2023 – 2028 Operating Plan Prince Albert Forest Management Agreement Area

March 9, 2022

Prepared for:

Saskatchewan Ministry of Environment Forest Service Branch 201 - 1061 Central Avenue Prince Albert, SK S6V 6G1

By:

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This plan was prepared in accordance with the requirements of the Environmental Code, the Prince Albert Forest Management Agreement (FMA) and FMA Side Agreement, approved Forest Management Plan, and the Harvest Volume Schedule and associated utilization standards.

Signature Redacted for Privacy

James Fischer, R.P.F.T. General Manager, Sakâw Askiy Management Inc. A Fully Integrated Plan (as defined in Operating Zones Agreement dated effective January 1, 2012 (the "OZA")) has been developed for the Tolko, Carrier, and Edgewood Planning Areas. Such Fully Integrated Plan complies with the OZA and includes an integrated harvest design that incorporates the species group and harvest design interests of parties holding an Allocation in the Planning Area. To the extent reasonably possible in the circumstances (but, for greater certainty, without in any way changing or modifying the rights or obligations of Allocation holders as set forth in the OZA or otherwise (including, without limitation, those set out in Section 5.5 of the OZA)), Incidental Timber in the Planning Area (that forms part of the allocation of another party) is being fully planned for utilization in a manner consistent with the requirements of the OZA.

Signature Redacted for Privacy

Michelle Young, R.P.F. Woodlands Manager, Tolko Industries

Signature Redacted for Privacy

Ed Kwiatkowski, R.P.F. Woodlands Manager, Carrier Forest Products

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Glossary

AHPP Aquatic Habitat Protection Permit

FMP Forest Management Plan

FMA Forest Management Agreement
GPS Global Positioning System
HCB Heritage Conservation Branch
HVS Harvest Volume Schedule
IBR Improved Bush Road

IHS Integrated Harvest Schedule

MIT Management Implementation Team

OP Operating Plan

OSB Oriented Strand Board

RMA Riparian Management Area

RPF Registered Professional Forester

RPFT Registered Professional Forest Technician

TSA Timber Supply Area

AC Forestry Agency Chiefs Forestry
Carrier Carrier Forest Products

Dunkley Lumber (Edgewood Forest Products Operations)

MLBV Montreal Lake Business Ventures

NorSask Forest Products

Tolko Tolko Meadow Lake OSB Division

ha hectare
m meter
m3 cubic meter
bP Balsam Poplar
bS Black Spruce

HS Hardwood Leading Mixedwood Forest Type

jP Jack Pine

SH Softwood Leading Mixedwood Forest Type

tA Trembling Aspen

tL Tamarack wS White Spruce

1 Introduction

This Operating Plan has been prepared in accordance with the Forest Operating Plan Chapter and Standard of the Saskatchewan Environmental Code, and the Amended and Restated Prince Albert Forest Management Agreement (PA FMA) and accompanying PA FMA Side Agreement.

The plan is aligned with the strategic 20-Year Forest Management Plan (FMP) for the PA TSA that came into effect on April 1, 2018. The FMP provides strategic direction for managing the forests in the Prince Albert Timber Supply Area, for the 20-year period from April 1, 2018 to March 31, 2038. It includes a calculation of the available timber supply and outlines strategies for balancing the use of crown forest lands for economic, social, and cultural benefits, while protecting the long term health of forest ecosystems. As examples: the strategies include maintaining biological diversity (including species at risk, such as boreal woodland caribou), meeting standards for protecting soil and water, and taking non-timber uses into account. In short, the FMP provides the direction for how this forest area will be managed. It also drives what happens on the ground in the Operating Plans.

The plan is being submitted by Sakâw Askiy Management Inc. (Sakâw), the corporation that holds the PA FMA on behalf of six shareholders, to gain approval for consumptive and non-consumptive activities on the TSA. These activities include harvesting, the staging or storage of wood, road construction, maintenance and reclamation, and renewal (tree planting, scarification, regeneration assessments). The six shareholders are AC Forestry, Carrier Forest Products, Dunkley Lumber (Edgewood Forest Products Operations), Montreal Lake Business Ventures, NorSask Forest Products and Tolko Industries Ltd. (Meadow Lake OSB Division).

As a result of changes to the Forest Operating Plan Standard (effective June 2022), harvest events are now spatially defined on the operating plan maps. Forest management in Saskatchewan follows the natural forest pattern (NFP) approach which requires forest managers to plan at the landscape, event and harvest block scales. Harvest events and the blocks associated with these events are presented on the intermediate scale maps. Events are planned to "more closely resemble a natural, fire dominated landscape by emulating sizes, shapes and structures at the event and block level together with strategic planning of harvest operations to reduce forest fragmentation at the landscape level." (Forest Operating Plan Standard, June 2022, Table 1). For the purpose of delineating events, Sakâw followed the FMP definition and only refined the boundary to exclude events which had already been reported as complete in the Forest Management Plan Annual Report. The events range in size from 3 ha to 65,953 ha. When determining year of new road construction specific to the event commencement, if the event had historical access that pre-dated the FMP approval (April 01, 2018), 2018 was assumed to be the commencement date.

The operating plan covers the five-year period from April 1, 2023 to March 31, 2028. Upon approval, the final maps and documents that make up the plan will be made available on the Sakâw website.

Each of Sakâw's shareholders (allocation holders) contributed to the development of this operating plan following a process outlined in Sakâw's Operating Zone Agreement. The TSA is partitioned into operating zones, within which a shareholder has been allocated the hardwood volume and a shareholder has been allocated the softwood volume. These operating zones are combined to form three planning areas.

Shareholders collaborated on preparing local-level operating plans under the direction of Planning Area Facilitators, who were responsible for turning those plans into a fully integrated operating plan for their area, then submitting it to Sakâw 's General Manager for incorporation into the Sakâw Operating Plan.

Planning Area Facilitators are currently Michelle Young, R.P.F. (Tolko Meadow Lake

Division), Ed Kwiatkowski, R.P.F. (Carrier), and Travis Hedger, R.P.F.T. (Dunkley Edgewood

Division). Figure 1 shows the planning areas managed by each facilitator.

