

WELCOME

Public Advisory Group (PAG) Meeting Prince Albert Timber Supply Area

December 9, 2022

(2:00 – 3:30 pm)

AGENDA

1. Introductions
2. Review Agenda
3. PAG Purpose (from Terms of Reference)
4. Previous Notes and Action Items
5. Updates
6. FMP 2022 Annual Report (2020-21 Operating Year)
7. Wrap up & Next Meeting

PAG's PURPOSE (from Terms of Reference)

To provide input on the development and implementation of the FMP

During development of an FMP, help formulate:

- forest management objectives, strategies, and options
- Indicators and targets for evaluating the implementation of those strategies

During implementation of an FMP

- review annual progress report on implementing the forest management strategies.

To act as a forum for information exchange between Sakâw & regional organizations.

Keep your constituents informed of the group's deliberations. (1-page briefing note).

Bring the opinions and feelings of your constituents.

PREVIOUS NOTES & ACTION ITEMS

Meeting of November 9, 2021

Meeting Notes – 4 pages

Meeting Notes
Public Advisory Group (PAG), Prince Albert Timber Supply Area (PA TSA)
November 9, 2021
Teams Meeting

Participants

Interest Category	Organization	Name
1_Environment & Wildlife	Canadian Parks & Wilderness Society (CPAWS)	Gord Vaadeland
1_Environment & Wildlife	Ducks Unlimited Canada	Mark Kornder
1_Environment & Wildlife	Prince Albert Model Forest	Peter Friedrichsen
2_Indigenous Interests	LLRIB Traditional Lands & Resources	Jeanine Patterson
2_Indigenous Interests	LLRIB Traditional Lands & Resources	Sam Roberts
3_Municipalities and Communities	City of Prince Albert	Don Cody
3_Municipalities and Communities	District of Lakeland No. 521	Treena McAlpine
6_Recreation & Tourism	Saskatchewan Snowmobilers Association	Leah Switzer
12_Government, Advisors & Resource People	Ministry of Environment, Forest Service Branch	Bill Thibeault
12_Government, Advisors & Resource People	Ministry of Environment, Forest Service Branch	Sarah Schmid
12_Government, Advisors & Resource People	Tolko Industries Ltd. (Sakaw Shareholder)	Michelle Young
12_Government, Advisors & Resource People	Norsask Forest Products (Sakaw Shareholder)	Robert Follett
12_Government, Advisors & Resource People	Meadow Lake Mechanical Pulp (Sakaw Shareholder)	Taneal Brucks
12_Government, Advisors & Resource People	BBNR Management Solutions, Facilitator	Carl Neggers
12_Government, Advisors & Resource People	Sakaw Askiy	Diane Roddy Michelle Thompson

Meeting Convened at 1:33 pm

Introductions: Attendance was reviewed by Carl Neggers, meeting facilitator. People introduced themselves and who they are with.

Review Key Elements of PAG Terms of Reference: Carl outlined the general responsibilities of PAG members, decision making process, logging of concerns and transparency of meeting summaries.

Review of Agenda

Previous Notes and Action Items
Meeting Notes and Meeting Brief from October 14, 2020 meeting

- Both documents are good information. The 1-page Brief is good to have.
- Key follow up was reviewed regarding concerns related to forest management planning and the

PAG Meeting Nov. 9, 2021 Page 1

Meeting Brief – 1 page

Meeting Brief
Public Advisory Group (PAG) - Prince Albert Timber Supply Area (PA TSA)
November 9, 2021

16 participants attended the meeting, from organizations in 5 interest categories.

PAG Terms of Reference: Brief review of PAG member responsibilities, decision making process, logging of concerns, transparency of meeting summaries.

Updates

- Hydrology concern raised in the previous meeting will be considered in an upcoming review of the Forest Management Planning Standard.
- New wood allocations in the PA TSA were announced for two potential new mills (Paper Excellence Prince Albert pulpmill and One Sky OSB mill) and expansions of the Dunkley and Carrier sawmills. The two new mills would use small softwood and excess hardwood that is currently underused. Until they are announced and commissioned it is difficult to determine the specific impacts on wood harvest. Further explanation added after meeting: *Harvest footprint will be larger, however the FMP accounted for the harvest volume. These volumes aren't additional to the calculated AAC – just allocated to different/new companies. The footprint modeled in the FMP accounted for this.*
- The amended Forest Management Plan (FMP) to align with the final caribou range plan was approved. CPAWS feels caribou habitat targets will be hard to achieve with the changes made.
- Development of next year's Operating Plan is underway. Draft maps are available at www.sakaw.ca

FMP 2021 Annual Report (on the 2019-2020 Operating Year).
The rest of the meeting was used to review selected highlights from the second FMP Annual Report on performance against the social, environmental, and economic strategies for sustainability. Experience in compiling these reports has proven that "What gets measured, gets managed".

Harvest Event Sizes: Harvest strategies are aimed at approximating the patterns and structure of forest stands and landscapes created by natural disturbances. The size of harvest events is smaller than the established targets. It will take years to reach the targeted sizes, reducing fragmentation.

Maintenance of Species Groupings (stand types): There was not a close correlation between the harvested and predicted future stand types. Concern was expressed about monitoring for species other than trees, and an explanation was provided about the coarse and fine filter approaches used to preserve all forms of biodiversity by maintaining all forest ecosystems in the landscape.

Planted Seedlings from Wild or Improved Seed: It was noted that some pine and mixedwood areas scarified or left for natural regeneration are not regrowing. Agreement on a field visit to view the sites of concern. Companies are legally obligated to ensure areas regrow and survey them twice to check.

Stand Replacing Natural Disturbances: It was suggested the industry needs to invest more in wildfire suppression. This is a provincial responsibility, but Mistik paid for manpower and contractor equipment to protect communities this summer when provincial resources were tied up elsewhere.

Harvested vs Estimated Volumes: Harvest volumes predicted by the wood supply model were accurate at the landscape level for the entire forest area.

Compliance Indicators: Performance improved in meeting standards for soil disturbance, road reclamation, watercourse crossings, and riparian areas.

Economic Indicators: Harvest levels increased to 66% of the allowable cut. There was a corresponding increase in contributions to the provincial economy (GDP, jobs, labour income, taxes).

Next Meeting: Field visit in the spring/summer to look at the regeneration of harvested sites.

Action Item:

Field visit in spring/summer to look at regeneration of harvested sites

PREVIOUS NOTES & ACTION ITEMS

Reforestation Tour

- Planned for June 14, 2022
- Cancelled due to rain

Tours with LLRIB

- September 7th
- October 9th

Clarine Lake Forest (Sept 23rd)

- View draft OP maps
- Past & current harvest sites

Celebrate Renewable Forests During National Forest Week 2022

Drop into the Clarine Lake Forest
Friday, September 23rd
Between 10 am and 2 pm
Weather permitting

Engage in the development of the next forestry plans for the surrounding area.
See a recently harvested forest area - and an area harvested 28 years ago.



To get there travel north of Prince Albert on Hwy 2 for 54 km and turn left. (see map attached).

Foresters at 3 driving tour stops (approximately 4 km) will have information about when the area was harvested and how it was reforested.

They'll also be happy to answer your forestry questions, discuss the draft operating plans for 2023, show you some of the tools used today and talk about the profession they've chosen.

Refreshments will be provided.

This event will not in be held in hazardous weather (such as a storm, heavy rains, or high winds).

If you let us know you are coming that would be appreciated but is not necessary. Contact Sakaw Askiy at 306 953-2021 or admin@sakaw.ca.



UPDATES

2023/24 Operating Plan

- First year of planning in harvest events
- 3 minute presentation on harvest events, created by the Forest Service Branch
- On sakaw.ca home page

Forest Inventory Project

HOME ABOUT US JOB OPPORTUNITIES CONTACT US

Prince Albert Timber Supply Area (PA TSA)

Sakaw Askiy Management Inc - Sustainable Forest Management

Sakaw Askiy - Cree for Forest Land

Sakaw Askiy Management Inc. (Sakaw) is a corporation that holds the Forest Management Agreement for the Prince Albert Timber Supply Area (PA TSA). Sakaw facilitates forest management in the Timber Supply Area for six shareholders who have been allocated wood to harvest from within it. The shareholders are four forest product companies and two First Nations.

Sakaw itself does not own any mills but several of its shareholders own processing facilities in Saskatchewan which use timber from the PA TSA. The wood harvested from the Term Supply Area is used to support forest products mills in Goshen, Meadow Lake, Big River and Carrot River, as well as several smaller facilities operated by third parties.

The Sakaw entity was formed to jointly assume the TSA and its management responsibilities. Forest operations - planning, harvesting, hauling, and renewal - are carried out by each of the shareholders in operating zones within the Term Supply Area. The business model is designed to leave operating decisions to those with the local knowledge (shareholders) while still providing coordinated oversight at the TSA level (Sakaw).

Natural forest pattern harvesting is used to create a healthy, diverse and resilient forest landscape that promotes biodiversity while supporting the sustainable use of Saskatchewan's forests.

