



Alberta Pacific Forest Industries  
Inc.  
and  
Northland Forest Products Ltd.

Forest Harvest Plan

Planning Compartment:

**070124A (Owl River)**

FMA 9100029/ CTLL010018

**Forest Harvest Plan- 070124A-19-24**

Date Submitted: **2019/07/15**

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# Forest Harvest Plan

## PU070124A / Owl River

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# Report

## 1.0 Introduction

Alberta – Pacific Forest Industries Inc. (Alberta – Pacific) and Northland Forest Products Ltd. (Northland) have prepared a Forest Harvest Plan (FHP) for the harvest of deciduous and coniferous stands within Planning Unit 070124A.

Planning Unit 070124A is comprised of 5 proposed coniferous cutblocks and 11 proposed deciduous cutblocks with a total area of 1,130.2 ha, within Forest Management Unit (FMU) Lo1.

The companies have identified two potential camp locations for logging operations within this Planning Unit. The temporary camps are located in block FC07013423691 (Lat 55.084223, Long -111.865359) and block FC07012420201 (Lat 55.066442, Long -111.802879), each with an area of 0.5 hectares and can be viewed in the FHP Overview Map. The campsites will be reclaimed as indicated in Section 11.3.4.4 of the Northeast Alberta Timber Harvesting Planning and Operating Ground Rules (OGRs).

Copies of this Forest Harvest Plan are available on the Alberta – Pacific website, at [www.alpac.ca](http://www.alpac.ca) and at [northlandforestproducts.com](http://northlandforestproducts.com)

## 2.0 General Planning Unit Information /Design Considerations

This FHP has been validated by Registered Forestry Professionals employed by Alberta-Pacific Forest Industries Inc.

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 2019-20 Alberta-Pacific and Northland Annual Operating Plan (AOP).

### 2.1 Operating Ground Rules

Planning Unit 070124A has been designed in accordance with the Northeast Alberta Operating Ground Rules (OGRs), revised 2018. Alberta – Pacific and Northland are 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

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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 in Appendix A outlining the expected volumes of the area.

##### 4.1 Utilization

Alberta – Pacific adheres to the 15/10 utilization standard for deciduous stands and Northland adheres to 15/10 standard for coniferous stands.

##### 4.2 Field Verification

The proposed blocks were ground verified by a field layout team. The layout team provided planning support to assess timber quality, 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 will be protected using 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 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 Appendix A - *Block Summary Table*.

##### 4.4 Structure Retention

Alberta – Pacific will leave an average of 5% merchantable volume as structure retention throughout the FMU and Northland will leave an average of 3%. This retention will be left in the following methods:

- Laid out patches
- Mapped patches (planned with GIS desktop)
- Individual trees
- Small clumps left at the operators' discretion

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#### 4.5 Debris Management

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

#### **5.0 Watercourse Protection**

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, Table 2.

Alberta- Pacific's internal fish surveys has confirmed no presence of fish bearing watercourses.

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. The list of watercourse crossings can be found in Appendix B – *Watercourse Crossing Summary Table*.

#### **6.0 Road Information**

Overview maps have been attached showing roads in accordance with Section 3.4.6. 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 of the OGRs. To enable for silviculture activities, all-terrain vehicle (ATV) access may be left throughout the harvest area. The list of roads can be found in Appendix C – *Road Attributes Table*.

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## 7.0 Land Use Information

A search of the Land Status Automated System (LSAS) and Digital Integrated Dispositions (DIDs) yielded active dispositions within the FHP harvest area. 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 harvest area will restrict harvest operations in the FHP.

The FHP design incorporates pipeline crossings for temporary class 4 roads. The agreements will be in place prior to the construction of these crossing.

## 8.0 Integration with Other Forest Users

### 8.1 Integration with Other Harvest Operators

This is an integrated plan between the FMA holder and CTL holder; both companies have validated the plan.

### 8.2 Registered Fur Management Areas (RFMAs)

There are 2 RFMAs within the FHP who will be affected by operations. Notification letters were sent to the respective RFMA holders, any requests from any RFMA holder have been considered, and, where possible, the harvest design has been planned to accommodate the request.

### **Trapper Areas Table**

RFMA ID	Notification Method	Contact Method
2007	Letter	Mail
2639	Letter	Mail

Table 1: Trapper Areas Table  
RFMA holders affected by harvest operations.

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

Planning Unit 070124A is location 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

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from Guides and Outfitters have been considered, and, where possible, the harvest design has been planned to accommodate the request.