Responsibility for the harvesting, road, and renewal activities in the proposed harvest areas is identified in tables in the Appendices that are part of this plan.

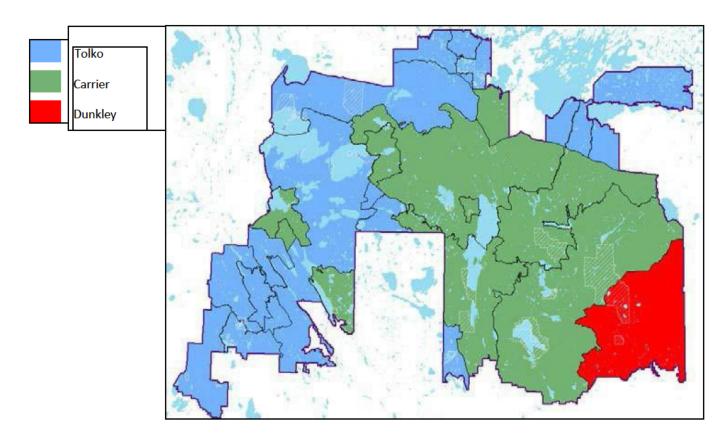


Figure 1 Planning Areas by Facilitator

2 Variances from the FMP, Operating Plan Standard, Licence, HVS

This section summarizes any variances in this operating plan from the code, forest management plan, licence or harvest volume schedule and the rationale for the variances.

2.1 Variances from Forest Management Plan (FMP)

This operating plan is aligned with the 2018-2038 (FMP) for the PA TSA which came into effect on April 1, 2018 and has been amended twice since, effective April 1, 2020 and June 8, 2021. Operating plan variances from approved FMP strategies and commitments are monitored, reported on in FMP Annual Reports, and reviewed annually by an FMP Management Implementation Team (MIT).

1. Proposed blocks occurring outside of tactical plan areas (FMP Indicator 15)

When the FMP was amended to adapt to the final woodland caribou range plan for the SK2 Central range, some decade two areas were shifted into decade one to recognize the loss of some decade one areas resulting from expanded harvest deferral areas in the new Caribou Habitat Management Zones. The revised version of the tactical plan (v2) was used for this variance analysis.

This indicator is tracked annually and assessed on a five-year cycle. As of March 31, 2020, only 2.7% has been harvested outside the tactical plan so it is expected that the target will be met at the 5 - year cycle.

There are 9,391 ha in 2022-23 operating plan blocks that fall outside of the FMP tactical plan area boundaries with 2X the expected harvest volume included in the plan (43%), and roughly 4,696 ha at 1X harvest volume (21.5%). Blocks and areas outside the tactical plan are listed in Appendix A. It is not expected that that this will result in a variance to the plan due to the fact the plan includes 2.2 times the HVS.

Sakâw will continue to monitor the area outside of the tactical plan, and report at the FMP MIT meetings.

2. Deviations from the FMP approved utilization standard being requested in operating plan.

Carrier (CFP) and Montreal Lake Business Ventures (MLBV) are requesting to use a larger, 12.5 cm minimum top diameter (inside bark) for sawlogs harvested under CFP and MLBV wood allocations in 2023/24. See section 4.2.3 Utilization Standards.

3. Blocks where the practice of excess hardwood retention will be used.

The waiver of the requirement to restrict areas of increased hardwood retention to 450 ha/year, which was waived for 3 years starting April 1, 2020, will not be extended for the 2023-2024 year. This can be re-evaluated as the conversations surrounding excess hardwood retention continue or if a situation arises where it appears this limit may be exceeded.

4. Proposed blocks with the potential to exceed the 5-year maximum harvest area targets (by planning unit and species grouping) by more than 5% or 100 ha, whichever is greater. (Indicator 24)

The harvest distribution targets will be managed throughout the operating year. A post-harvest evaluation of performance against them will show the actual variances and be included in the FMP Annual Report on implementing the FMP.

Projected variances from the 5-year targets for the period from 2018 to 2022 are being monitored. The 2021-22 harvest areas are not yet updated from imagery and the 2022-23 harvest is still in progress, so field depletions have been used for the projections. Once the actual harvest information is known, the tracking numbers will be updated and may result in changes, typically as a reduction in hectares.

As per PATSA Forester's December 8, 2022 email, Sakaw has been approved to exceed the targets for wS and SH in the West due to two large events (Dore and Glew). Sakaw met with the Forest Service to provide rationale earlier this year. Given the current harvest schedule, Sakaw is projected to be under the wS target, and 68 ha over the 5% variance on the SH target in the West Planning Zone.

There is also potential that the SH target in the East Planning Zone could be exceeded. This is being monitored closely and Sakaw will discuss any potential variance once the 2021 actual depletions are in.

5. Blocks occurring in Caribou Habitat Tier 1 Areas

The caribou habitat management plan in the approved FMP is being followed, and no harvest blocks have been planned Tier 1 areas.

There are 5.3 km of an existing, active winter road in Tier 1 area V that is expected to be travelled on in the 2022/23 operating year. This road has been used for around 5 years and is a historic trail/road that has been there for decades before that. It is also a stakeholder trail since it is a historic road, so will be left intact after the harvest operations. (see spreadsheet in Appendix A).

6. Event Size Distribution (FMP Indicator 3) and Event Size Duration (FMP Indicator 20)

Since implementation of the Forest Management Plan, a revised Forest Operating Plan Standard was finalized in June of 2022. The new standard requires harvest event plans to be spatially defined in the Operating Plan. It also provides further direction on event size delineation and provides for extended durations for event completion. During the development of the FMP, Sakaw considered operational restrictions and the limit of 10 years for event duration (2017 FMP Standard, Table 1 Indicator 20) to determine targeted event size distribution (2017 FMP Standard, Table 1, Indicator 3). The events proposed in the 2023-2028 Operating Plan (Table 1) were delineated using the FMP definition of events, which is primarily guided by stand characteristics (clustering of stands based on decadal age). This resulted in some very large events >8,001 ha not previously contemplated, and fewer small events.