Learn more:

- [Infographic PDF](#)
- [Natural Forest Pattern Powerpoint](#)

Traditional Forest Harvest

Small, spread out harvest blocks. More roads and more habitat fragmentation.

Natural Forest Pattern Harvest

Same area cut, but fewer roads and less habitat fragmentation. Closer to what fires naturally create.

What's New...

Update: Due to weather meetings for **Nese Creek, Chitak Lake and Big River** have been rescheduled.

[See meeting dates and other options to review the 2023 Operating Plan here](#)

[See Draft Maps here >>](#)

► Term Supply Area
► Sakaw Askiy Shareholders
► Forest Management Plan
► Operating Plans
► Public Advisory Group Documents
► Checking the facts



Forest Management Plan 2022 Annual Report

FOR THE 2020-2021 YEAR

PRINCE ALBERT TIMBER SUPPLY AREA

GENERAL COMMENTS

Used updated versions of Indicators from FMP Amendment 1 –
Operational Realities

(FMP Vol II, Version 2.2 Effective April 1, 2020)

4 Harvest Event Retention

24 Distribution of Harvest

GENERAL COMMENTS

Small businesses

Data reported is for Sakâw shareholders

Relatively minor amounts harvested by Third Party Operators excluded, except:

- Indicator 21 (Actual Harvest vs HVS) and
- Indicator 28 (Economic Contribution)
- Also for 2020-21: Indicator 13 (Actual vs Predicted Productivity)

Deviations resulting from small businesses are not counted against the FMP targets.

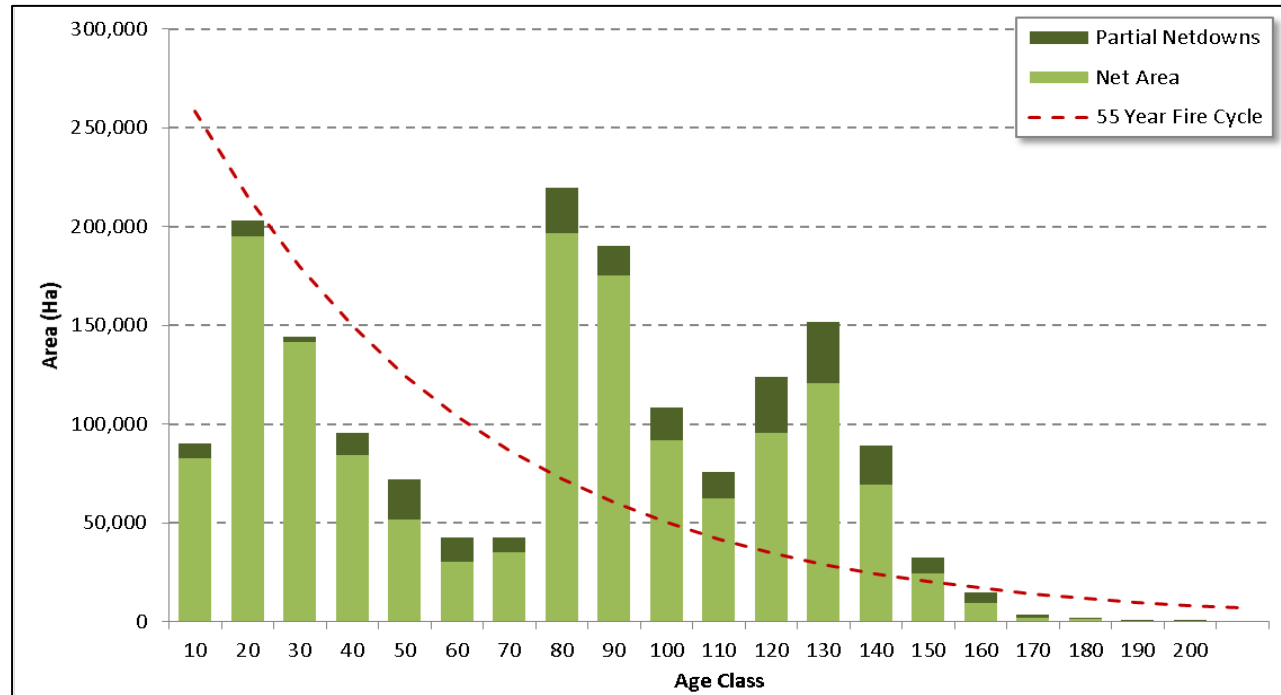
GENERAL COMMENTS

Reporting Cycle & Status

#	Indicator Title	Reporting Cycle	Detailed Assessment	Reporting Yr:	Operating Year of Activity									
					2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
1	Age Class Distribution	5 Year	10 Year	Reporting Yr:					2024					2029
2	Old/Very Old Forest	Annual	-	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
3	Harvest Event Size	Annual	10 Year	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
4	Harvest Event Retention	Annual	-	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
5	Softwood in H Types	Annual	5 Year	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
6	Species Groups Maintained	Annual	5 Year	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
7a	Moose Habitat	5 Year	5 Year	Reporting Yr:					2024					2029
7b	Fisher Habitat	5 Year	5 Year	Reporting Yr:					2024					2029
7c	Caribou Habitat	Annual	5 Year	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
8	Source of Planted Seedlings	Annual	5 Year	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029

9	Area Declared FTG	Annual	-	Reporting Yr:	-	-	-	-	-			2027	2028	2029
10a	Losses from Forest Area	Annual	-	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
10b	Additions to Forest Area	Annual	-	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
11	Natural Disturbance	Annual	-	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
12	Salvage Harvest	Annual	-	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
13	Actual vs Predicted Productivity	Annual	5 Year	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
14	Utilization Standard	Annual	5 Year	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
15	Adherence to Tactical Plan	Annual	5 Year	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
16	Soil Disturbance	Annual	-	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
17	Road Reclamation	Annual	-	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
18	Watercourse Crossings	Annual	-	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
19	Riparian Areas	Annual	-	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
20	Event Duration	Annual	5 Year	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
21	Actual vs Available Harvest	Annual	5 Year	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
22	Public Engagement	Annual	-	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
23	Non-Timber Resources	Annual	-	Reporting Yr:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029

Ind 1 Age Class Distribution of Managed Forest Land Base (MFLB)



Will take decades to influence the age class towards target

Reported every 5 years

Assessed at 10 years

Events (Size, Retention, Duration)

Incorporated changes made to the Forest Operating Plan Standard:

- Events closed when all activities except silviculture completed
- Targets for duration of an event take event size into account

Calculation of Excess Hwd Retention to be discussed



Events: Ind 3 Size Distribution

Operating Year	< 100	100 -1,500	>1,501-3,500	>3,501-8,000
2018-19	3	2	0	0
2019-20	14	6	0	0
2020-21	2	1	0	0
2021-22				
2022-23				
2023-24				
2024-25				
2025-26				
2026-27				
2027-28				
Cumulative Total	19	9	0	0
% of Events	67.9%	32.1%	0%	0%
FMP Targets	10%	65%	15%	10%

Skewed to smallest size category. Off-track now, but will likely move on track as larger events which take more time to harvest are completed.

Events: Ind 4 Event Retention

Target of at least 9% retention was not met for Event 24A.

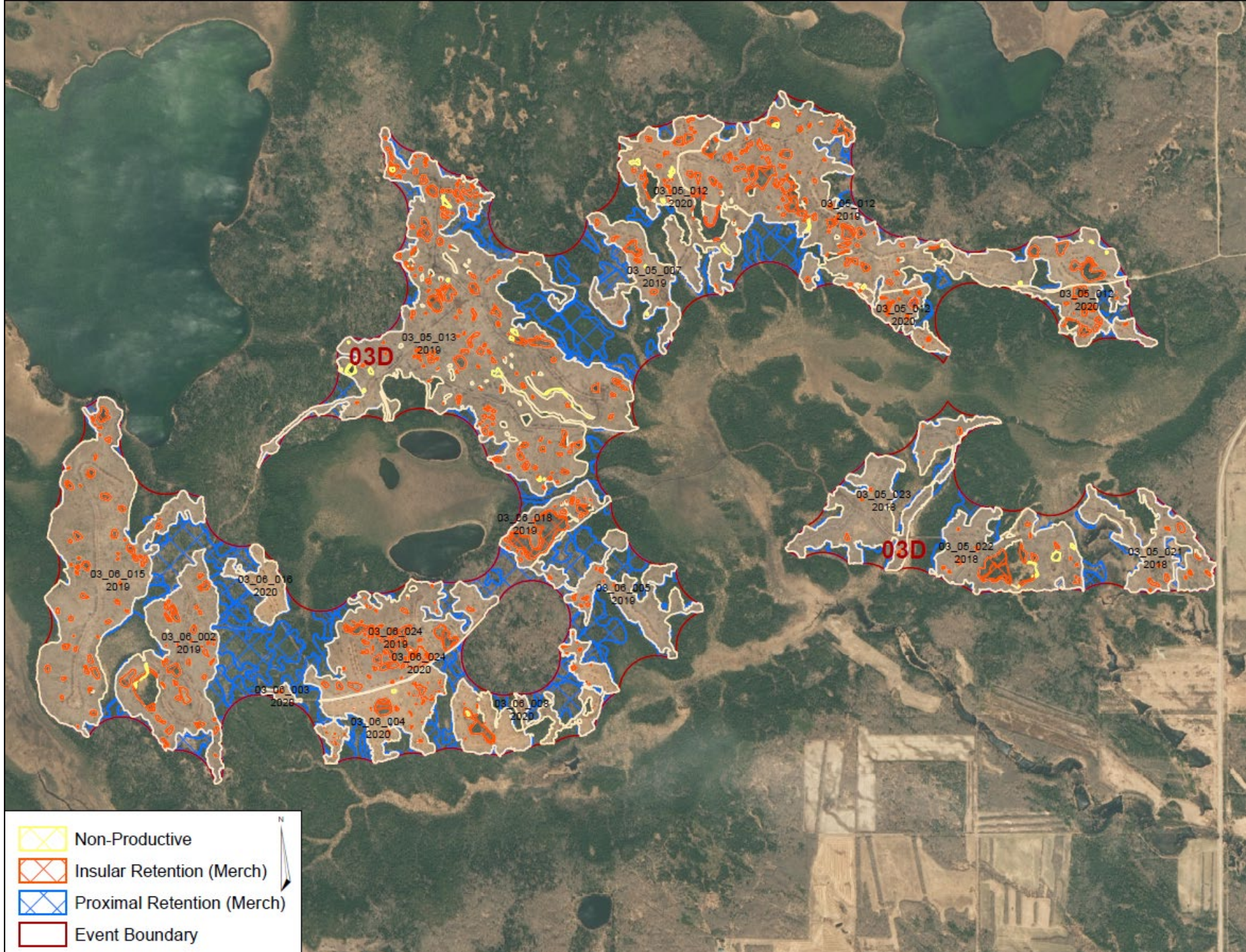
Yet a good amount of retention was left for a stakeholder commitment.

