Total Volume (m³)
FB09322405331	4220930533	Frozen	3	517	415	931

4.4 Structure Retention

For Alberta-Pacific and Commercial Timber Permits, an average of 5% representative of all harvested area at the FMU level by stewardship reporting period will be retained. A harvest area may have zero structure but the FMU average shall be 5%. Non-merchantable structure is not to be tracked as part of the 5%. Structure retention will be left in the following methods:

- Laid out patches
- Individual trees
- Small clumps left at the operators' discretion

4.5 Debris Management

The Planning Unit is situated within Alberta's Fire Control Zone number 46 as identified by Alberta Agriculture, Forestry and Rural Economic Development (AFRED).

Debris management of the Planning Unit will be accomplished in a manner consistent with the Debris Management Standards for Timber Harvest Operations (AF-FDP-2017-07).

4.6 Camp Location

The companies have identified a camp location for logging operations within this Planning Unit. The campsite will be reclaimed as indicated in Section 2.12.2 of the OGRs.

Source ID	Opening Number	LATITUDE	LONGITUDE
FB09322406891	4220930699	57.043219	-113.524014

5.0 Watercourse Protection

During the potential watercourses were identified during preliminary planning using wet areas mapping, LiDAR data, aerial imagery, as well as the available AVI data.

Where harvest blocks are in proximity to any potential watercourses, the field layout team conducted field assessments utilizing the methodology and classification standards outlined in Section 2.17 of the OGRs. Any confirmed watercourses have been buffered in accordance with the OGRs Section 2.17.

Any deviations from the OGRs in relation to the watercourse buffers are noted in this report; please refer to the *OGR Deviations* section of the report for further information.

Watercourse Crossing Summary Table

Table 2: Watercourse Crossing Summary

A list of road crossings over field verified watercourses within the Planning Unit.

Road ID	Crossing ID (Road Crossing Number)	Watercourse Classification
RB09322417461	1769	Ephemeral
RB09322417461	1716	Small Permanent
RB09322409171	917	Ephemeral
RB09322408651	848	Ephemeral
RB09322408651	857	Intermittent
RB09322418741	1892	Ephemeral
RB09322407581	738	Ephemeral
RB09322407581	748	Transitional
RB09322405821	540	Ephemeral

RB09322405171	556	Ephemeral
RB09322404311	430	Intermittent
RB09322405131	522	Ephemeral
RB09322405171	654	Small Permanent
RB09322408191	829	Small Permanent
RB09322405171	529	Ephemeral
RB09322406911	692	Ephemeral
RB09322418741	1714	Ephemeral
RB09322404311	421	Ephemeral
RB09322417461	1726	Ephemeral
RB09322405171	614	Ephemeral

6.0 Road Information

Overview maps have been attached showing roads in accordance with Section 4.1.3.7. of the OGRs; all spatial data requirements have also been included with this submission.

Roads will be constructed, maintained, and reclaimed in a manner consistent with Section 2.15 of the OGRs.

When new access is necessary, reclamation processes will be followed as per applicable legislation. To enable for silviculture activities, all-terrain vehicle (ATV) access may be left throughout the harvest area.

Road Attributes Table

(Values rounded to whole numbers)

 $\begin{tabular}{ll} \hline \textbf{Table 3: Road Attributes} \\ \textbf{Summary of the proposed inter-block roads of the Planning Unit.} \\ \end{tabular}$

Road ID	Road Classification	Haul Season	Length, m
RB09322404311	Temporary	Non-Frozen	491
RB09322405131	Temporary	Non-Frozen	1,821
RB09322405171	Temporary	Non-Frozen	4,705
RB09322405821	Temporary	Non-Frozen	1,970
RB09322406891	Temporary	Non-Frozen	120
RB09322406911	Temporary	Non-Frozen	423
RB09322407581	Temporary	Frozen	2,420
RB09322408191	Temporary	Non-Frozen	717
RB09322408651	Temporary	Non-Frozen	3,133
RB09322409171	Temporary	Non-Frozen	722
RB09322417091	Temporary	Frozen	208
RB09322417461	Temporary	Frozen	1,540
RB09322417461	Temporary	Frozen	1,016
RB09322417521	Temporary	Frozen	4,325
RB09322417811	Temporary	Frozen	877
RB09322418741	Temporary	Non-Frozen	3,378
RB09322419601	Temporary	Frozen	244
RB09322420011	Temporary	Frozen	1,117
RB09322404311	Temporary	Non-Frozen	491
RB09322405131	Temporary	Non-Frozen	1,821

Road ID	Road Classification	Haul Season	Length, m
RB09322405171	Temporary	Non-Frozen	4,705
RB09322405821	Temporary	Non-Frozen	1,970

7.0 Land Use Information

A search of the Geographic Land Information Management and Planning System (GLIMPS) and Digital Integrated Dispositions (DIDs) yielded active dispositions within the FHP. Any necessary agreements with the disposition holder will be in place prior to the commencement of harvest operations. None of the dispositions within the FHP will restrict harvest operations in the FHP.

