



7 July 2021

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# Forest Harvest Plan

**PU070124**



**ALBERTA  
PACIFIC**  
FOREST INDUSTRIES INC



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## **Appendices**

**Appendix 1- FHP Block Maps**

**Appendix 2- FHP Overview Map**

**Appendix 3- Spatial Harvest Sequence Summary Table**

**Appendix 4- Spatial Harvest Sequence Summary Map**

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# Report

## **1.0 Introduction**

Alberta – Pacific Forest Industries Inc. (Al-Pac) has prepared a Forest Harvest Plan (FHP) for the harvest of stands within Planning Unit 070124.

The Planning Unit is located within Forest Management Unit (FMU) L01.

Copies of this Forest Harvest Plan are made available on the Al-Pac website, at [www.alpac.ca](http://www.alpac.ca).

## **2.0 General Planning Unit Information /Design Considerations**

This FHP has been validated by a Registered Forestry Professional from Al-Pac.

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 2021-2022 Al-Pac Annual Operating Plan (AOP).

This Planning Unit is located approximately 55 km north of Lac La Biche along Al-Pac’s “K-Road”. The Owl River runs along the west side of the planned area, and CN’s railway along the east side. This area is trafficked seasonally for hunting as there is fairly good access through the “2100” road that goes north to Philomena, and there are nice camping spots on the roadside near the river. Because of the high valued use of the Owl River and the 2100 road in this area, Alberta–Pacific chose to buffer the Owl River by 100m and remove spatial harvest sequence from the plan along parts of the 2100 road.

Another unique feature of this Planning Unit is the concentration of large hills left by glaciation. Some slopes prevent logging with conventional equipment, and so areas of the spatial harvest sequence were deleted as Al-Pac does not have contractors with the appropriate equipment.

### **2.1 Operating Ground Rules**

This Planning Unit is designed in accordance with the Northeast Alberta Operating Ground Rules (OGRs). Al-Pac 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”.

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### 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 600 stems/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.

In this submission, there were two openings which warranted avoidance methods.

| UNDERSTORY BLOCKS |                |           |                   |
|-------------------|----------------|-----------|-------------------|
| Source ID         | Opening Number | AREA (ha) | Protection Method |
| FC07012404991     | 4120700499     | 52        | Avoidance Block   |
| FC07012411141     | 4120701114     | 17        | Avoidance Block   |



## Block Summary Table

(Values rounded to whole numbers)

**Table 1: Block Summary Table**

This table provides a brief description of the proposed harvest blocks within the Planning Unit.