It is classed as proximal retention though (is connected to the block boundary) and capped at 5%.

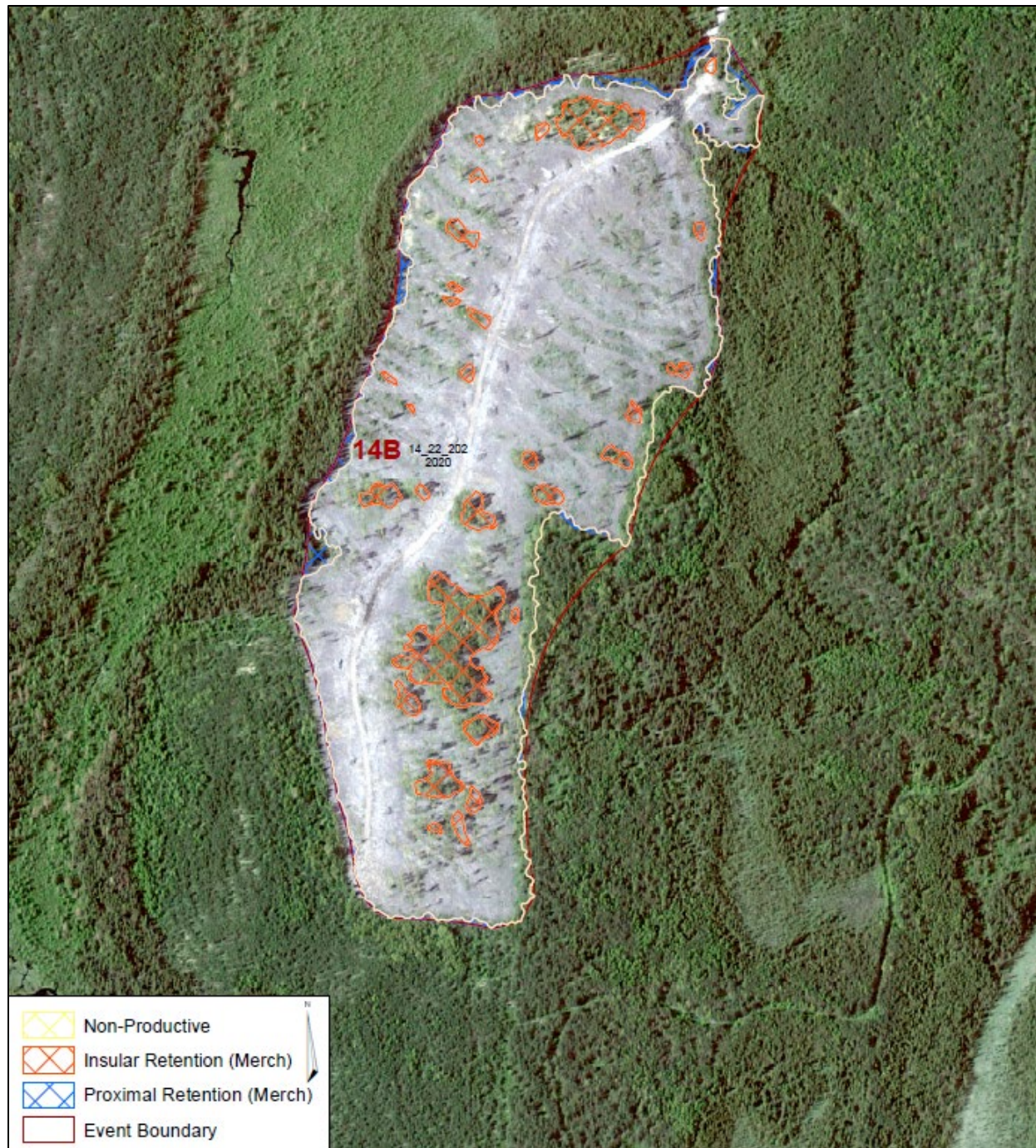
Table 7 Area of Merchantable Insular and Proximal Retention in Events

Operating Year	Event	Harvest Area	Insular Retention (Clumps/Islands)		Proximal Retention		Event Total Retention	Event Insular Retention	Excess Hwd Retention
		(ha)	(ha)	(%)	(ha)	(%)	(%) >9% (Y/N)	≥4% (Y/N)	≤2,250 ha/5yrs (avg 450 ha/yr)
2018-19	21A	43.5	3.5	8.0%	7.1	16.4%	13% Y	Y	n/a
	21B	235.8	12.5	5.3%	63.0	26.7%	10.3% Y	Y	n/a
	23A	29.0	0	0%	4.2	14.6%	5% N	N	n/a
	Totals	308.3	16	5.2%	74.4	24.1%	10.2%		
2019-20	2B	108.1	3.7	3.4%	16.3	15.1%	8.4% N	N	n/a
	3A	31.7	0.2	0.8%	18.6	58.7%	5.8% N	N	n/a
	4C	28.3	1.1	3.8%	6.3	22.2%	8.8% N	N	n/a
	4D	27.2	0.5	1.7%	1.8	6.6%	6.7% N	N	n/a
	4E	36.8	0.4	1.0%	7.1	19.1%	6.0% N	N	n/a
	4G	23.6	1.0	4.3%	4.4	18.6%	9.3% Y	Y	n/a
	6D	125.7	3.9	3.1%	44.6	35.5%	8.1% n	N	n/a
	16A	75.6	0.3	0.4%	2.4	3.1%	3.5% N	N	n/a
	22B	98.5	4.5	4.6%	16.2	16.4%	9.6% Y	Y	n/a
	25A	41.0	0.3	0.8%	18.9	46.0%	5.8% n	N	n/a
	Totals	596.5	15.8	2.7%	136.4	23%	7.4%		
2020-21	03D	1267.5	64.2	8.7%	236.6	32.3%	13.7%	Y	n/a
	14B	25.0	1.9	9.3%	0.8	3.7%	13.3%	Y	n/a
	24A	68.7	0.2	0.5%	14.3	32.0%	5.5%	N	n/a
	Totals	1361.2	66.33	8.3%	251.7	31.5%	13.3%		

3D
Insular 8.7%
Proximal 32.3%
Total: 13.7%



14B
Insular 9.3%
Proximal 3.7%
Total: 13.3%



24A
Insular .5%
Proximal 32%
Total: 5.5%



Events: Ind 20 Event Duration

All 2020-21 events were <1,500 ha.
None exceeded the 10-year maximum

Table 27 Duration of Completed Events

Reporting Period	Event	Event Start Date	Event End Date	Event Size (ha)	Event Duration (years)	% of Events Meeting Target for Duration
2018-19	14B	2018-09-05	2019-06-30	n/a	1	100 %
	14C	2016-10-03	2020-08-01	n/a	4	
	21A	2018-08-21	2020-08-01	n/a	2	
	21B	2018-08-08	2020-08-01	n/a	2	
	23A	2019-01-07	2020-08-01	n/a	2	
2019-20	02B	2018-01-02	2019-05-25	n/a	1	100 %
	03A	2019-11-18	2021-03-31	n/a	1	
	04A	2019-02-18	2020-01-30	n/a	1	
	04C	2019-02-04	2020-05-31	n/a	1	
	04D	2019-09-18	2021-06-29	n/a	2	
	04E	2019-10-07	2021-06-24	n/a	2	
	04F	2019-06-05	2020-09-30	n/a	1	
	04G	2019-01-13	2021-06-29	n/a	2	
	05A	2019-07-22	2020-06-26	n/a	1	
	06B	2019-09-13	2021-07-01	n/a	2	
	06C	2019-02-02	2021-06-25	n/a	2	
	06D	2013-12-31	2020-11-09	n/a	7	
	06E	2012-06-21	2019-11-02	n/a	7	
	14A	2018-08-06	2019-06-30	n/a	1	
	16A	2018-11-22	2020-09-17	n/a	2	
	18A	2019-06-01	2021-06-29	n/a	2	
	18B	2019-05-21	2020-09-17	n/a	1	
18C	2019-05-12	2020-09-17	n/a	1		
22B	2018-10-01	2020-05-22	n/a	2		
25A	2012-08-21	2019-04-01	n/a	7		
2020-21	03D	2019-03-31	2021-03-01	1,268	2	100 %
	14B	2019-02-01	2021-03-31	25	2	
	24A	2020-12-28	2021-07-01	69	1	