Table 1	Newly	Delineated	Harvest	Events
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FMP Harvest Target % Event Size of Area		Event Duration	Event Distribution	Event Duration for Proposed Events	
		(2017 FMP	Planned in the		
	Harvested	Standard)	2023-2028 OP	(2022 Forest OP Standard)	
< 100	10%	10	0.8%	10	
100 -1,500	100 -1,500 65%		11.8%	10	
1,501-3,500	15%	10	6.4%	15	
3,501-8,000	10%	10	16.3%	20	
> 8,001	0%	10	64.7%	20	

2.2 Variances from Forest Operating Plan Standard

Planned Volumes

It includes some blocks from the 2022-23 operating year that may not be started or completely harvested by March 31, 2023. If they do end up being harvested in 2022-23, they will be removed from the 2023-24 plan and other blocks will be added to keep planned volumes at 2.2 times the AAC. A major amendment to the 2023-24 operating plan will be submitted in early April to reconcile these block changes, and any associated changes needed to planned roads and silviculture treatments. It is recognized that an amendment to the operating plan may entail a consultation period that could result in delays in approval of the blocks not included in the operating plan submission.

Map Production

As per PATSA Forester's email from December 8, 2022, the following are approved:

- Renewal maps produced at the 1:50,000 scale, instead of the 1:15,000 scale specified under clause 1-7(d) of the 2022 Forest Operating Plan Standard. Shapefiles of the mapped areas will be submitted along with the 1:50,000 maps.
- Harvest event maps will be submitted at the 1:50,000 scale, along with the shapefiles.

Access Control

Any existing road closures that are being removed are to be highlighted in the 2023-2028 Operating Plan and include information regarding whether it was an existing trail where there may be a perceived right of access.

2.3 Variances from FMA and HVS

The HVS shown in Schedule F of the PA FMA has not yet been updated to reflect the following recent changes:

- Paper Excellence (Prince Albert Pulp Inc.) 179,000 m3 annual hardwood timber allocation (the uplift identified in the 2018 FMP) was terminated on September 7, 2021. This timber was allocated to One Sky Forest Products Inc. effective September 7, 2021.
- The Meadow Lake Mechanical Pulp (MLMP) annual hardwood timber allocation of 95,000 m3 was terminated effective March 31, 2022 and MLMP has ceased to be a Sakâw shareholder. This timber was allocated to One Sky Forest Products effective April 1, 2022.
- Softwood sawlog timber reserved for third party operators has been reduced from 150,000 m3 to 100,000 m3 annually. This 50,000 m3 has been allocated to Carrier Forest Products Ltd., effective September 7, 2021. Carrier's annual softwood sawlog timber allocation has now increased from 375,000 m3 to 425,000 m3.

The volume allocated to Sakâw Shareholders at the start of this Operating Plan is 1,990,000 m3/year. The volume planned is 2.2 times that amount and includes contingency areas that provide flexibility to respond to factors such as weather, access to areas, and market demand.

3 Engagement and Information Sharing

There are many other users and values on every hectare of the TSA, to consider when harvesting timber. The TSA is managed to provide short and long-term economic benefits to communities and the province, while also protecting environmental values, cultural heritage, traditional land use, and many other non-timber values and activities (tourism, recreation, hunting, fishing, trapping, fishing etc.). Nearly all this activity is concentrated on road-accessible portions of the TSA.

There is ongoing communication with people throughout the year about forestry plans (roads, harvesting, renewal, reclamation) but the fall is the busiest time when the next Operating Plan, that will start on April 1st of the upcoming year, is being developed. The plan is submitted to the government for review on or before December 31st.

Hundreds of changes are made to harvesting plans each year based on where other land users are and their concerns.

Communication and information sharing mechanisms are aimed at reaching interested people and communities in whatever manner is most effective. The mechanisms used are continually being modified and adjusted to meet people's needs and expectations, legal requirements and public health restrictions. The public engagement that occurred in the fall of 2022 during the development of this operating plan is described below.

3.1.1 Draft Maps Online

Draft maps showing proposed harvest areas were made available online on the Sakâw website (www.Sakâw.ca) on October 21, 2022. Interested people could review the maps at their convenience to see if harvesting was being planned in an area of interest to them.

Links on the "What's New" section of the Sakâw.ca home page led to the draft maps as well as instructions on how to give feedback. People were asked to contact Sakâw with the name of the map or area they wanted to discuss, so the planner for that area could arrange a discussion with them through:

- a one-on-one phone call or online meeting (for viewing a map together)
- an online meeting with a small group
- a small field tour following the public health guidelines in place at the time.

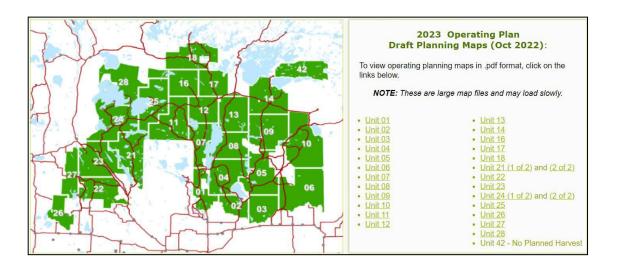
The maps show roads and harvest blocks proposed for Year 1 of the plan in detail. Many more years' worth of future harvesting is also shown on the maps, for information and to start early discussions about them.

What's New...

Update: Due to weather meetings for **Ness Creek, Chitek Lake** and **Big River** have been rescheduled

See meeting dates and other options to review the 2023 Operating Plan here

See Draft Maps here >>



3.2 Letters

On October 6, 2022 letters (shown in Appendix B) were sent to over 1,000 contacts for the PA TSA, directing them to the Sakâw web site for viewing the draft maps. The letters were sent by regular mail, registered mail or email.

The people and organizations contacted were from a comprehensive database kept by Sakâw and government lists of disposition holders and registered trappers in the TSA.