#### 8.4 Indigenous Groups

During the General Development Plan (GDP) process, Alberta – Pacific and Northland completes a consultation with indigenous groups every year. There have not been any issues identified for the Planning Unit 070124A FHP submission.

#### 8.5 Other Forest Users

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

#### 8.6 Forest Aesthetics

As outlined in Section 5.5. of the OGRs, Alberta – Pacific and Northland follow 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. Alberta – Pacific and Northland will strategically locate retention areas adjacent to Class I, II, and III roads, minimizing line of sight where possible.

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

#### 9.1 Woodland Caribou

None of the planned cutblocks in this FHP are within mapped Caribou Ranges.

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

Planning Unit 070124A is located within the KWBZ and will adhere to section 7.7.5 of the OGRs.



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### 9.3 Other Species

All known sensitive wildlife sites have been buffered in accordance with Section 7.7.5.2 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 or moderate 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 class 4 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, or diseases identified, including signs of terrestrial lichen.

If any sites are identified post submission, Alberta – Pacific and Northland 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.

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

## **10.0 SHS Information / Variance Summary**

Variances from the Spatial Harvest Sequence (SHS) within the Planning Unit boundary are shown in Appendix D – *SHS Variance Summary Table*.

## **11.0 Silviculture Information**

No watercourse crossings will be left in for silviculture.

## 12.0 OGR Deviations

### 12.1 Road Deviations

The following table outlines the blocks which are greater than 7 hectares, with potentially more than 5% road disturbance.

### **Road Percent Deviations Table**

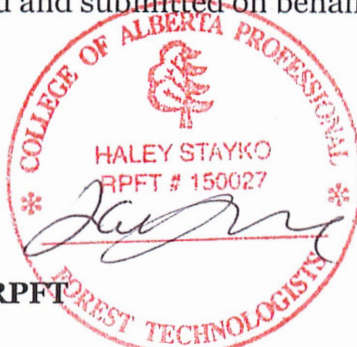
Table 2: Road Percent Deviations Table

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

<b>Source ID</b>	<b>Opening Number</b>	<b>Road Percentage</b>	<b>Reasoning</b>
<i>FCo7012413971</i>	4130701397	5.17	Required to avoid land use
<i>FCo7012420201</i>	4120702020	12.20	Steep terrain
<i>FCo7012429231</i>	4120702923	5.77	Access to other blocks
<i>FCo7013423691</i>	4130702369	7.77	Narrow/irregular block

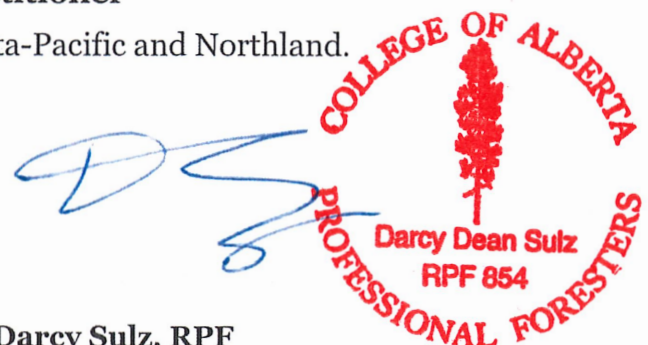
## 13.0 Validation by Registered Forest Practitioner

Plan prepared and submitted on behalf of Alberta-Pacific and Northland.



**Haley Alm, RPFT**

ALBERTA-PACIFIC FOREST INDUSTRIES INC.