Silviculture: Ind 5 Swd Component in H Stands

- Not being reported on yet
- Target - Swd densities in H stands ≥ 200 sph of Swd (FTG surveys)
- First data from establishment surveys on blocks harvested in 2018-19 (2027 Annual Report)

- Started a system for tracking protection of white spruce understory in H stands
- Silviculture Liabilities analysis based on 8 years of harvesting: 1,009 more ha SwD stands in H blocks were treated, than SwD stands in H blocks that had not been treated



Silviculture Ground Rules

Reference Code: **1-H-HW**

Transitions	Existing Forest Condition						Future Forest Condition				
	Development Type	Area (ha)	Yield	FMZ	Site	Density	%	Yield Group	Species Type	Vol/ha @	Rotation Age
	HW	89,264	01	1, 2, 3	All	B	100%	01-H-HW	H8S2	105 m³/ha	60 yrs
291,516		02	1, 2, 3	All	C, D	100%	02-H-HW	H8S2	150 m³/ha	60 yrs	

(PFT = TAB, AOH)

Treatment Options	Silviculture System			Logging Method and Slash Management		
	Clearcut with retention			Full-Tree; process at roadside and spread, or Tree-Length; process at roadside and spread, or Cut-To-Length; process at stump or process at roadside (spread)		
	% Applied	Renewal Name	Site Preparation	Regeneration	Tending (Pre-/Post Free-to-Grow)	
95%	A. Leave	None	Leave For naturals	Only if required		
5%	C. Plant	If required (mechanical)	Plant @ 800 sph	Only if required		

- Planting is only expected where small pockets of existing H stands are incidentally treated within blocks of S or SH stands.
- Maintain softwood presence by retaining overstory conifer as seed trees and/or protecting advance growth within the understory.
- Tending may occur to control over-stocking (e.g., ≥30,000 sph) and/or influence stem quality.

Regeneration Targets	Survey Window	Preferred Species/Height (m)	Acceptable Species/Height (m)	Stocking
	Establishment (4 to 7 years)	S: <u>wS/0.3, bS/0.1</u> H: <u>tA/0.3</u>	<u>jP/0.3, tI/0.1</u> <u>bP/0.1, wB/0.1</u>	Minimum: ≥80% stocked and ≥800 sph At <10,000 sph: S <7% of stems At ≥10,000 sph, S <3% of stems
	FTG (8 to 14 years)	S: <u>wS/1.5, bS/1.5</u> H: <u>tA/2.0</u>	<u>jP/2.0, tI/2.0</u> <u>bP/2.0, wB/2.0</u>	

• The 80% stocking requirement typically requires >1200 sph of uniformly spaced (planted) trees or >3000 sph in less uniform areas. These densities are assumed to deliver forecasted yields in future.

• The target stocking percentages by species types at establishment and FTG are expected to develop the desired species type (H) at rotation age (adapted from 'Development of a Regenerating Mixedwood Succession Matrix', Gelhorn, 2009 – see densities from matrix to the right).

• Some planted stands that regenerate to HS will offset the reverse trend elsewhere.

Softwood (sph)	Hardwood Densities (sph)											Spruce Mixed @ 80 yrs		
	30000	20000	15000	10000	5000	4000	3000	2000	1500	1000	750	500	250	
1500	SH	SH	SH	SH	SH	SH	SH	S	S	S	S	S	S	
1250	SH	HS	HS	SH	SH	SH	SH	S	S	S	S	S	S	
1000	HS	HS	HS	HS	SH	SH	SH	SH	S	S	S	S	S	
800	HS	HS	HS	HS	SH	SH	SH	SH	SH	S	S	S	S	
600	HS	HS	HS	HS	HS	HS	HS	SH	SH	SH	S	S	S	
500	HS	H	HS	HS	HS	HS	HS	SH	SH	SH	SH	S	S	
350	H	H	H	HS	HS	HS	HS	HS	SH	SH	SH	SH	S	
200	H	H	H	H	H	H	H	HS	HS	HS	SH	SH	S	
100	H	H	H	H	H	H	H	H	H	HS	HS	HS	SH	



Silviculture: Ind 6 CSGs Harvested & Predicted

- Compares CSGs harvested to CSGs predicted when regenerated stands reach maturity
- Based on species and tree densities present at age 14 (at free to grow survey)
- No Sakaw data available yet.
- Using data from legacy areas harvested in 2006-07 that had reached FTG by 2020-21
- Used SGR tables to predict CSG at maturity

Table 8 Cover Species Group-Actual versus Predicted

Operating Year	CSG	Harvested Area		Predicted Area Using SGR Tables	
		(ha)	(adjusted ha)	(ha)	% Difference (predicted to harvested)
2018-19 <i>2004 Legacy Harvest</i>	S	5,364	5,123	3,781	-26%
	SH	1,476	1,409	3,912	178%
	HS	1,879	1,794	2,050	14%
	H	3,706	3,540	2,123	-40%
		12,424	11,867	11,867	
2019-20	S	3,179	2,580	1,777	-31%
	SH	783	635	2,494	293%
	HS	827	671	1,382	106%
	H	2,921	2,371	604	-75%
		7,710	6,257	6,257	
2020-21	S	1,793	1,147	861	75%
	SH	182	116	266	229%
	HS	184	118	689	584%
	H	2,025	1,295	861	66%
		4,185	2,676	2,676	

Habitat: Ind 7a Area of Moose Habitat

Moose cover habitat is defined as stands >50 years old in the following species groups:

- White Spruce/Balsam Fir leading softwood stands (WSF)
- Black Spruce leading softwood stands (BSL, BSJ)
- Jack Pine leading softwood stands (JLP), and
- Mixedwood (hardwood & softwood) stands (PMW, SMW, HSM, HPM)



Moose browsing habitat is defined as stands <20 years old.

Reported every 5 years

FMP Year	Year 0 (2018)	Year 5 (2023)			Year 10 (2028)		
	Actual (ha)	Predicted (ha)	Actual (ha)	Variance (%)	Predicted (ha)	Actual (ha)	Variance (%)
Moose Cover Habitat	968,408	925,469			848,632		
Moose Browse Habitat	260,117	302,216			305,086		

Habitat: Ind 7b Area of Fisher Habitat

Fisher habitat is defined as stands 50-120 years old in the following species groups:

- White Spruce/Balsam Fir leading softwood stands (WSF)
- Black Spruce leading softwood stands (BSL, BSJ)
- Jack Pine leading softwood stands (JLP), and
- Mixedwood (hardwood & softwood) stands (SMW, HSM)



FMP Year	Year 0 (2018)	Year 5 (2023)			Year 10 (2028)	
	Actual (ha)	Predicted (ha)	Actual (ha)	Variance (%)	Predicted (ha)	Actual (ha)
Fisher Habitat Patches <5,000 ha	251,085	231,056			217,636	
Fisher Habitat Patches 5,000 – 10,000 ha	49,325	42,231			52,872	
Fisher Habitat Patches >10,000 ha	59,163	10,974			0	
Total	359,573	284,261			270,508	



Habitat: Ind 7c Caribou Habitat

Targets:

1. No harvesting in Tier 1
2. No harvesting in Tier 2 after 10 years
3. $\leq 49\%$ disturbance in SK2 Central portion of FMA area

(This target came into effect in 2021-22 after FMP Caribou Habitat Management Zones were updated to match those in the final SK2 Central range plan. For consistency it is being used retroactively for 2020-21).

- Disturbance levels can vary from 34% to 49% during the term of the plan.
- Short term variance is needed because of wildfire activity in the TSA. Approx. 125,000 ha of fire area will be recovering in the first 2-3 years of the plan.
- The total disturbed area is reported on annually, assessed every 5 years.



Habitat: Ind 7c Caribou Habitat

Target 1: No harvesting in Tier 1

In 2020-21 some blocks in Tier 1 areas, where harvesting had started before the final range plan was published, were approved to be finished.

Table 11 Harvest Area in Tier 1 Caribou Zones

Operating Year	Harvest Area (ha) in Tier 1 Zones
2018-19	0
2019-20	0
2020-21	168
2021-22	
Etc.	



