

2023 – 2028 Operating Plan For Tolko's Area Based Term Supply Licence on the Bronson-Green Lake Timber Supply Area

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Prepared for:

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This plan is prepared for the Tolko Term Supply License (TSL No. A-TOLKO-03) on the Bronson-Green Lake Timber Supply Area.



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1 Introduction

This Operating Plan (OP) has been prepared in accordance with the Forest Operating Plan Chapter and Standard of the Saskatchewan Environmental Code, and the Tolko Industries Ltd Area Based Term Supply Licence (TSL) for the Bronson-Green Lake Timber Supply Area (TSL). It is also aligned with a strategic 20-Year Forest Management Plan (FMP) for the TSL area, which was prepared in accordance with the Forest Management Planning Chapter and Standard of the Environmental Code and came into effect on April 1, 2018.

The plan is being submitted by Tolko, as the Licensee, to gain approval for forest management activities on the TSA. These activities include, but are not limited to, forest harvesting, road construction, road maintenance, watercourse crossing construction, road reclamation, tree planting and scarification. The operating plan covers the period April 1, 2023, to March 31, 2024. Approval is being sought for year 1 activities. Future years are shown in accordance with the Forest Operating Plan Standard to illustrate intent and inform stakeholder engagement.

The Tolko Term Supply Licence was recently amended with an effective date of April 01, 2021. Tolko is in discussion with the Ministry of Environment (MoE) regarding transitioning the licence from a Term Supply Licence to a Forest Management Agreement (FMA) prior to the expiration of the current licence on March 31st, 2026.

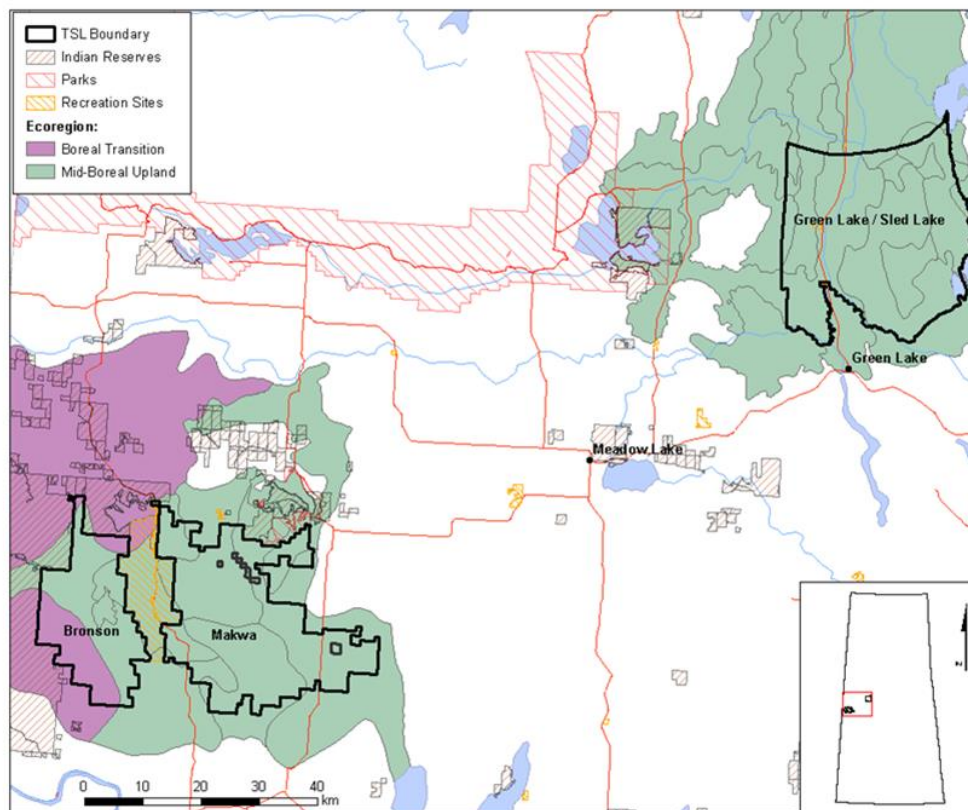


Figure 1 Tolko Term Supply Licence Area – the Bronson Green Timber Supply Area (TSA)

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

2.1 Variances from FMP

This operating plan is aligned with the 2018 Forest Management Plan (FMP) for the Tolko TSL area which came into effect on April 1, 2018. Operating plan (OP) variances from approved FMP strategies and commitments are monitored, reported on, and reviewed annually by an FMP Management Implementation Team (MIT).