The letters provided information on both the draft Operating Plan (how to view the maps and contact Sakâw, and a schedule of open houses) as well as the long-term Forest Management Plan (including how to access it and view annual performance reports on achieving the forest management strategies contained in it).

3.3 Personal Contacts, Map Mailouts

Planners reached out to individuals and groups they knew would want to discuss the plans. Numerous maps were mailed, delivered or picked up to anyone requesting them in paper form.

3.4 Open Houses and Meetings

The community open houses and meetings listed in Table 2 were held to seek comments on draft maps. At these sessions draft operating plan maps were available to discuss with shareholder planning and operating staff, and Sakaw. Roads and harvest blocks proposed for Year 1 of the plan were outlined on the maps in detail, and the direction for Years 2-5 was discussed more generally. As people discussed where their activities or other specific values occur, the locations were marked on the maps with accompanying notes and contact information. Information about the FMP and a presentation on Natural Forest Patterns and event harvesting was also available.

Date	Location
Friday, Sept 23, 2022	Clarine Lake Forest (Hwy 2 north of Prince Albert)
Wednesday, Oct 19, 2022	Montreal Lake
Tuesday, Oct 25, 2022	Lac La Ronge Indian Band Traditional Lands & Resources Cttee
Thursday, Oct 27, 2022	Hall Lake
Friday, Oct 28, 2022	Candle & White Swan Lakes
Tuesday, Nov 1, 2022	Dore Lake
	Sled Lake
Monday, Nov 14, 2022	Beauval (N-12 Furblock)
Wednesday, Nov 16, 2022	Pelican Lake First Nation
Monday, Nov 21 2022	Ness Creek
	Big River
Thursday, Nov 24 2022	Chitek Lake
Tuesday, Dec 6 2022	Big River First Nation

At the Clarine Lake Forest, at the same time as engaging in the development of the next forestry plans, people interested in reforestation could also see what older harvest areas look like today.

3.5 Advertising

Advertisements about the opportunity to review forestry plans directed people to visit Sakâw's website for information and instructions for viewing and providing input on the draft operating plan maps.

3.5.1 Radio

CKBI

- Twenty 1-minute ads (in English) ran from Oct 24, 2022 to Nov 2, 2022 (2 per day for 10 days).
- CKBI is based in Prince Albert, and the signal is rebroadcast on 92.5 FM in Big River and 95.9 FM in LaRonge, reaching north central Saskatchewan. The broadcast area serves 117,000 people in CKBI's regional trading area. Local radio listening on computers and smart speakers has steadily been rising as well.

CJWW

- Thirty-six 1-minute ads (in English) ran from Oct 22, 2022 to Nov 2, 2022 (3 per day for 12 days)
- This station covers an area from Ile-a-la-Crosse to south of Regina, extending into both Alberta and Manitoba on each side, with an audience of over 800,000 tuning in per week.

MBC

- Fifteen 2-minute radio ads (in Cree) ran from Oct 24, 2022 to Nov 2, 2022 (10 days).
- This station covers the province from Uranium City in the north to White Bear reserve in the south, reaching 62 communities - including the major cities of Regina, Saskatoon, Yorkton, Prince Albert, North Battleford, Meadow Lake, and La Ronge.
- News and information are primarily from an aboriginal angle, and the music selection includes a lot of aboriginal artists from across Saskatchewan and Canada. Programming is in English with featured shows in Cree and Dene languages.

Audio files for the ads these stations ran are included in Appendix B.

3.5.2 Online News

Three online news sites - paNOW, LaRongeNOW and MeadowlakeNOW - ran the following "Billboard Ad", that could appear on any page of the site, for a week:



Anyone using the "Click Here" button was taken to the Sakâw website where draft maps and instructions for getting in touch with Sakâw were posted.

3.6 Customized Maps for Trapping and Outfitting Areas

Outfitters and the Chairs of trapping furblocks will be sent customized maps in early January 2023 that show the overlap between their allocated furblock or outfitting area and the proposed harvest areas. Unnecessary information that could detract from showing the planned activities in the area is removed from these maps. An accompanying letter will ask that the Chairs of trapping furblocks make the maps available to their members, and indicate that additional copies can be mailed upon request.

3.7 Indigenous Engagement

The Saskatchewan government has a duty to consult with First Nations and Métis communities about the impact of this operating plan on their ability to exercise Treaty and Aboriginal rights, before approving the plan. The people Sakâw solicited input from on drafts of this plan included known First Nations and Métis community leadership in and adjacent to the PA TSA for which the

province's duty to consult is triggered by this proposed project. Information about the opportunity to review draft forestry plans reached all areas within and adjacent to the PA TSA through mailings and various forms of advertising, including known indigenous communities.

Feedback received has enabled Sakâw to adjust the plan to avoid, mitigate or minimize adverse impacts on the ability of indigenous communities and individuals to hunt, fish and trap for food on unoccupied Crown lands, gather plants for food and medicine, and carry out traditional ceremonial and cultural practices.

Information about discussions and adjustments made to harvesting plans during the development of this operating plan is provided to the Government of Saskatchewan with the submission of this operating plan. It includes communications, commitments and changes made that help inform the government's consultation process.

There is also ongoing engagement with individual trappers and trapper associations, committees or boards, and band members throughout the year that continues to be effective in avoiding or minimizing adverse impacts on traditional land uses.

Potential impacts from the proposed forest operations (harvesting, constructing, maintaining and reclaiming roads, and renewing the forest) on the ability to hunt, trap, fish and carry out traditional uses, and steps that are taken to avoid negative impacts, are described below.