Habitat: Ind 7c Caribou Habitat

Target 2: No harvesting in Tier 2 after 10 years

There was harvesting in Tier 2 areas in 2020-21, as planned for in the FMP

Habitat: Ind 7c Caribou Habitat

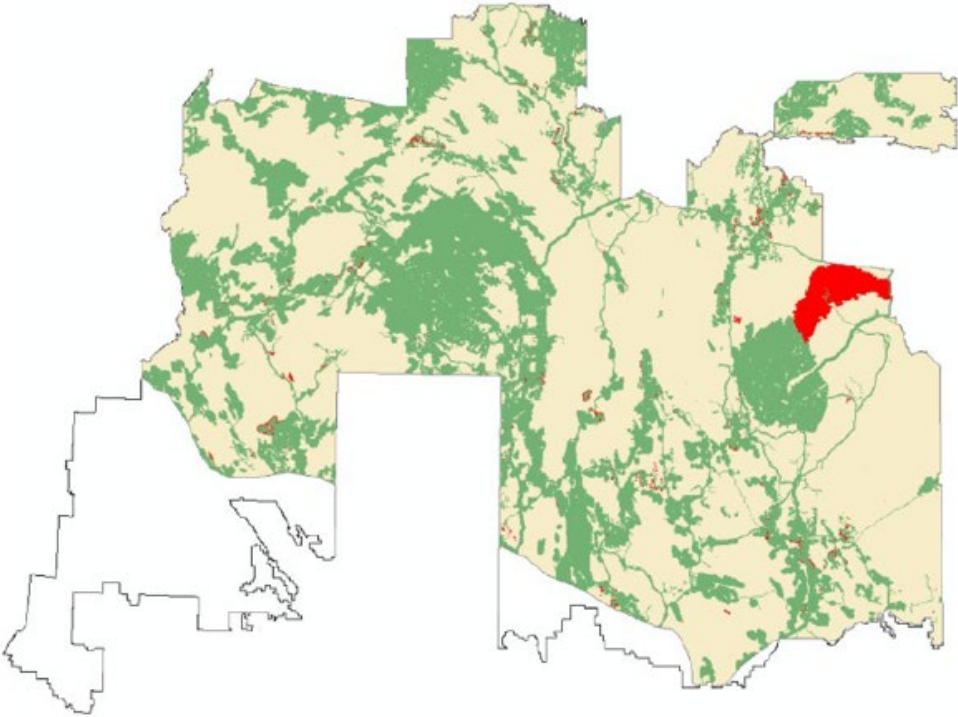
Target 3: $\leq 49\%$ disturbance in SK2 Central portion of FMA

- Disturbed area defined as ≤ 40 years old for 2021-22, and used retroactively for 2020-21 as well. Thus an increase in % disturbed is expected that is independent of the amount of harvesting.
- Variable width buffers around all disturbed areas, ranging from 0 to 500m

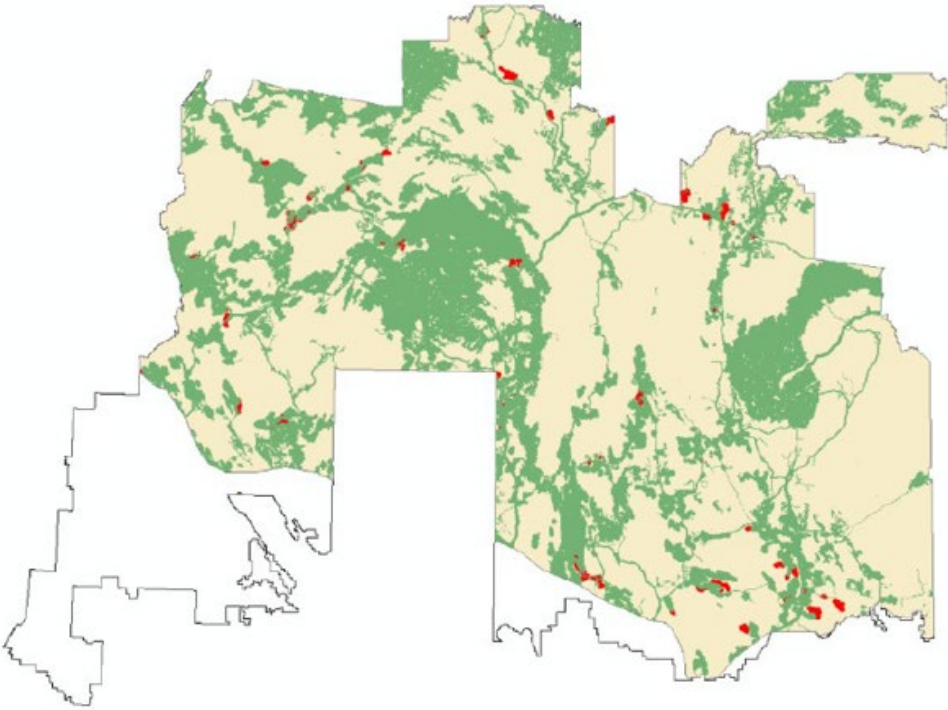
Table 12 Total Disturbed Area*

Operating Year	Definition of Disturbance	Total Disturbed Area *	% Disturbed
2017	≤ 30 years	942,381	33.0%
2018-19	≤ 30 years	902,986	31.6%
2019-20	≤ 30 years	919,028	32.2%
2020-21	≤ 40 years	896,611	31.4%