| <b>Deciduous Blocks</b> |                       |  |                  |   |  |                                     |
|-------------------------|-----------------------|--|------------------|---|--|-------------------------------------|
| <i>Source ID</i>        | <b>Opening Number</b> | <b>Harvest Season (Frozen/ Non-Frozen)</b> | <b>Area (ha)</b> | <b>Deciduous Volume (m<sup>3</sup>)</b> | <b>Incidental Conifer Volume (m<sup>3</sup>)</b> | <b>Total Volume (m<sup>3</sup>)</b> |
| FC07012404371           | 4120700437            | Non-Frozen                                 | 26               | 6,285                                   | 635  | 6,920                               |
| FC07012404541           | 4120700454            | Non-Frozen                                 | 39               | 9,416                                   | 1,027  | 10,443                              |
| FC07012404931           | 4120700493            | Non-Frozen                                 | 19               | 4,028                                   | 1,072  | 5,100                               |
| FC07012404991           | 4120700499            | Non-Frozen                                 | 52               | 12,004                                  | 1,453  | 13,457                              |
| FC07012405491           | 4120700549            | Non-Frozen                                 | 53               | 13,246                                  | 1,303  | 14,549                              |
| FC07012408511           | 4120700851            | Non-Frozen                                 | 19               | 4,543                                   | 488  | 5,031                               |
| FC07012409001           | 4120700900            | Non-Frozen                                 | 19               | 4,740                                   | 580  | 5,320                               |
| FC07012409341           | 4120700934            | Non-Frozen                                 | 19               | 4,355                                   | 593  | 4,948                               |
| FC07012409401           | 4120700940            | Non-Frozen                                 | 7                | 1,558                                   | 264  | 1,822                               |
| FC07012409461           | 4120700946            | Non-Frozen                                 | 25               | 5,066                                   | 1,219  | 6,285                               |
| FC07012410161           | 4120701016            | Non-Frozen                                 | 11               | 2,646                                   | 272  | 2,918                               |
| FC07012411141           | 4120701114            | Non-Frozen                                 | 17               | 4,063                                   | 430  | 4,493                               |
| FC07012411551           | 4120701155            | Non-Frozen                                 | 12               | 3,022                                   | 340  | 3,362                               |
| FC07012414221           | 4120701422            | Non-Frozen                                 | 24               | 5,312                                   | 1,019  | 6,331                               |
| FC07012415141           | 4120701514            | Frozen                                     | 7                | 1,351                                   | 348  | 1,699                               |
| FC07012415321           | 4120701532            | Non-Frozen                                 | 27               | 5,498                                   | 1,187  | 6,685                               |
| FC07012416401           | 4120701640            | Non-Frozen                                 | 60               | 12,643                                  | 3,030  | 15,673                              |
| FC07012416671           | 4120701667            | Non-Frozen                                 | 86               | 19,228                                  | 3,116  | 22,344                              |
| FC07012416701           | 4120701670            | Non-Frozen                                 | 16               | 3,424                                   | 662  | 4,086                               |
| FC07012422171           | 4120702217            | Non-Frozen                                 | 6                | 1,422                                   | 150  | 1,572                               |
| FC07012422901           | 4120702290            | Non-Frozen                                 | 60               | 13,850                                  | 1,558  | 15,408                              |
| FC07012423261           | 4120702326            | Non-Frozen                                 | 16               | 3,834                                   | 529  | 4,363                               |
| FC07012426191           | 4120702619            | Non-Frozen                                 | 46               | 11,238                                  | 1,350  | 12,588                              |
| FC07012427841           | 4120702784            | Non-Frozen                                 | 22               | 5,217                                   | 563  | 5,780                               |

\*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.

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#### 4.4 Structure Retention

For Al-Pac, 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 42 as identified by Alberta Agriculture and Forestry (AAF).

Debris management of the Planning Unit will be accomplished in a manner consistent with Section 7.3 of the OGRs.

#### 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 11.3.4.4 of the Northeast Alberta Timber Harvesting Planning and Operating Ground Rules (OGRs).

| SOURCE ID     | OPENING NUMBER | GRID | LAT      | LONG        |
|---------------|----------------|------|----------|-------------|
| FC07012404541 | 4120700454     | 0453 | 55.02821 | -111.772164 |
| FC07012422901 | 4120702290     | 2290 | 55.06765 | -111.737215 |

### **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 6.0 of the OGRs. Any confirmed watercourses have been buffered in accordance with the OGRs Section 6.0.

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 1: Watercourse Crossing Summary**

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

| <i>Road ID</i> | <i>Crossing ID<br/>(Road Crossing Number)</i> | <i>Watercourse<br/>Classification</i> |
|----------------|---|---------------------------------------|
| RC07012404541  | 0434  | Ephemeral                             |
| RC07012404991  | 0466  | Ephemeral                             |
| RC07012405491  | 0558  | No Watercourse                        |
| RC07012405491  | 0578  | No Watercourse                        |
| RC07012405491  | 0831  | Ephemeral                             |
| RC07012408511  | 0871  | No Watercourse                        |
| RC07012410161  | 0997  | Ephemeral                             |
| RC07012415141  | 1524  | No Watercourse                        |
| RC07012416401  | 1601  | No Watercourse                        |
| RC07012416401  | 1791  | No Watercourse                        |
| RC07012416671  | 1689  | No Watercourse                        |
| RC07012416671  | 2170  | Transitional                          |
| RC07012426191  | 2633  | Ephemeral                             |

### 6.0 Road Information

Overview maps have been attached showing roads in accordance with Section 3.4.7. 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 11.3 of the OGRs.