- The harvest disturbance impacts the availability of vegetation for different wildlife species. The forest growth cycle is reset to the beginning, and a young forest starts to grow back. Measures to mitigate the impact on trapping activity include keeping high value trapping habitat within and between proposed cutblocks, maintaining traditional access to trails and cabins used for trapping, adjusting harvest areas or the timing of harvest, and leaving green tree retention in strategic locations such as valuable habitat or sensitive sites.
- Building roads and carrying out some types of mechanical treatments to promote forest renewal
 can impact archaeological or culturally significant sites.
 Forest planners work with communities and individuals to identify and avoid the location of such
 sites during development of the operating plan. Once approved, the operating plan is also
 submitted to Saskatchewan's Heritage Conservation Branch (HCB) for screening. Areas of
 moderate or high heritage potential where activities will exceed minimum ground disturbance
 levels are surveyed by an archaeologist. If heritage resources are found adjustments are made to
 planned activities to avoid disturbing the site.
- Constructing, maintaining, and reclaiming watercourse crossings can affect fish populations and water quality, and restrict the passage of water and fish.
 Federal and provincial permits stipulate requirements that protect water and aquatic habitat when constructing water crossing. These include controlling erosion and sedimentation, storing fuels away from the water, inspecting crossings twice a year (spring and fall), and carrying out maintenance and prevention work. Crossings are removed when they are no longer needed, and the sites are restored.

A few examples of the engagement and changes made as a result of feedback received during the development of operating plans are:

- Approximate location of an old historic cabin was identified on a map. It is located within a 90 meter buffer in a visually sensitive area and has received protection.

- The approximate location of an existing trail connecting Wapawekka Road to Wapawekka Lake was shown on a map. It was agreed this particular trail would be protected or similar access would be left (via in-block road reclamation) to ensure this travel route is maintained.
- A trapper noted that Giles Creek is a major walleye spawning creek. A 90 meter buffer was agreed to and placed around it and this was entered into the GIS.
- A band Councillor asked if a 90 meter fisheries buffer could be placed on areas 18_16_004 and 18_16_018 and this was agreed to.
- Sacred and historic sites, moose calving and hunting areas and dancing grounds in the vicinity of ZigZag Bay were discussed with elders and community members. Work will continue to identify specific sites for protection and coupled with that, areas that are appropriate for harvest.
- A Métis Local was interested in preserving Métis history and sites. Some special maps that focus on showing known trails and cabins were prepared for their use, and an offer was made to go with a small group to look for sites in proposed harvest areas.

3.8 Adjustments to Plans

Plans and maps were revised to incorporate the input received from other land users to the best extent possible.

Some of the adjustments made are general and aspatial in nature, such as shutting down the wood haul trucks for a long weekend or not burning slash piles during deer hunt season. Others were specific to a location that could be shown on a map, such as leaving an unharvested buffer around a cabin, leaving a visual buffer around a lake, or moving the location of a road.

This operating plan is a living document informed by on-going discussions with stakeholders and First Nations and Métis people. While input into the development of this plan is complete, if new information becomes available during the life of the plan which needs to be considered during operational activities, Sakâw shareholders will submit requests to amend the plan as appropriate.

3.9 Further Details in Appendix B

Discussions and Commitments

Information from the many conversations about planned forestry operations in the PA TSA and their impacts, including commitments and adjustments made, is entered into a stakeholder database on an ongoing basis. Detailed information exported from that database is found in Appendix B, as follows:

- Communications and commitments made during the last 10 years is provided in an excel format that can be sorted or filtered and searched by name, operating area, keyword etc. (Commitment_Communication_Masterlist.xls).
- A report on communications from April to December 2022, when the 2023-24 Operating Plan was being developed, is provided in .pdf format.
- (CommunicationsWithCommitmentsReport_April 2022_Nov 2022.pdf).
- A list of contacts for the PA TSA is provided in excel format.
- (tblSakâw Stakeholders Query-November 2022.xls).

Supporting Information for Section 3 – Engagement and Information Sharing
Copies of the letter and radio ads to engage in the development of this operating plan are also found in Appendix B.

4 Proposed Forest Operations

The operational activities that will be carried out under this operating plan involve:

- Forest harvesting (including felling, skidding, processing, log hauling, storing and staging of wood)
- Road construction, maintenance, and reclamation
- Forest renewal

4.1 General

4.1.1 Operations Standards

Activities carried out under this operating plan and described below will follow requirements outlined in the Forest Operations Standard (June 2022), Forest Operations Environmental Standard (November 2022), Temporary Work Camp Standard (November 2022) and an Aquatic Habitat Protection Permit.

4.1.2 Contractor Management

Harvesting, road construction and maintenance, and renewal activities are carried out by independent contractors. Contractors must meet all operational and safety and health standards that apply to the operation they are responsible for. This includes:

- Providing direct supervision of their employees
- Ensuring safe working conditions for employees
- Adhering to each Shareholder's Environmental Policy, Environmental Management System, and forest practices certification requirements, as applicable
- Meeting the requirements of all applicable Saskatchewan Acts and Regulations
- Being familiar with Sakâw 's forest management objectives and carrying out operations in a manner that is consistent with them
- Ensuring that employees comply with all forest regulations and contract provisions
- Working with the public, stakeholders and other users of the forest who may have leases, cabins, trails, or other interests that need protecting within the operating area.

4.1.3 Harvest Block Boundaries

The boundaries of harvest areas will be marked with flagging tape, or the GPS coordinates of the boundary will be uploaded into the harvesting equipment, or a combination of both techniques will be used.

If boundaries are being ribboned, ribbons are not needed where a distinguishable linear corridor can be used, or the area beside the boundary has a height difference of 10 meters of more. Table 3 lists the standard flagging tape colours that will be used where needed, to mark boundaries or lines for proposed forestry activities. Deviations from the approved harvest area boundaries are acceptable under certain conditions and allowances set out in the Forest Operations Standard.