Ind 7c Caribou Habitat

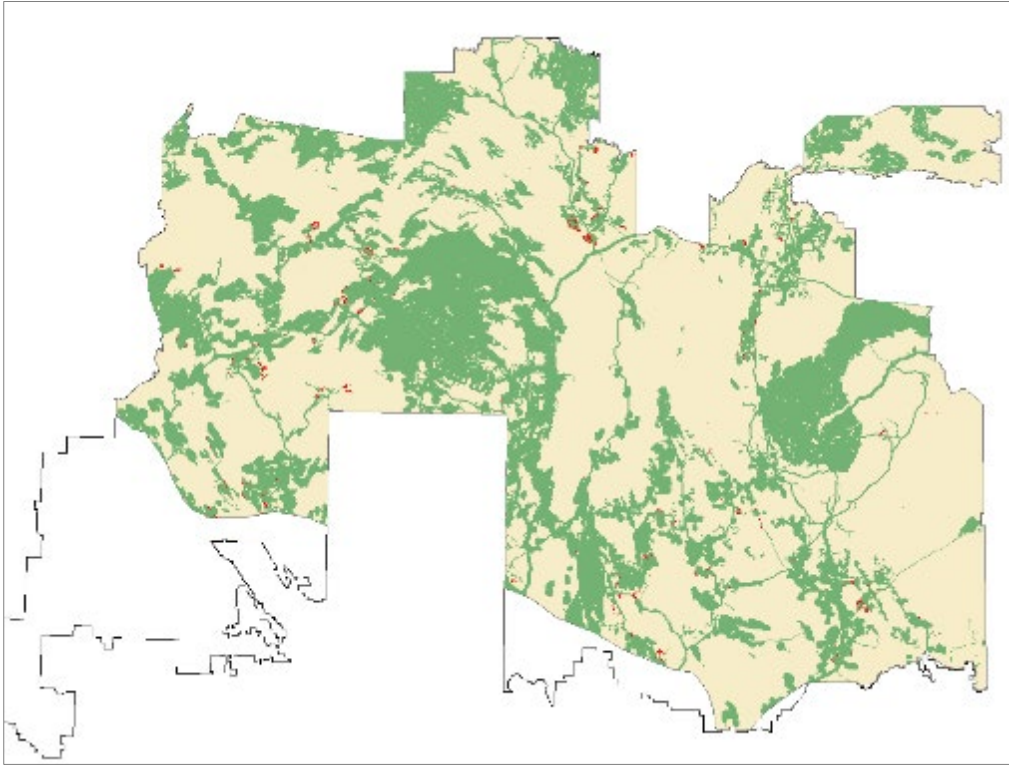


2020 Disturbance Changes - Subtractions

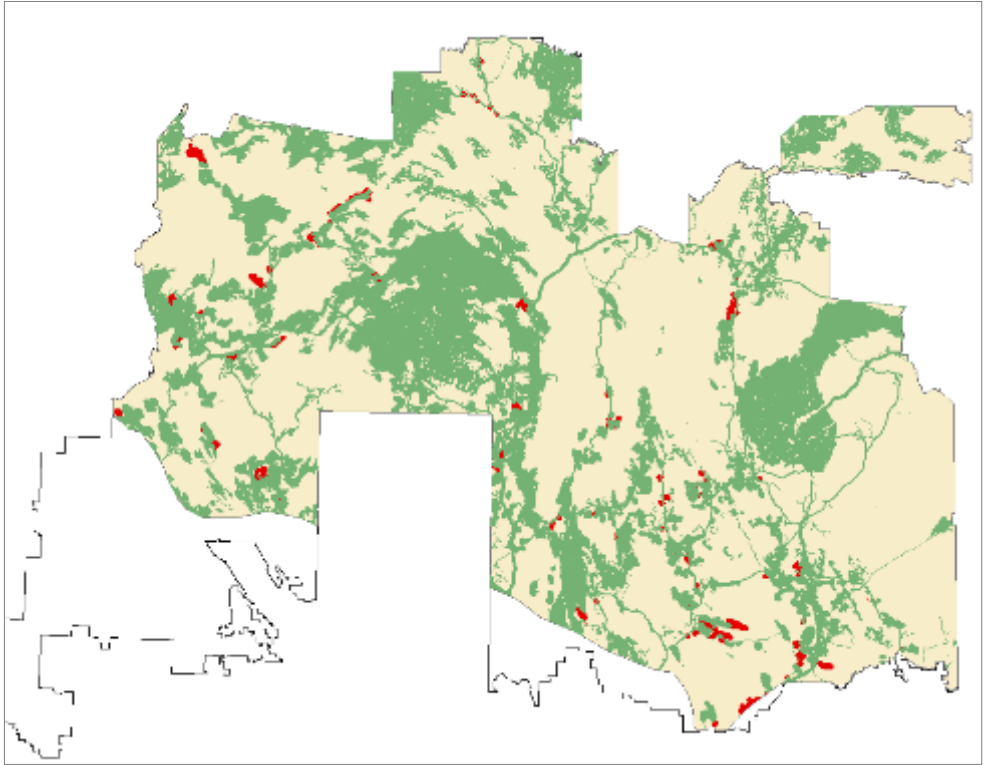


2020 Disturbance Changes - Additions

Ind 7c Caribou Habitat



2019 Disturbance Changes - Subtractions



2019 Disturbance Changes - Additions

Silviculture: Ind 8 Planted Seedlings from Wild or Improved Seedlots

Targets:

- no genetically modified seed sources
- use of improved seed is maximized but can range from 0 – 100%

No increased growth rates from using selected seed sources was incorporated into wood supply modeling.

Table 13 Summary of Planted Seedlings

Operating Year	Number of Seedlings Planted	Genetically Modified Seed	Improved Seed	Wild Seed
2018-19	3,110,765	0%	73%	27%
2019-20	2,307,531	0%	95%	5%
2020-21	2,342,410	0%	61%	39%

Silviculture: Ind 9 Harvested Areas that are Free-to-Grow in 14 Years

Target:

- 100% of harvest areas meet free-to-grow stocking and heights within 14 years
- up to 2% of the area / yr can exceed the 14 year timeframe

2020-21 harvest areas will have an establishment survey in 2027-28 (7 years after harvest), their status will be reported in the 2029 Annual Report.

Ind 10a Managed Forest Land Base – Subtractions

Target:

- <300 ha/yr converted to non-forest land uses by licensee – roads, landing strips/pads, gravel pits etc.
- 25% variance allowed on annual limit. 5% variance on 5-year cumulative totals

- permanent features have a lifespan > 5 years (Class 1 & 2 roads & ditches)
- not considered permanent: gravel pits >.1 ha, winter roads, Class 3 & 4 roads

- in 2020-21 construction of the Class 1 Junor Cut Across IBR occurred (8.73 ha). No other landbase was converted to other uses

Table 14 Productive Forest Area Removed

Operating Year	Class 1 Roads* (ha)	Class 2 Roads** (ha)	Gravel Pits, etc. (ha)	Total (ha)
2018-19	0	5.51	0	5.51
2019-20	0	25.45	0	25.45
2020-21	8.73	0	0	8.73

Ind 10b Managed Forest Land Base – Additions

Target:

- ≥ 0 hectares/year of reclamation of permanent access structures or afforestation by the licensee
- In 2020-21 no area was added back into the managed forest landbase by Sakaw

Table 15 Productive Forest Area Subtracted

Operating Year	Class 1 Roads (ha)	Class 2 Roads (ha)	Gravel Pits, Afforestation etc. (ha)	Total (ha)
2018-19	0	0	0	0
2019-20	0	0	0	0
2020-21	0	0	0	0



Ind 11 Stand Replacing Natural Disturbances

- Portion of net landbase disturbed by stand replacing natural disturbance (fire, windthrow, flood)
- “Disturbed” = stand replacing event with loss or death of $\geq 50\%$ of the volume in a stand.
- Minimum sizes >100 ha for wildfire, >2 ha for all other disturbances
- Once threshold of 10% ($132,323$ ha) is disturbed, a recalculation of the HVS is triggered.

Table 16 Stand-Replacing Natural Disturbances

Operating Year	Stand Replacing Disturbances (ha)					Insects / Diseases	Salvage Harvested**	
	Fire	Windthrow	Flood	Total (ha)	% of Net Land Base		Area (ha)	% (of stand replacing disturbance)
2018-19*	416	4,046	390	4,852	0.4%	8,249	Not reported	Not reported
2019-20	0	1,520	1,220	2,740	0.2%	33,392	959	35%
2020-21	0	211	2,229	2,440	0.2%	29,615	285	12%
.....								
2027-28								
Cumulative Area (ha of Net Land Base)	416	5,777	3,839	10,032	0.8%	71,256	1,244	24%



Ind 12 Proportion of Salvage Harvest Left Unharvested

Targets:

- Leave $\geq 20\%$ of a natural disturbance unharvested.
- Contiguous area, no roads/trails, representative of the forest impacted, if possible
- 9% retention, of which 4% is insular. (exception for mistletoe)

- 10 areas salvage harvested in 2020-21 were damaged by flood, dwarf mistletoe or jack pine budworm.
- None of those areas were largely contiguous, with $>50\%$ mortality, covering at >100 ha

Table 17 Salvage Harvest in Events

Operating Year	Nat. Disturbance Event Area	Type of Damage	Area Salvage Harvested	Insular Retention	Contiguous Area Left Unharvested	Meets $\geq 20\%$ Unharvested
	(ha)	(fire, wind, insects...)	(ha)	(%)	(ha)	(Y/N)
2018-19	0	N/A	0	N/A	N/A	N/A
2019-20	0	N/A	0	N/A	N/A	N/A
2020-21	0	N/A	0	N/A	N/A	N/A



Ind 13 Harvested vs Estimated (Yield Curve) Volumes

Target: Harvested volumes within 15% of the volumes estimated by FMP yield curves

Harvested Vol:

- Softwood sawlogs and hardwood delivered to multiple mills from blocks where all deliveries were completed. Pulp was removed from numbers reported in all years, as insignificant amounts being harvested.
- Included volumes harvested by third parties in Sakaw blocks, where there was integrated harvesting
- Two shareholders were approved to harvest to a 12.5 cm top in 2020-21. Predicted volumes for those areas were reduced by 16%

Estimated Vol:

- Estimated using the forest inventory strata and associated softwood sawlog and hardwood yield curves.
- Mapped retention areas were excluded

Operating year	Actual harvest (m ³ /ha)	Predicted harvest (m ³ /ha)	% difference (actual / predicted)
2018-19	165	149	11%
2019-20	164	153	7%
2020-21	181	146	24%



Compliance: Ind 14 Utilization

Target: -

- Original target - 95% of areas inspected will comply with approved Operating Plans over a 5-year period
- Now using MoE reports for Compliance Indicators, and reporting the number of non-compliances

Utilization has expanded to include sanitation of mistletoe, excess Hwd in slash pile, etc.

“Actions Taken” was added to table

Table 19 Adherence to Utilization Standards

Operating Year	# of Blocks or Roads in Non-Compliance? ¹	Actions Taken			
		No Action Taken	Voluntary Compliance Opportunity	Notice of Violation	Admin. Penalty
2018/19	6				
2019/20	7		2	2 (2 remedied)	3
2020/21	1		1		

Ind 15 Harvest within Tactical Plan Areas

Target:

- no more than 15% of mapped Sakâw shareholder harvest areas will fall outside of identified decade 1 or 2 tactical plan areas.

Exceptions:

- Salvage, incorrect inventory data and harvesting is following intent of the plan

Table 21 Harvesting in Tactical Plan Areas

Harvest Year	Total Harvest Area (ha)*	Harvest Area Within Tactical Plan Polygons (ha)	Harvest Area Outside Tactical Plan Polygons (ha)	Harvest Area Within Tactical Plan Polygons (%)
2018-19	10,433	10,398	34	99.7%
2019-20	11,729	11,167	562	95.2%
2020-21	9,633	9,022	611	93.7%

Compliance (Soil & Water): Ind 16 Soil Disturbance

Target:

- 100% of inspected harvest blocks comply with provincial standards related to soil disturbance.