Based on the current operating plan as proposed there are 2 FMP targets to identify as potential variances; event size distribution and duration.

Event Size Distribution (FMP Indicator 3) and Event Size Duration (FMP Indicator 18)

Since implementation of the 2018 Forest Management Plan, the Forest Operating Plan Standard (FOPS) was revised and finalized in June of 2022. The FOPS now 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, Tolko considered operational restrictions and the upper limit of 10 years for event duration (2017 FMP Standard, Table 1 Indicator 18) when determining targeted event size distribution (2017 FMP Standard, Table 1, Indicator 3). The events proposed in the 2023-2028 Operating Plan (Table 2) uses the FMP definition to delineate events which is primarily guided by stand characteristics (clustering of stands based on decadal age). This resulted in some very large events not previously contemplated.

Table 1 Tolko FMP Event Size Distribution and Duration vs Proposed OP Event Size Distribution and Duration.

FMP Harvest Event Size	FMP Target % of Area Harvested	Event Duration (2017 FMP Standard)	Event Distribution Presented in the 2023-2028 OP	Event Duration for Proposed Events (2022 Forest OP Standard)
>0-4	0%	10	0%	10
5-60	10%	10	0.04%	10
61-800	60%	10	0.55%	10
801-1800	20%	10	1.19%	15
1801-4000	10%	10	2.32%	15
4000+	0%	10	95.90%	20

2.2 Variances from Forest Operating Plan Standard

Tolko requests the following variances to the Forest Operating Plan Standard:

Scale of Event Maps: Under the Forest Operating Plan Standard 1-5(1)(a)(ii) harvest events are required to be illustrated on digital maps at the operating area/event scale and recommended to be illustrated on digital maps at the planning unit/management unit scale (section 1-7). Tolko requests to illustrate harvest events at the management unit scale maps, rather than on the operating area maps. This is being requested due to the size of the events, which would not display fully on the operating area maps. Harvest event shapefiles will be provided so that the events may be reviewed at any scale.

Access Control: Tolko is requesting that where existing approved road closures are being left open (i.e., not closed) during periods when forest operations are not active, that they be included in the 2023-2028 Operating Plan. A description as to rationale for removal and whether the trail was pre-existing will be included (section 4.3.2).

Map Production: Section 1-7 (c) (x) requires roads and water crossings reclaimed in the “previous operating year” to be displayed on the large-scale maps. Because data for the previous operating season is not fully completed until February of the following year, Tolko is requesting to include reclaimed roads and crossings for the 20-21 operating season.

2.3 Variances from the Term Supply License or the Harvest Volume Schedule

This operating plan is aligned with provisions of the Tolko TSL and the approved HVS (Table 4). Specifically, planned area at 2.2 times volume is consistent with the HVS in the approved FMP and the Tolko TSL Licence.

The Village of Green Lake softwood allocation (Table 10) is included although the volume is accounted separately and blocks where the volume will be allocated is detailed within the plan.

3 Engagement and Information Sharing with Indigenous Communities and other Forest Users

Resources on the TSL support the various activities of other forest users. The forest plays an active role in people's lives including trapping, outfitting, grazing, sawmilling, tourism, fishing, hunting, farming and outdoor recreation. In preparation for the submission of the 2023-2028 Operating Plan, Tolko has met on a regular basis and documented feedback received from rural and urban municipalities, First Nations and Métis communities, trappers, outfitters, and other stakeholders, including third parties. Stakeholder input was received through one on one meetings, phone calls, email communication, mail outs and field tours. In addition, internet-based communications such as the Tolko webpage and the Tolko Facebook page are utilized by stakeholders.

With the removal of Covid-19 precautions, in person meetings and community open houses resumed in 2022. During the pandemic, an effort to increase media outreach and provide an opportunity for other users to access the operating plan virtually was quite successful. The "Virtual Open House" was updated on the Tolko.com website to include 2023-2028 Operating Plan in addition to in person open houses (held on December 8th and 9th, 2022). Stakeholder letters and emails were sent on November 24th inviting individuals to the open houses and directing them to the Tolko website at www.tolko.com where simplified stakeholder maps were uploaded. The website poster is provided in Appendix B. As well, newspaper (online and paper) and radio ads in Meadow Lake, Lloydminster and Green Lake provided information regarding the community open houses.

Stakeholder engagement mechanisms are continually being modified and adjusted to meet people's needs and expectations, and legal requirements. The goal is to reach interested people and communities in whatever manner is most effective.