Table 3 Standard Flagging Tape Colours

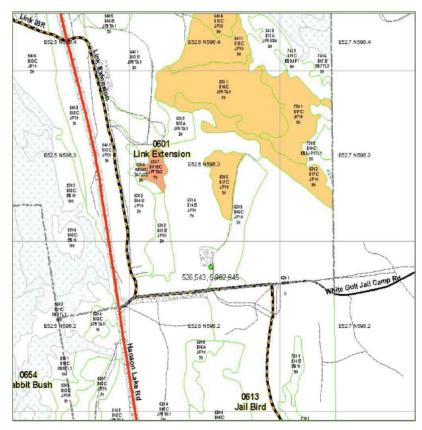
Ribbon Colour	Use
Pink "Harvest Area Boundary"	Harvest area boundary locations and sensitive sites where harvesting will not occur
Orange "Road Line" or "Road Centerline"	Road location
Day-glo Green "Machine Free Zone" (Carrier uses Yellow "Machine Free Zone")	Areas where equipment is not permitted to travel
Yellow "Special Management Zone"	Areas with special management conditions (i.e. no harvest zones in riparian management areas)
Yellow	Planting boundaries

4.1.4 Temporary Work Camps

Requirements in a Temporary Work Camp Standard (effective Nov 14, 2022) will be followed whenever camps are set up for carrying out forestry activities in the 2023-2024 operating year. This includes black and grey water collection and disposal requirements that came into full effect on October 1, 2021.

The camp locations of contractors carrying out harvesting work will be kept updated in a reporting spreadsheet that is made available to the Ministry of Environment Forest Ecosystem Protection Specialists on an ongoing basis.

Sakaw is requesting approval, on behalf of Dunkley Lumber Ltd., for a Temporary Work Camp at Z13 E526543 N5962645 – please see map below with location details.



The camp locations of contractors carrying out renewal work will be emailed to the Area Forester by the responsible Shareholder.

4.1.5 Heritage Resource Surveys

Maps and operating information will be provided to the Heritage Conservation Branch (HCB) of the Saskatchewan Ministry of Parks, Culture and Sport, for all areas included in Year 1 of this operating plan. HCB screens all proposed harvest areas and roads for heritage resource potential based on location, topography, known heritage resource information and professional judgement. Each site is rated for heritage potential. A qualified professional archaeologist is contracted to carry out field surveys on sites where the heritage potential is moderate or high and the roads or renewal methods involved are expected to exceed specified minimums for ground disturbance. If heritage resources are found during the survey, planned forestry activities are modified to avoid disturbing the sites.

In addition to the HCB annual review, sites of archaeological or cultural significance may be identified during the operating plan engagement process or during forestry activities. They will be reported to the HCB in accordance with provincial requirements and appropriate management actions will be identified.

4.2 Harvesting

4.2.1 Harvest Events

Table 1 provides details for newly delineated harvest events. Appendix A further details blocks within these events where harvest approval is being sought. It should be noted that approval to harvest remains at the harvest block level for year one activities only.

4.2.2 Harvesting Methods

Mechanical harvesting systems are used to process all wood harvested on the TSA. Typically a mechanical system consists of a tracked feller-buncher used to cut standing trees and lay them in orderly piles (drags). A grapple-skidder collects the drags of wood left distributed throughout the harvested area by the feller-buncher and skids them to roadside or into rows within the cut block to facilitate the use of a processor to remove tree branches and tops. The processor operator sorts the processed logs into three basic products: sawlogs, softwood pulp and hardwood.

There are also operations where timber is felled, processed at the stump, and forwarded to roadside.

4.2.3 Utilization Standards

Carrier (CFP) is requesting to use a larger, 12.5 cm minimum top diameter (inside bark) for sawlogs harvested under CFP and MLBV wood allocations in 2023/24. Harvesting to a larger top size reduces the HVS by 23%. To achieve that 23% volume reduction the volume for each block in the harvest table (Appendix C) has been reduced by 17%. The other 6% is the average proportion of S2 wood smaller than a 12.5 cm top size that has been delivered to Carrier's mill.

For all other Sakâw shareholders, the utilization standards approved in the 2018-2038 Forest Management Plan will be used, as shown in Table 4.

Table 4 Utilization Standards

Product	Fibre Leaves forest	Stump Height (cm)	Minimum Top Diameter inside Bark (cm)	Minimum Merchantable Height (m)	Log Length (m)
SWD Sawlog	CTL	30	10	5.35	2.6
SWD Pulp	Tree length	30	8	5.35	2.4
Hardwood	Tree length	30	8	5.35	Full tree

4.2.4 Proposed Year 1 Harvest Volumes and Attributes

This operating plan includes the Year 1 harvest volumes shown in Table 5. The volumes shown are 2 times the annual allowable harvest, which includes contingency harvest areas. This provides flexibility to move harvest locations since weather, markets, wildfires, contractor and equipment availability, stakeholder concerns etc. change even the best laid plans. Despite this additional volume being included in the plan, harvesting will not exceed the HVS over a five-year cut control cycle so there is no risk of unsustainable harvest.

Table 5 Shareholder Allocations and Proposed Harvest Volumes

Shareholders	Allocation (m³/yr)	Year 1 Proposed Volume (m³)	Years of HVS Proposed
<u>Hardwood</u>			
A.C. Forestry	200,000	460,007	2.3
MLBV	40,000	95,910	2.4
Tolko	600,000	1,448,633	2.4
Softwood			
A.C. Forestry	200,000	412,809	2.1
Carrier**	425,000	825,723	1.9
Dunkley	75,000	130,387	1.7
MLBV**	200,000	480,395	2.4
NorSask*	250,000	546,954	2.2
Total	2,035,000	4,402,773	2.2

^{*}Includes the former L & M allocation

The harvest distribution by species group and planning unit (VOIT Indicator) for proposed harvest in year one is summarized in Table 6.

^{**} Volumes reduced by 17%, plus 6% reduction for delivered wood smaller than 12.5 cm diameter, for a total reduction of 23%

Table 6 Harvest Distribution by Species Group and Planning Units

Area (ha)	Cover Species Group (CSG)				
	S-wS S-		SH	HS/H	Grand Total
Planning Unit					
Central	1,013	12,464	1,631	5,904	21,012
East	459	10,573	578	1,889	13,499
West	2,258	7,455	1,943	16,392	28,047
Grand Total	3,819	35,953	4,465	25,579	69,817

For greater certainty, nothing in this Operating Plan shall obligate Sakâw or any of its shareholders to harvest any minimum volume of timber, and it is recognized that operational flexibility is needed to address factors such as changing market conditions, stakeholder (including shareholder) issues, and other operational factors from time to time.