Land Use Summary Table

<u>Table 4: Land Use Summary Table</u> Active dispositions in the Planning Unit

Disposition Number	Disposition Holder	Disposition Type
DLO033408	ALBERTA-PACIFIC FOREST INDUSTRIES INC.	DLO
LOC841170	SUNCOR ENERGY INC.	LOC

The FHP design incorporates pipeline crossings, for temporary roads. The agreements will be in place prior to the construction of these crossings.

8.0 Integration with Other Forest Users

8.1 Integration with Other Harvest Operators

This FHP is not an integrated between the FMA and a CTL holder.

8.2 Registered Fur Management Areas (RFMAs)

Notification letter were sent to RFMAs within the FHP who will be affected by operations. Any requests from the RFMA holders have been considered, and, where possible, the harvest design has been planned to accommodate the request.

Trapper Areas Table

Table 5: Trapper Areas Table

RFMA ID	Notification Method
20	Mail
25	Mail

8.3 Wildlife Management Unit(s) (WMU)

Planning Unit 093224 is located within WMU 531. The Guides and Outfitters operating within this unit have been sent notification, via registered mail, on the FHP design, as well as a timeline for the commencement of harvest operations. Any requests from Guides and Outfitters have been considered, and, where possible, the harvest design has been planned to accommodate the request. A table with the active Guides and Outfitters in the WMU is included below.

Guide and Outfitters Table

Table 6: Guide and Outfitters

OG ID Number	Date	Contact Method
Wizard Lake Outfitting Inc.	05-Jul-22	Registered Mail
Birch Mountain Outfitter	05-Jul-22	Registered Mail
Northern Sporting Adventures	05-Jul-22	Registered Mail
Double Diamond Wilderness Hunts Ltd.	05-Jul-22	Registered Mail
Buffalo Hill Outfitters Inc.	05-Jul-22	Registered Mail
Epic Outfitting Ltd.	05-Jul-22	Registered Mail
Alberta West Outfitters Ltd.	05-Jul-22	Registered Mail

8.4 Indigenous Groups

During the General Development Plan (GDP) process, Alberta – Pacific conducts consultations with indigenous groups every year. There have not been any issues identified prior to FHP submission.

There was a trapper/traditional use trail located within the Planning Unit. This trail was given a 50-meter protective buffer on either side of the trail centerline.

8.5 Other Forest Users

There are no known forest user groups operating within the Planning Unit area.

8.6 Forest Aesthetics

As outlined in Section 4.2.2.1. of the OGRs, Alberta – Pacific follows the objective to mitigate the impact of timber operations on the visual quality of the forest landscape.

This FHP is not adjacent to any park or recreational areas, and no other aesthetics concerns have been noted to date by other forest users.

9.0 Species and Areas of Concern

9.1 Woodland Caribou

Planning Unit 093224 is located within Woodland Caribou Range. All operations will be consistent with the OGRs.

9.2 Key Wildlife and Biodiversity Zone (KWBZ)

Planning Unit 093224 is not within a Key Wildlife and Biodiversity Zone. All operations will be consistent with the OGRs.

9.3 Other Species

All known sensitive wildlife sites have been buffered in accordance with Section 2.8.9 of the OGRs.

9.4 Sensitive Sites

A review of the block design and landscape of the FHP was completed by professional archaeologists. Any sites identified as being of high historical significance (historical resource sites) have been removed from the harvest design.

Upon completion of cutblock and road layout, a second review of the harvest blocks, and temporary roads is completed to identify potential conflicts, and to determine if any further changes are required to the Planning Unit.

There were no signs of rare plants, including signs of terrestrial lichen found within the Planning Unit.

If any sites are identified post submission, Alberta – Pacific will take the appropriate action to protect these sites.

9.5 Forest Health

During the field verification, a team evaluated the current state of the forest health in the FHP area, as outlined in Section 2.19 of the OGRs.

If any sites are identified post submission, Alberta – Pacific will take the appropriate action to address these concerns as per Section 2.19.1 of the OGRs.

10.0 SHS Information / Variance Summary

Variances from the Spatial Harvest Sequence (SHS) within the Planning Unit boundary are shown in Appendix 3 - Spatial Harvest Sequence Summary Table.

11.0 OGR Deviations

<u>Table 7. Temporary Roads requested to be within 200m of lakes >4a.</u>

Road ID	Opening Number	Block Area	Harvest Season (Frozen/ Non-Frozen)	Buffer Deviation	Buffer Deviation Reason
RB09322408651	4220930865	85	Non-Frozen	Lake >4ha	Limited locations for road alignment within Block.
RB09322404311	4220930431	9	Non-Frozen	Lake >4ha	Limited locations for road alignment within Block.
RB09322405821	4220930582	46	Non-Frozen	Lake >4ha	Limited locations for road alignment within Block.
RB09322417581	4220931758	4	Frozen	Lake >4ha	Limited locations for road alignment within Block.
RB09322420011	4220932001	9	Frozen	Lake >4ha	Limited locations for road alignment within Block.

12.0 Validation by Registered Forest Practitioner

This plan is being prepared and submitted on behalf of Alberta-Pacific Forest Industries Inc.

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