Tolko documents engagement in the form of a Stakeholder Database which summarizes the engagement with stakeholders. With this submission, the most up to date Commitment and Communications Report, has been provided to the Ministry in digital format. In preparing this plan, Tolko has accommodated other forest users where possible. Commitments and changes made to the plan, if spatial, are identified on the 1:15,000 and 1:50,000 scale maps as a Stakeholder Commitment. The stakeholder commitment is identified spatially as either "special harvest" or "no harvest." In addition to the Stakeholder Commitment layer on the operating maps, Tolko also created an additional GIS layer to further inform the planning and engagement process. This is the Active Stakeholder Trail layer which identifies known active trails to ensure that this or similar access is retained upon completion of harvest. Many of these trails were identified through field tours and communication with local stakeholders.

3.1.1 Trapping and Outfitting Maps

Custom made maps are being mailed to the chairs of trapping fur blocks and outfitters, for their applicable areas, in mid-January 2023.

Only trapping or outfitting boundaries, proposed blocks, and landmarks like lakes and roads will be shown on the maps to make it very clear to outfitters and trappers if there are any plans in their areas.

3.1.2 Public Notification of Operating Plan Development

Letters (by email and / or post) were sent to all individuals, organizations, and communities in the Tolko stakeholder database inviting them to review the draft plan. In addition to these notification letters, Tolko endeavored to reach the public through various advertising methods. Information about the opportunity to review draft forestry plans was spread through radio ads, newspapers, online news sites, and the Tolko website. All advertisements directed individuals to the community open houses or to Tolko's website for information and instructions for viewing and providing input on the draft operating plan maps. Details of the 2022 advertising include:

- Northern Pride - ¼ page colour ad running for two issues
- Meadow Lake NOW - online billboard running from Dec. 1st to Dec. 9th
- Lloydminster Meridian Source - ¼ page colour ad running for two issues
- Green Lake Radio - 30 second ad run twice per day for two weeks

The Northern Pride newspaper advertisement is shown below.

Food bank receives sizeable donation

When it comes to providing for people in need, every donation – no matter how big or how small – helps.

This is the opinion of Natania Banduchuk, executive director at the Door of Hope in Meadow Lake, when commenting on recent donations received at both the Door of Hope and the local food bank courtesy of Innovation Credit Union.

Innovation donated \$5,000 to the Door of Hope soup kitchen and \$5,000 to the food bank," Banduchuk explained. "We haven't earmarked the money for anything specific, but operating costs are generally higher than our income every year. So, this money will go into the general fund for each department it was designated for to help with expenses. For the Door of Hope it will likely be used to purchase supplies for the kitchen, while, right now, the food bank's stock is looking pretty good, but there are times when we don't have as many donations coming in and we need to supplement. That's where this money will likely end up going toward."

According to a recent news release issued by Innovation, inflation has significantly impacted Saskatchewan residents over the past year. Rising food costs have made it a true challenge for people to afford even the necessities. Local charitable organizations are helping as much as possible, but with in-



creasing demand and reliance on them, they require additional support from community partners. It is with this in mind, Innovation Credit Union's 2022 Community Impact Campaign focused on ensuring the underserved received food during this difficult time. In total, Innovation donated a total of \$50,000 this year to the Door of Hope and food bank, as well as organizations in North Battleford, Regina, Saskatoon and Swift Current.

"This year has been incredibly difficult for so many to navigate financially," noted Innovation marketing community specialist Shawna Jardine. "It's an honour to be able

to help so many worthwhile organizations continue to make a difference in our communities. We can't thank them enough for the work they do."

As part of Innovation Credit Union's Responsible Banking commitment, it gives two to four per cent of pre-tax profits to activities and causes that help build and support communities it serves.

"We couldn't make contributions such as these without the support of our membership," Jardine said. "Thank you to Innovation members for your business." Banduchuk also expressed her gratitude to Innovation.

"Innovation has been an incredibly supportive organization in our community for many years," she said. "I've also noticed, over the last several years, they have continued to increase what they've been able to give us. Each year they send a group of volunteers over here to help cook a meal, so it's encouraging to see community organizations coming alongside us and helping us to do the work."

With Christmas just around the corner, Banduchuk also said things are looking positive at the Door of Hope in terms of the ongoing service it provides to patrons.

"Things are pretty decent heading into the holidays because we recently received quite a large food share from Food Banks of Saskatchewan, while the Meadow Lake Co-op, last year, donated \$2,500 worth of groceries, and they have done so again this year," she noted. "We also had a food bank grant we just completed – so the food is looking pretty decent. That being said, we are doing Christmas hampers this year. We're starting to collect information now from the people who receive food bank services, and plan to do Christmas-specific hampers with all the fixings for a traditional Christmas meal. Anyone who can donate turkey, ham, traditional Christmas foods or small gifts for children, we are accepting."