Appendix C contains a complete list of proposed harvest areas and their attributes, which includes the shareholders with harvesting and renewal responsibilities for each block, submission maps, and unit volume summaries.

Lists of prescriptions and considerations for operating areas that describe strategies to address aesthetic, forest health and other considerations are also provided in Appendix C.

4.2.5 Staging and Storage of Wood

As part of the harvesting process shareholders may stage or store wood before delivering it to the mills. Staging wood is when it is left at roadside in the block it was harvested in. Storing wood is when it is moved out of a harvest block to a storage site before it is hauled to a mill.

Staging and storing wood is a critical strategy for managing wood moisture content in some shareholder mills. Sakâw shareholders store wood at locations along all-weather roads where they can access it when they need to deliver it to mills, or get wood out of harvested areas so the roads can be reclaimed and the area reforested.

A list of wood storage sites anticipated to be used in 2023-24 is listed in Appendix C. Sakâw requests approval to allow forest products harvested in 2022-23 to remain in the listed storage sites, until March 31, 2023.

As the locations needed to store wood in the forest beyond the end of the operating year become clearer, Sakâw will identify and submit for approval by January 15, 2023 the actual locations of stored wood from the anticipated harvest areas and storage sites, the volumes to be stored at those locations, and the anticipated date the timber will be removed from the sites.

4.2.6 Silviculture Systems and Event Level Retention

The primary silviculture system used is to cluster the harvest in an area and carry it out relatively quickly, so the area can be reclaimed and the time over which it is impacted is minimized. An average of 9% or more of the area (a range of 3-15% by cutblock) is left uncut. Generally, this event style harvesting is preferred for environmental, forest health, and wildlife reasons. The rationale behind this approach can be found in Appendix D of the Forest Management Plan for the PA TSA.

Management to control dwarf mistletoe involves removing infected trees and overrides the requirement to leave any uncut areas.

4.2.7 Riparian Area Harvesting

Harvesting and silviculture activities in riparian areas will comply with requirements for riparian management areas in the Forest Operations Standard.

4.2.8 Visually Sensitive Areas

Some harvest areas in this operating plan fall within visually sensitive areas that can be seen from communities, public recreation areas, major highways, and high value recreational use lakes and rivers. Harvest strategies for those areas take into consideration aesthetic values and stakeholder concerns, which may include limiting the extent of disturbed forest, reducing the size of openings, using irregular block boundaries, or using retention to act as a visual screen.

A list of area specific prescriptions and considerations made in light of aesthetic, forest health or other considerations is provided in Appendix C.

4.2.9 Third-Party Operators

Independent third party operators collectively have rights to harvest 100,000 m³/year of softwood sawlogs and 12,000 m³/year of hardwood from the PA TSA. Shareholders and third-party operators work together wherever possible to plan operations and integrate the location of harvest areas, road use, and utilization of products from the area.

4.3 Roads and Crossings

Shareholders are responsible for the construction and maintenance and reclamation of Improved Bush Roads (IBRs), and all other lower class roads used to access harvest operations. The softwood and hardwood operators share responsibility for the roads and crossings in an area, as listed in the roads and crossings tables in Appendix D.

Watercourse crossings are constructed, maintained and reclaimed according to conditions specified in Aquatic Habitat Protection Permits (AHPPs). Sakâw requests that a blanket Aquatic Habitat Protection Permit be issued under the Environmental Management and Protection Act to authorize the construction, maintenance, and remediation of road crossings and the removal of beaver dams, at water crossings approved under this operation plan.

4.3.1 Proposed Roads and Watercourse Crossings

Proposed Year 1 road construction is summarized in Appendix D by operating area, zone, and the licence area. Crossings are also listed in Appendix D, by location and type. The roads and crossings were planned for 2 times the harvest volume and exceed what is expected to be constructed.

4.3.2 Borrow and Gravel Pits

As a general practice borrow pits may be dug within any approved Year 1 harvest area to gather materials such as gravel or sand to use when constructing roads in the area. When the roads are reclaimed all gravel pits, borrow pits, cuts, fills and extra workplaces will be reclaimed as per the Forest operations Standard.

4.3.3 Road Closures

Temporary and permanent road closures align with provincial resource protection methods (in addition to the requirements in the Forest Operations Standard). The closures are used to restrict vehicle access to help prevent overfishing or overhunting of an area, protect road and camp infrastructure, and reduce liability. Berms and gates proposed for installation in Year 1 are listed in Appendix D.

4.3.3.1 Request to Leave Closures Open

Sakâw is requesting that certain road closures be left open in the following situations:

- there is a high degree of damage and breaching of the closure such that closing the gate becomes unreasonable and,
- when Sakâw shareholders may be unaware that the gate has been damaged / breached and hence the road would be "open."

A table listing the closures proposed to be left open during times when forest operations are inactive is included in Appendix D.

4.3.4 Class 1 &2 Road Non-permanent Closure

Non-permanent road closures involves removing watercourse crossings and leaving the road surface intact for future use. No major roads (Classes 1 or 2) are planned for non-permanent closure in the 2023/24 operating year.

4.3.5 Road Reclamation

Class 1-4 roads no longer needed for forest management purposes are generally reclaimed and returned to productive status. Slash piles will be burned and in-block Class 4 roads reclaimed within two years of harvest completion.

4.4 Renewal

4.4.1 Silviculture Ground Rules

Silviculture Ground Rules (SGRs) are followed that outline the operational treatments that can be used for a given forest type (i.e., harvest, renewal and stand tending). These are found in the Forest Management Plan for the PA TSA (April 1, 2018).

4.4.2 Planned Year 1 Renewal Activities

Tables that identify blocks planned for initial treatment (leave for natural, scarify or plant), retreatment, or that won't be retreated due to mitigating circumstances, are included in Appendix E along with maps of their locations. The planned renewal activities include areas harvested by third party operators on the TSA and areas with outstanding silviculture obligations.

No herbicide or insecticide treatments are planned for the 2023-2024 operating year.