(rutting, area of roads and landings, construction and maintenance of in-block and inter-block roads, slash management environmental protection, trespass)

Table 22 Compliance with Standards for Soil Disturbance

Operating Year	# Blocks or Roads in Non-Compliance ¹	Actions Taken			
		No Action Taken	Voluntary Compliance Opportunity	Notice of Violation	Admin. Penalty
2018/19	33	6	5	7 (3 remedied)	15
2019/20	13	1	2	8 (4 remedied)	2
2020/21	21	3	2	7 (0 remedied)	9

Compliance (Soil & Water): Ind 17 Road Reclamation

Target:

- 100% of inspected harvest blocks comply with provincial standards related to road reclamation (reclamation of in-block and inter-block roads, landings, borrow/gravel pits)

Table 23 Compliance with Standards for Road Reclamation

Operating Year	# Blocks or Roads in Non-Compliance ¹	Actions Taken			
		No Action Taken	Voluntary Compliance Opportunity	Notice of Violation	Admin. Penalty
2018/19	6	1	1	3 (2 remedied)	1
2019/20	3			1 (1 remedied)	2
2020/21	2	1	1		

Compliance (Soil & Water): Ind 18 Watercourse Crossings

Target:

- 100% of inspected harvest blocks comply with provincial standards related to watercourse crossings (construction, maintenance, safety, removal and reclamation)

- Provincial and federal acts and regulations

Table 24 Compliance with Standards for Watercourse Crossings

Operating Year	# Crossings in Non-Compliance ¹	Actions Taken			
		No Action Taken	Voluntary Compliance Opportunity	Notice of Violation	Admin Penalty
2018/19	18	13	4	0	1
2019/20	8	3	3	2 (1 remedied)	
2020/21	13	1	5	5 (2 remedied)	2

Compliance (Soil & Water): Ind 19 Riparian Management Standard

Target:

- 100% of inspected harvest blocks comply with provincial standards for riparian areas (tree retention, soil and water protection, riparian boundaries identified and maintained)

Table 25 Compliance with Standards for Riparian Areas

Operating Year	# Blocks in Non-Compliance ¹	Actions Taken			
		No Action Taken	Voluntary Compliance Opportunity	Notice of Violation	Admin Penalty
2018/19	4				4
2019/20	3		1	1	1
2020/21	0				
2021/22					
2022/23					
Etc.					

¹ Ministry of Environment data.



Ind 21 Harvested Volumes vs Approved HVS

Targets: average annual volumes harvested in a five-year period are:

- 1,265,000 m³/year of softwood sawlogs
- 600,000 m³/year of softwood pulpwood, and
- 1,126,000 m³/year of hardwood

Includes wood allocated to Shareholders, Third-Parties, and hardwood reserved for potential future use.

Table 28 Harvested versus Approved Volumes

Operating Year	Softwood Sawlogs			Softwood Pulpwood			Hardwood			Total	
	HVS Target ¹	Harvested Volumes ²	% HVS Used	HVS Target ¹	Harvested Volumes ²	% HVS Used	HVS Target ¹	Harvested Volumes ²	% HVS Used	Harvested Volumes ²	% HVS Used
2018-19	1,265,000	785,353	62%	600,000	19,193	3%	1,126,000	754,294	67%	1,558,841	52%
2019-20	1,265,000	1,150,703	91%	600,000	17,818	3%	1,126,000	799,022	71%	1,967,542	66%
2020-21	1,265,000	709,645	56%	600,000	117	0%	1,126,000	768,267	68%	1,478,079	49%



Engagement:

Ind 22 Stakeholder/Public Engagement in Forest Management Planning

Targets:

- minimum of 2 PAG meetings/yr., one focused on FMP Annual Report.
- community open houses at 8 locations (Operating Plan development).

Two PAG meetings held.

In light of covid-19 and for everyone's safety, in 2020-21 changed from holding community open houses to making information available in advance online or by mail. This worked well. People could review the maps in their own time and have a targeted discussion with the appropriate planner or Sakaw when it was mutually convenient.

For 2020-21 and beyond this target is being changed to "A variety of mechanisms for engaging in forest management planning are provided"

Operating Year	# PAG Meetings	Open Houses Held in Targeted Communities	Variety of Mechanisms for Engaging in Forest Management Planning
2018-19	1	Y	n/a
2019-20	0	Y	n/a
2020-21	2	n/a	Y



Ind 23 Non-Timber Resources and Forest Uses

Tracks maintenance of a spatial dataset for information needed to integrate forest management plans with non-timber resources and uses

- known legal cabins, visually sensitive areas, trails (ski, trappers, snowmobile, recreational), sensitive wildlife sites, community areas of interest, important areas of non-timber botanical forest products (such as berries and mushrooms), known sites of cultural significance to aboriginal peoples, etc.

The database now contains 92,375 records.

Operating Year	New Non-Timber Features Added to Dataset	Area-based Features	Linear Features	Point-based Features	Total # of Records
2018-19	605	89*	273	243	91,142
2019-20	766	126	481	159	91,893
2020-21	477	229	182	66	92,375

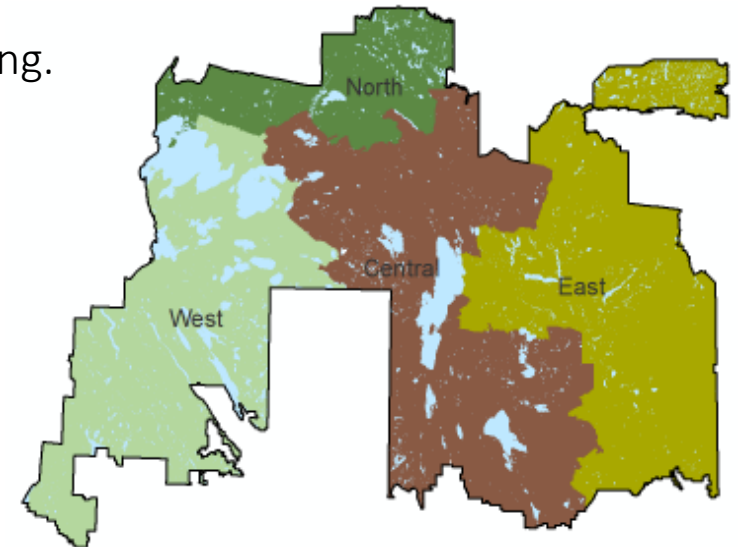


Ind 24 Harvest Distribution by Planning Areas and Species Groupings

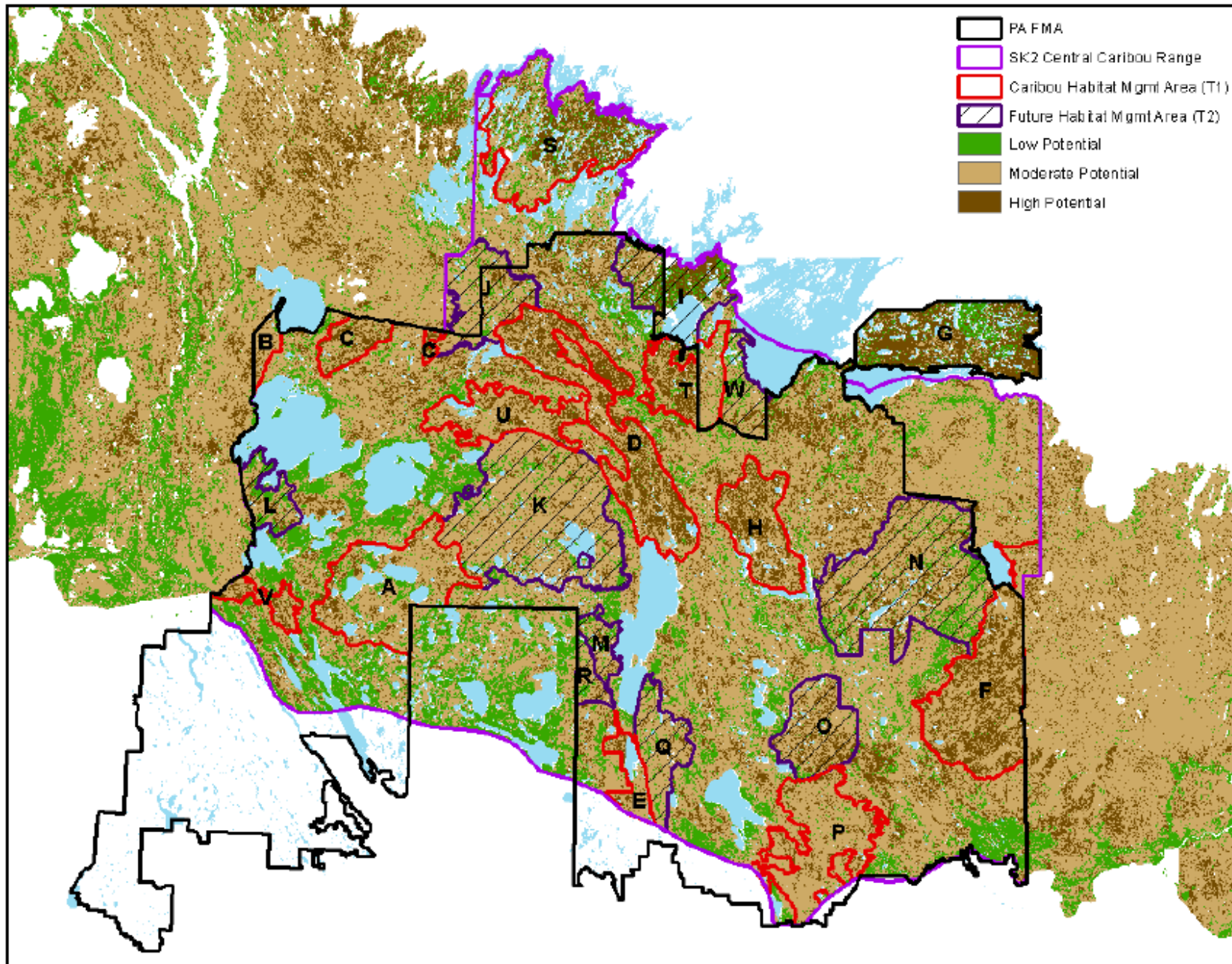
16 Targets: 4 Planning Areas, and 4 Species Groupings (S-WS & Other, S-BS or JP, SH, H & HS).