Phil Ambrosiak • phil.ambrosiak@innovation.ca



This is your opportunity to review our operating plans and provide comments.

Thank you!

OPPORTUNITY TO REVIEW FOREST OPERATING PLANS

Tolko Industries Ltd.,
Meadow Lake OSB Division
**Bronson Green Timber Supply Area
Forest Operating Plan: 2023-2028**

Open houses are being held in the following communities to provide the public with an opportunity to review Tolko's planned forest operations over the course of the next five years, with a focus on the 2023/2024 operating year.

Location	Date & Time	Location
Green Lake	Dec. 9 2:00 p.m. - 5:00 p.m.	Mervin Sayese Memorial Arena
Meadow Lake	Dec. 9 11:00 a.m. - 1:00 p.m.	Grace United Church Hall 502 - 6th Ave West
Loon Lake	Dec. 8 10:30 a.m. - 12:00 p.m.	Loon Lake Senior Centre
St. Walburg	Dec. 8 2:00 p.m. - 4:00 p.m.	St. Walburg Senior Centre

The 2023-2028 maps are available for viewing on Dec. 7th on the following website:
<https://tolko.com/responsibility/managing-our-forest/prairies/meadow-lake-woodlands>
If you have any questions or would like to comment on this plan, please email us at:
sk.tolkowoodlands@tolko.com

www.tolko.com



Meadow Lake Wildlife Federation

2022 HORN SCORING

Thursday, December 15



Seniors' Activity Centre
406 - 5th Ave. West
Meadow Lake, SK

Doors open at 6:00 pm

Concession & Bar
50/50 • Raffle Draw
MLWF apparel
available for purchase

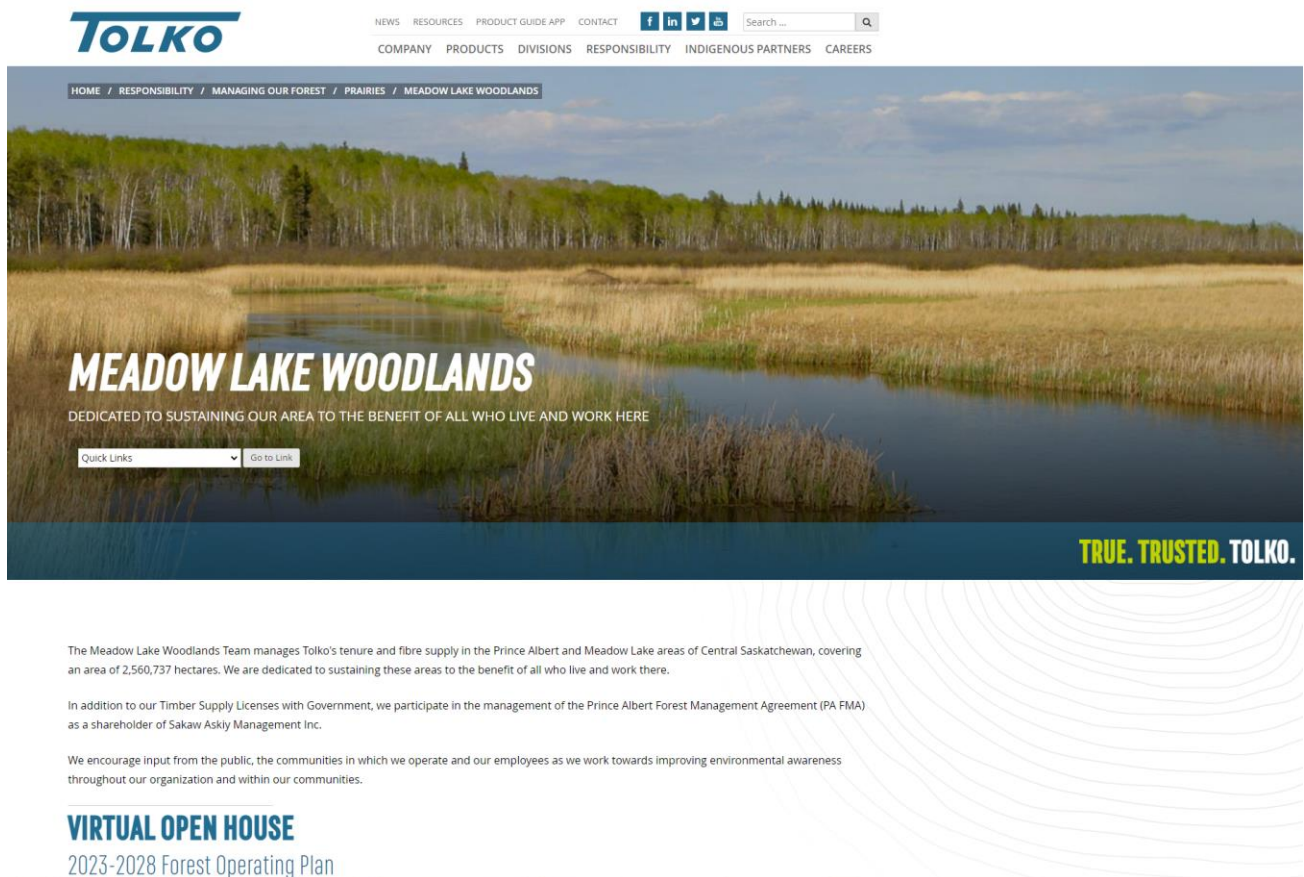
Certified Henry Kelsey/Boone & Crocket Measurer