4.4.3 Regeneration Assessments

Regeneration assessments that will be done in 2023/24 involve:

- Establishment surveys on areas harvested in 2016/17, by shareholders or third party operators.

- Free to Grow (FTG) surveys on areas harvested in 2009/10, where Sakâw is responsible for legacy silviculture obligations as outlined in Schedule A of the PA FMA Assignment and Assumption Agreement.
- Blocks missed in previous years will be included with these surveys.

These surveys will primarily be carried out using Large-Scale Aerial Photography (LSAP) Methodology, with interpreters assessing high resolution 3D aerial photographs overlaid with a virtual plot grid. Ground surveys will also be carried out to calibrate those assessments and to verify regeneration status of areas previously surveyed using the LSAP methodology.

Approval is requested to allow an alternate approach to hardwood regeneration assessments to be used for the 2023/2024 operating year. This approach was developed to reduce surveying efforts on low-risk leave for natural (LFN) hardwood stands. A sample of hardwood blocks identified as LFN will be surveyed instead of surveying 100% of the blocks. The results from the sample are extrapolated to the remaining un-surveyed blocks. This will be the fourth operating year using the alternate approach, and a summary of the results will be prepared and presented to the Forest Service.

5 Forest Protection

5.1 Fire Protection and Suppression

Sakâw will submit a Fire Protection and Suppression Plan by March 31, 2023 to Saskatchewan Public Safety Agency.

5.2 Insect and Disease Protection

Protection strategies are outlined in the 2018 FMP (Section 7.2) and incorporated into planning and operations to minimize the loss of timber from forest insects and diseases.

Efforts to control the spread of jack pine dwarf mistletoe are focused on reducing the chance of current infestations becoming established in new regenerating stands. Strategies used include ensuring that retention (including in riparian areas) is made up of species not susceptible to mistletoe and sanitizing areas adjacent to the block.

Strategies that can be used to control building populations of sawyer beetles, protect in-block retention, and protect harvested timber from being degraded include:

- Sanitation. Burn slash piles as soon as possible to get rid of habitat for the beetles. Haul log piles out of the area as soon as possible. Avoid storing fresh cut logs close to fire-killed timber (in the forest or in the mill yard).
- Leave retention in large clumps (not single trees) so there is proportionately less edge and more protection for interior trees.

6 Reporting and Self-Inspections

The following reporting will be done during the implementation of this plan:

- Harvest Operations. A common report on shareholder harvest operations in the PA TSA, in the
 form of a shared worksheet ("smartsheet") that is continuously updated as activities are
 completed, is made available to the Ministry of Environment Inspecting Officers
 on an ongoing basis. Alerts are automatically sent to the Ministry of Environment when a row in the
 report changes.
- Harvest Camp Location. A common list of harvest camp locations for all shareholders is also reported to the Ministry of Environment through a shared worksheet that can be checked at any time.
- Renewal Camp Location. The location of renewal camps (usually for tree planting) is emailed to the Area Forester by each shareholder.
- Crossings. A monthly crossings report outlining where active construction or maintenance work on crossings has occurred is emailed to the Area Forester by each shareholder.
- Monitoring and reporting on operational activities will summarize the area harvested, the areas of reforestation activities, and the amount of roads built and reclaimed. Activities are summarized and submitted annually once actual harvest data is available, under the Forest Data Submission Standard.

Sakâw shareholders self-inspect their activities on the landbase as required under section 32(e) of the Forest Resources Management Regulations, terms of the Prince Albert FMA Side Agreement, and voluntary certification to the Sustainable Forestry Initiative (SFI) standard. The following self-inspection and self-reporting procedures will be followed by shareholders:

- Before operations begin a start-up checklist will be completed with the contractor. This pre-work form details specific requirements for the operation, such as how a harvest area will be developed and key standards to be met.
- A post-work inspection will be done and documented once operations are complete.
- Non-compliances will be reported by e-mail or letter to the appropriate Inspecting Officer
 as soon as practical after they are discovered and verified. The notice will contain the
 location and the specifics around the non- compliance as well as the action plan to be
 taken to correct the issue, if applicable.
- Measures to correct non-compliances will follow each Shareholder's non-compliance, preventative and corrective action process.
- Pre- and post-work reports will be made available to Inspecting Officers on request.

7 Amendments

Request for amendments to this operating plan will be submitted by email or letter to the Area Forester. Where a change being requested may impact stakeholders, engagement will normally be done before the request is submitted and information about the outcome of the discussions will be included with the amendment request.

Appendix A Variances from FMP

See files or folder titled:

2023 Tactical Plan Variance-PATSA

2023-Inside Caribou Tier 1 Roads-PATSA

Appendix B Engagement and Information Sharing

See files or folder titled:

Discussions and Commitments

Commitment_Communication_Masterlist_2022-12-20.xlsx

CommunicationsWithCommitmentsReport_ 2022-12-19.pdf

Supporting information for Section 3 – Engagement & Information

Sharing

Celebrate Renewable Forests – Clarine Lake.pdf

Letter_Engagement Opportunities 2023 Plan (2 pages) updated

CJWW.wav

CKBI.mp3

MBC_Cree.mp3

Appendix C Harvest Areas and Volumes

See files or folder titled:

Submission Maps 2023 (folder)

- 15K_Submission
- 50K_Submission
- 300K_Submission

Unit Volume Summaries 2023 (folder)

- Unit 01 – 28, 42 Volume Summary 2023.pdf

2023 Events-PATSA Final v2

2023 Events-PATSA

2023 Harvest Distribution-PATSA

2023 Proposed Harvest Detail-PATSA

Regional Prescriptions Considerations.pdf

Storage Sites (For Wood Harvested in 2023-24)

Appendix D Roads, Watercourse Crossings, Closures

See files or folder titled:

2023 Proposed Closures Detail-PAFSA

2023 Proposed Crossings Detail-PATSA v2

2023 Proposed Roads Detail-PATSA v2

2023 Road Closures to Remain Open Table

Appendix E Renewal Activities

See files or folder titled:

Renewal Maps (folder)

2023 Proposed Renewal-PATSA