When new access is necessary, reclamation processes will adhere to Section 11.3.4, Section 11.3.4.3 and Section 11.3.4.4 of the OGRs. 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)

**Table 2: Road Attributes**

Summary of the proposed in-block roads of the Planning Unit.

| <i>Road ID</i> | <b>Road Classification</b> | <b>Haul Season</b> | <b>Length, m</b> |
|----------------|----------------------------|--------------------|------------------|
| RC07012404541  | Temp                       | Non-Frozen         | 1,018            |
| RC07012404991  | Temp                       | Non-Frozen         | 1,219            |
| RC07012405491  | Temp                       | Non-Frozen         | 3,107            |
| RC07012408511  | Temp                       | Non-Frozen         | 639              |
| RC07012410161  | Temp                       | Non-Frozen         | 252              |
| RC07012415141  | Temp                       | Frozen             | 98               |
| RC07012416401  | Temp                       | Non-Frozen         | 3,470            |
| RC07012416671  | Temp                       | Non-Frozen         | 2,609            |
| RC07012426191  | Temp                       | Non-Frozen         | 1,923            |

### 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

**Table 3: Land Use Summary Table**

Active dispositions in the Planning Unit

| <b>LANDUSE SUMMARY</b>    |                                       |                         |
|---------------------------|---------------------------------------|-------------------------|
| <b>Disposition Number</b> | <b>Disposition Holder</b>             | <b>Disposition Type</b> |
| LOC971791                 | CANADIAN NATURAL<br>RESOURCES LIMITED | License of Occupation   |
| LOC4812                   |                                       |                         |

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

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## 8.0 Integration with Other Forest Users

### 8.1 Integration with Other Harvest Operators

This plan is not integrated with other Quota Holders or Permitees, and effort was taken to avoid other's landbase (AFI's sequenced conifer).

### 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 4: Trapper Areas Table

| <b>RFMA ID</b> | <b>Notification Method</b> |
|----------------|----------------------------|
| 1637           | Registered Mail            |
| 2007           | Registered Mail            |

### 8.3 Wildlife Management Unit(s) (WMU)

Planning Unit is located within WMU 515 . 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 5: Guide and Outfitters

| <b>GUIDE &amp; OUTFITTERS</b>                |                 |                       |
|--|-----------------|-----------------------|
| <b>OG Company</b>                            | <b>Date</b>     | <b>Contact Method</b> |
| Limb Driven Outditting Ltd.                  | April 1st, 2021 | Letter                |
| North Point Outfitters Inc.                  | April 1st, 2021 | Letter                |
| North Country Outfitting Inc.                | April 1st, 2021 | Letter                |
| Dale McKinnon Alberta Guide & Outfitter Ltd. | April 1st, 2021 | Letter                |
| Sherwood Outfitters Inc.                     | April 1st, 2021 | Letter                |
| Avenir Guiding & Outfitting                  | April 1st, 2021 | Letter                |

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## 8.4 Indigenous Groups

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

## 8.5 Other Forest Users

There are no other forest user groups identified within the Planning Unit area.

## 8.6 Forest Aesthetics

As outlined in Section 5.5. of the OGRs, Al-Pac follows the objective to mitigate the impact of timber operations on the visual quality of the forest landscape.

There was consideration of the sight lines from the Owl River (navigable) as well as from both active trapper cabins, and traffic on the 2100 road. Significant areas were removed from the plan to accommodate the Owl River and cabin sight lines, and some retention patches were planned into locations adjacent to CNRL's 2100 road.

## **9.0 Species and Areas of Concern**

### 9.1 Woodland Caribou

Planning Unit 070124 is **not** located within a Woodland Caribou Range.