**Darcy Sulz, RPF**

NORTHLAND FOREST PRODUCTS LTD

Appendix A: Block Summary Table

Disposition	Source ID	Opening Number	Season	Landbase	Understorey Protection	Area (ha)	Deciduous Volume (m3)	Conifer Volume (m3)	Total Volume (m3)
FMA9100029	FC07012413971	4130701397	Non-frozen	D	Avoidance	11.2	2,214.5	329.3	2,543.9
FMA9100029	FC07012418591	4120701859	Non-frozen	D	Avoidance	194.2	35,788.2	2,977.7	38,765.9
FMA9100029	FC07012419951	4120701995	Non-frozen	D	Avoidance	28.0	5,673.6	783.0	6,456.6
FMA9100029	FC07012420201	4120702020	Non-frozen	D	Avoidance	102.1	23,399.5	2,968.0	26,367.5
FMA9100029	FC07012423661	4130702366	Non-frozen	D	Avoidance	64.5	13,210.9	1,056.4	14,267.3
FMA9100029	FC07012424621	4130702462	Non-frozen	D	Avoidance	158.0	30,067.1	2,328.3	32,395.3
FMA9100029	FC07012424991	4130702499	Non-frozen	D	Avoidance	291.3	51,909.3	10,237.2	62,146.5
FMA9100029	FC07012425771	4130702577	Non-frozen	D	Avoidance	115.7	23,345.8	2,043.1	25,388.9
FMA9100029	FC07012429231	4120702923	Non-frozen	D		110.0	25,071.4	2,545.5	27,616.9
FMA9100029	FC07013423691	4130702369	Non-frozen	D	Avoidance	29.8	5,922.9	721.9	6,644.8
FMA9100029	FC07013425151	4130702515	Non-frozen	D	Avoidance	6.9	1,236.8	201.9	1,438.7
CTLL010018	NC07012418964	4120701896	Non-frozen	C		1.0	55.9	100.4	156.3
CTLL010018	NC07012419924	4120701992	Non-frozen	C		3.1	185.8	583.5	769.2
CTLL010018	NC07013424364	4130702436	Non-frozen	C		6.6	713.6	994.8	1,708.5
CTLL010018	NC07013425714	4130702571	Non-frozen	C		6.2	546.1	1,141.4	1,687.4
CTLL010018	NC07013426604	4130702660	Non-frozen	C		1.6	94.6	319.7	414.4
Total						1130.2	219,436.0	29,331.9	248,768.0

## Appendix B: Watercourse Crossing Summary Table

Road ID	Crossing ID	Stream Class
RC07012418591b	1913	Intermittent
RC07012418591c	1911	Intermittent
RC07012418591e	1836	Ephemeral
RC07012418591e	1957	Ephemeral
RC07012418591e	1965	Ephemeral
RC07012418591g	1966	Ephemeral
RC07012423661a	2409	Transitional
RC07012423661a	2500	Intermittent
RC07012424621d	2481	Intermittent
RC07012424991c	3023	Ephemeral
RC07012424991f	1927	Ephemeral
RC07012424991f	1949	Ephemeral
RC07012424991h	2487	Ephemeral
RC07012425771a	3026	Transitional
RC07012425771f	2534	Transitional
RC07012425771f	3015	Transitional
RC07013423691a	2359	Ephemeral
RC07013423691x	2671	Ephemeral
RC07013423691z	2672	Ephemeral
RC07013424364a	2458	Ephemeral
RC07013425151a	2517	Intermittent
LOC850328	2336	Ephemeral
LOC850328	2358	Ephemeral
LOC850328	2369	Ephemeral
LOC850328	2516	Intermittent
LOC850328	2680	Intermittent
LOC850328	2691	Intermittent
LOC991106	2372	Ephemeral
LOC991106	2424	Ephemeral

**Appendix D: Road Attributes Table**

Road Name	Road Class	Season	Road Length (m)
RC07012413971a	Temporary	Non-frozen	28
RC07012418591b	Temporary	Non-frozen	625
RC07012418591c	Temporary	Non-frozen	1468
RC07012418591e	Temporary	Non-frozen	3127
RC07012418591h	Temporary	Non-frozen	226
RC07012418591i	Temporary	Non-frozen	83
RC07012418964a	Temporary	Non-frozen	149
RC07012419924a	Temporary	Non-frozen	42
RC07012419951a	Temporary	Non-frozen	110
RC07012420201a	Temporary	Non-frozen	1779
RC07012420201i	Temporary	Non-frozen	350
RC07012420201j	Temporary	Non-frozen	343
RC07012420201m	Temporary	Non-frozen	180
RC07012423661a	Temporary	Non-frozen	1693
RC07012423661d	Temporary	Non-frozen	42
RC07012424621a	Temporary	Non-frozen	1767
RC07012424621d	Temporary	Non-frozen	1967
RC07012424991c	Temporary	Non-frozen	1925
RC07012424991d	Temporary	Non-frozen	2244
RC07012424991f	Temporary	Non-frozen	955
RC07012425771a	Temporary	Non-frozen	2674
RC07012425771f	Temporary	Non-frozen	2194
RC07012429231a	Temporary	Non-frozen	2576
RC07013423691a	Temporary	Non-frozen	1628
RC07013425151a	Temporary	Non-frozen	387
LOC042895	Temporary	Non-frozen	1335
LOC850290	Temporary	Non-frozen	1765
LOC850328	Temporary	Non-frozen	2716
LOC931175	Temporary	Non-frozen	3153
LOC991106	Permanent	Non-frozen	1901
MSL931821	Temporary	Non-frozen	322