Tracked annually, assessed on a 5-year cycle.

- After 3 years of harvest most areas harvested are on track for meeting the 5 year targets.
- Two large harvest events with high proportions of WS and SH could put the harvested area over the WS and SH targets in the West Planning Unit
- Completing those events would meet the intent of harvest event planning.
- Those events will be included in the next Operating Plan with an assessment of their impact on the Indicator 24 targets, for an approval decision.



	S-WS or Other Leading (ha)	S-BS or JP Leading (ha)	SH (ha)	H/HS (ha)	Total (ha)
WEST					
2018-2019	471	649	402	3,654	5,177
2019-2020	332	1,015	649	3,473	5,469
2020-2021	253	937	431	3,375	4,995
2021-2022					
2022-2023					
Cumulative Total	1,056	2,600	1,482	10,502	15,641
5 yr Target	3,100	11,000	2,200	22,300	38,600
Yrs. Harvested	1.7	1.2	3.4	2.4	2.0
CENTRAL					
2018-2019	272	1,763	299	1,220	3,554
2019-2020	201	2,532	211	1,055	4,000
2020-2021	135	1,384	179	792	2,490
2021-2022					
2022-2023					
Cumulative Total	608	5,679	689	3,067	10,044
5 yr Target	1,000	17,800	1,100	8,300	28,200
Yrs. Harvested	3.0	1.6	3.1	1.8	1.8
NORTH					
2018-2019	4	75	1	3	82
2019-2020	94	129	45	253	522
2020-2021	0	295	4	80	379
2021-2022					
2022-2023					
Cumulative Total	98	499	49	336	983
5 yr Target	300	6,000	300	2,400	9,000
Yrs. Harvested	1.6	0.4	0.8	0.7	0.5
EAST					
2018-2019	127	1,153	87	160	1,526
2019-2020	25	1,358	83	132	1,599
2020-2021	39	1,413	35	176	1,664
2021-2022					
2022-2023					
Cumulative Total	191	3,924	205	469	4,789
5 yr Target	1,300	16,500	800	5,700	24,300
Yrs. Harvested	0.7	1.2	1.3	0.4	1.0
Cumulative Total	1,954	12,703	2,426	14,374	31,457
Total Target	5,700	51,300	4,400	38,700	100,100
Total Yrs. Harvested	1.7	1.2	2.8	1.9	1.6



Caribou Habitat Management Areas

that Overlap the PA Timber Supply Area

2023-24 Operating Plan

Harvest Distribution Targets (Indicator 24): Sakaw is approved to exceed the WS and SH profile targets in the West Planning unit beyond the 5% variance that is currently allowed.

The potential to exceed these targets is a result of two large events (>1,500ha) at Dore Lake and Glew Lake that are included in Year 1 of the 2023-2028 Operating Plan.

This is an inherent risk associated with large events, and an assessment of their impact on Indicator 24 targets is to be included in the 2023-2028 Operating Plan.



Engagement:

Ind 25 Indigenous Communities Review of Operational/Strategic Plans

Purpose - help assess whether Indigenous and treaty rights are respected in planning and implementing forestry activities. (industry engagement assists with Duty to Consult)

Target - all Indigenous communities whose traditional territory is within the FMA area have an opportunity to review operational and strategic plans annually.

Engagement with indigenous communities occurred in various ways

Table 32 Indigenous Communities Provided an Opportunity to Review Operational and Strategic Plans

Operating Year	Number of Indigenous Communities Involved in Review of Plans	All Indigenous Communities with Traditional Territory in the TSA Provided an Opportunity to Review Operational and Strategic Plans? (Y/N)
2018-19	27	Y
2019-20	27	Y
2020-21	26	Y*

* Does not include 3 Metis Locals, established or in the process of becoming established, for which there was no known contact

Ind 26 Culturally Significant Indigenous Sites

Tracks that all known culturally significant Indigenous sites are mapped in Sakâw 's GIS system and receive operational consideration while planning forest management activities.

Identification: heritage screening, Indigenous communities, Shareholder (upon discovery)

Examples provided of features identified and the adjustments made during planning in 2020-21 are:

- Discussions began about proposed harvesting in a traditional community elk hunting area. Harvesting plans were postponed until follow up discussions could take place
- Maps were also mailed to numerous other people and communities, to help with gathering feedback on the operating plan. Screen sharing to look at maps together during online meetings was used
- Trail access connecting Wapawekka Road to Wapawekka Lake was maintained upon request.

Ind 27 Incorporating Traditional Knowledge into Planning Process

Indigenous traditional knowledge - taken to mean knowledge of local resources and the environment (sometimes also referred as traditional ecological knowledge), as opposed to traditional land uses - although the line between tradition knowledge and traditional land uses can sometimes be blurry.

There were not as many opportunities for field visits and discussions in 2020-21 as there would normally have been, due to Covid-related health concerns. However the location of prayer ribbons was identified and protected by a no harvest buffer.

Table 33 Incorporation of Indigenous Traditional Knowledge

Operating Year	# of Instances of Sharing Indigenous Traditional Knowledge	# of Instances of Incorporating Indigenous Traditional Knowledge into the Planning Process
2018-19	3	3
2019-20	3	3
2020-21	1	1



Ind 28 Economic Contribution from Forest Industry

- Economic activity created by the forest industry in the PA FMA area is estimated under this indicator.
- The volume harvested in the year being reported on is multiplied by economic multipliers which represent the direct, indirect and induced economic activity associated with a cubic meter (m³) of wood moving through the economy.

Table 35 Economic Impact of Forestry

Economic Measure	Operating Year	Direct Impact	Indirect Impact	Induced Impact	Total Impact
GDP (\$)	2018-19	\$226,967,250	\$197,006,326	\$72,797,875	\$496,771,450
	2019-20	\$286,474,115	\$248,657,958	\$91,884,211	\$627,016,285
	2020-21	\$215,208,302	\$186,799,624	\$69,026,289	\$471,034,216
Jobs (#FTE)	2018-19	1,169	912	304	2,385
	2019-20	1,476	1,151	384	3,010
	2020-21	1,109	865	288	2,261
Labor income (\$)	2018-19	\$102,774,387	\$68,526,650	\$21,465,241	\$192,766,278
	2019-20	\$129,720,044	\$86,493,146	\$27,093,053	\$243,306,244
	2020-21	97,449,748	\$64,976,353	\$20,353,148	\$182,779,249
Tax (\$)	2018-19	\$59,953,025	\$0	\$4,286,813	\$64,239,838
	2019-20	\$75,671,665	\$0	\$5,410,741	\$81,082,406
	2020-21	\$56,846,918	\$0	\$4,064,717	\$60,911,636

Engagement:

Ind 29 Engage & Inform Public, Stakeholders, Indigenous Peoples on FMP Implementation

Targets:

- Engage public, stakeholder, Indigenous people on implementation of the FMP annually
- PAG is provided with FMP Annual Report

Activities:

- 2 PAG meetings, on FMP amendments and to review the first FMP Annual Report
- Contact with over 1,000 people about opportunity to discuss the FMP and amendments
- Increased advertising of the opportunities available
- Opportunity to discuss FMP and how it drives where and how harvesting occurs at many meetings with stakeholders throughout the year.
- Website links to government website where key FMP documents are available

Ind 30 FMP and Operating Plan made Publicly Available

Target – FMP and Operating Plans will be posted to Sakaw’s website

In 2020-21:

- Sakaw website linked to <https://publications.saskatchewan.ca/#/categories/170> where key documents from projects reviewed under the Environmental Assessment Act are filed.



Forest Management Plan (2018-2038)

Sakaw Askiy Management Inc. has completed working on a new Forest Management Plan.


Details and documents associated with this plan are available on the Government of Saskatchewan Website.

[\[View Current Forest Management Plan Documents >>\]](#)

Ind 30 FMP and Operating Plan made Publicly Available

Operating Plan (April 1, 2020 to March 31, 2021) was also available from Home Page, and included:

- Plan text, approvals & permits
- Interactive webmap of approved harvest areas available, for viewing years 1-5 of current Operating Plan



Operating Plan Web Map:

A web map of the Sakâw Forest Management Area is available at the link below.

The map's contents reflect the 2020 operating plan

- ▶ [View Operating Plan Web Map](#)
- ▶ [View Web Map Tips and Tricks Guide](#)