### 9.2 Key Wildlife and Biodiversity Zone (KWBZ)

Planning Unit 070124 is within a Key Wildlife and Biodiversity Zone; all operations within the KWBZ will be consistent with Section 7.7.4. of the OGRs.

### 9.3 Other Species

All known sensitive wildlife sites have been buffered in accordance with Section 7.7.5 of the OGRs.

### 9.4 Cultural 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.

There was an historic wagon trail identified in this plan and gps'd by a local trapper who accompanied an Alberta–Pacific employee. The trail bisected a harvest area and was buffered accordingly, which caused the removal of the harvest area.

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

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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 10.1 of the OGRs. No forest health concerns were identified other than old/decadent wood in the southern portion of the harvest areas.

If any sites are identified post submission, Al-Pac will take the appropriate action to protect these sites as per Section 10.1.2 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

**Table 6: Road Percent Deviations Table**

Road deviations which contain blocks that are greater than 7 hectares, with potentially more than 5% road disturbance.

| Road Attributes |                |                 |                |                 |                         |
|-----------------|----------------|-----------------|----------------|-----------------|-------------------------|
| Source ID       | Opening Number | Block Area (ha) | Harvest Season | Road Percentage | Road Percentage Reason  |
| FC07012404371   | 4120700437     | 26              | Non-Frozen     | 6.89            | Access to other blocks  |
| FC07012404541   | 4120700454     | 39              | Non-Frozen     | 6.43            | Required due to terrain |
| FC07012404931   | 4120700493     | 19              | Non-Frozen     | 6.24            | Required due to terrain |
| FC07012404991   | 4120700499     | 52              | Non-Frozen     | 6.14            | Required due to terrain |
| FC07012405491   | 4120700549     | 53              | Non-Frozen     | 6.51            | Required due to terrain |
| FC07012408511   | 4120700851     | 19              | Non-Frozen     | 6.99            | Access to other blocks  |
| FC07012409001   | 4120700900     | 19              | Non-Frozen     | 4.83            | Access to other blocks  |
| FC07012409341   | 4120700934     | 19              | Non-Frozen     | 6.56            | Access to other blocks  |
| FC07012409401   | 4120700940     | 7               | Non-Frozen     | 7.98            | Narrow/irregular block  |
| FC07012409461   | 4120700946     | 25              | Non-Frozen     | 5.65            | Narrow/irregular block  |
| FC07012410161   | 4120701016     | 11              | Non-Frozen     | 7.94            | Narrow/irregular block  |
| FC07012411141   | 4120701114     | 17              | Non-Frozen     | 4.67            | Narrow/irregular block  |
| FC07012411551   | 4120701155     | 12              | Non-Frozen     | 4.6             | Narrow/irregular block  |
| FC07012414221   | 4120701422     | 24              | Non-Frozen     | 5.95            | Narrow/irregular block  |
| FC07012415321   | 4120701532     | 27              | Non-Frozen     | 5.46            | Access to other blocks  |
| FC07012416401   | 4120701640     | 60              | Non-Frozen     | 6.49            | Required due to terrain |
| FC07012416671   | 4120701667     | 86              | Non-Frozen     | 5.52            | Required due to terrain |
| FC07012416701   | 4120701670     | 16              | Non-Frozen     | 5.89            | Narrow/irregular block  |
| FC07012422901   | 4120702290     | 60              | Non-Frozen     | 4.76            | Access to other blocks  |
| FC07012423261   | 4120702326     | 16              | Non-Frozen     | 10.71           | Narrow/irregular block  |
| FC07012426191   | 4120702619     | 46              | Non-Frozen     | 5.24            | Access to other blocks  |
| FC07012427841   | 4120702784     | 22              | Non-Frozen     | 6.12            | Narrow/irregular block  |



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**12.0 Validation by Registered Forest Practitioner**

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

**ALBERTA-PACIFIC FOREST INDUSTRIES INC.**

*Dennis Froese*