Operator: Al-Pac

07/04/2019

Harvest Profile				Planned for Harvest (ha)												As-Built				Combined As-Built & Planned						Unplanned					
				Variance								Harvested (ha)				SHS Assessment (Excluding Silvers)		Variance		SHS Assessment (Excluding Silvers)											
																		Substantial		Silvers		Substantial		SHS Assessment (Excluding Silvers)							
Compartment	Company Specific Yield Strata	Provincial Yield Strata	Approved DFA 10 Year SHS	Operator Approved FMP 10 Year SHS	SHS 1-10yr	SHS 11-20yr	Contributing Landbase Outside SHS	Non-Contributing Landbase	Total	Additions	Deletions	Deferrals	Total	Additions	Deletions & Deferrals	Total	SHS 1-10yr	SHS 11-20yr	Contributing Landbase Outside SHS	Non-Contributing Landbase	Total	SHS Variance (Additions %)	Difference in Area (Subst. Add. - D&D)	Difference in Area Total Harvested - 10yr FMP SHS	Additions	Deletions	Deferrals	SHS Variance (Additions %)	Difference in Area (Subst. Add. - D&D)	Remaining Available Area (SHS & Non-SHS)	
L01-A	All	All	9,268	6,446	1,596	-	200	20	1,816	220	290	203	493	283	290	574	571	-	110	4	684	3.41%	(274)	(5,762)	220	290	203	3.41%	(274)	4,631	3,496
	Aw/AwU	D	6,327	6,327	1,573.60	-	197.19	5.37	1,776.15	202.6	287.5	192.7	480.1	100.7	277.1	377.8	550.3	-	110.0	3.6	663.9	3.20%	(278)	(5,663)	203	287	193	3.20%	(278)	3,887	3,446
	Pj/MX	DC-P	101	-	-	-	2.29	2.29	2.3	-	-	-	-	3.1	-	3.1	-	-	-	-	-	0.00%	2	-	2	-	-	0.00%	2	(2)	-
	AwSx	DC-S	119	119	22.36	-	-	-	22.36	-	2.5	10.6	13.2	11.3	13.2	24.5	20.3	-	-	-	20.3	0.00%	(13)	(99)	-	3	11	0.00%	(13)	76	50
	SxAw	CD-SW	148	-	-	-	-	-	-	-	-	-	-	7.1	-	7.1	-	-	-	-	-	0.00%	-	-	-	-	-	0.00%	-	-	-
	Pj/Mx	CD-P	172	-	-	-	-	-	-	-	-	-	-	4.3	-	4.3	-	-	-	-	-	0.00%	-	-	-	-	-	0.00%	-	-	-
	SxAw	CD-SB	22	-	-	-	4.53	4.53	4.5	-	-	-	-	1.5	-	1.5	-	-	-	-	-	0.00%	5	-	5	-	-	0.00%	5	(5)	-
	Sw	C-SW	386	-	-	-	-	-	-	-	-	-	-	34.6	-	34.6	-	-	-	-	-	0.00%	-	-	-	-	-	0.00%	-	-	-
	Pj	C-P	1,849	-	-	-	2.65	2.65	2.6	-	-	-	-	35.3	-	35.3	-	-	-	-	-	0.00%	3	-	3	-	-	0.00%	3	(3)	-
	SbG	C-SB	144	-	-	-	5.20	5.20	5.2	-	-	-	-	59.2	-	59.2	-	-	-	-	-	0.00%	5	-	5	-	-	0.00%	5	(5)	-
	SBFM	C-SBFM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00%	-	-	-	-	-	0.00%	-	-	-
	X	NoStrata	-	-	-	-	2.33	2.33	2.3	-	-	-	-	26.1	-	26.1	-	-	-	-	-	0.00%	2	-	2	-	-	0.00%	2	(2)	-
<div>Note:      * Deletions and Deferrals to be provided in shapefile format for next FMP Values may be affected by rounding  Planning Units submitted with this variance Calculation:      70124a, 70134, 70134a, 71124, 71134, 72124, 73124</div>																															

Operator - NFPL

PD 1, Year 1-10

Note:	* Deletions and Deferrals to be provided in shapefile format for next FMP Values may be affected by rounding
Planning Units submitted with this variance Calculation:	70124a, 70134a, 71114, 71134, 73124