For more information contact Kurt at 306-240-7120

3.1.3 In Person and Virtual Open House

In person open houses were held in the communities of Meadow Lake, Green Lake, Loon Lake and St. Walburg on December 8th and 9th, 2022. As well, the “Virtual Open House” went live on December 8th, 2022. The website link is <https://tolko.com/responsibility/managing-our-forest/prairies/meadow-lake-woodlands>. The Meadow Lake Woodlands site is a page within Tolko’s overall corporate website. This also provides interested stakeholders with the opportunity to explore other Tolko sites such as products, divisions and indigenous partners. As well, there is a link to the current 20-Year Forest Management Plan and a one-page brief describing the proposed FMP Amendment. A poster is displayed which details the process to provide feedback and includes an email (sk.tolkowoodlands@tolko.com) for comments.

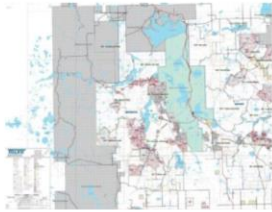
View of the Website:



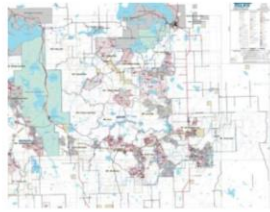
The maps on the Tolko website (shown below) were tailored to be more readable and more easily downloaded. All information other than landmark features such as roads and lakes, recent harvest blocks, and proposed harvest blocks was removed.

MAPS

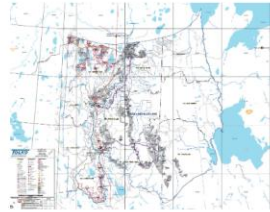
Click on the maps below to view their PDF.



Bronson Forest map (PDF)



Makwa Forest map (PDF)



Green Lake/Sled Lake map (PDF)



Dev Plan map 2023 (PDF)

OTHER LINKS

[Our 20-Year Forest Management Plan](#)

[Forest Management Plan Amendment \(Dec 2022\)](#)

3.2 Indigenous Communities

It is the duty of the Government of Saskatchewan to consult, and if appropriate accommodate, First Nation or Métis if the actions contemplated by the Government could adversely affect Treaty or Aboriginal rights and carry out traditional uses. Tolko also has an obligation to engage with First Nations and Métis communities where proposed operations could adversely affect Treaty or Aboriginal rights and carry out traditional uses. Tolko attends Duty to Consult meetings when invited.

Tolko engages with indigenous communities through letters, emails, phone calls, field tours, and meetings.

In addition to communication throughout the year, Tolko sent registered letters communicating the opportunity to view draft maps on the Tolko website to each of the First Nation communities and Métis locals listed below. The letters also provided the opportunity for communities to request a meeting with Tolko.

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

- An historic camping area was added to the database and a protection buffer was placed around the site.
- A natural springs site was identified, and a 100 m protection buffer was placed on the site.
- An historic trail system was added to the GIS and received protection.
- A medicinal gathering site was protected.
- Increased cover (through retention and understory protection) was left in an area for thermal cover for moose calving habitat.
- During harvest operation, firewood was left roadside.

First Nation Communities

Onion Lake First Nations
Makwa Sahgaiehcan First Nation
Canoe Lake Cree First Nation

Thunder Child First Nation
Flying Dust First Nation
Buffalo River Dene Nation

Ministikwan Lake Cree Nation
English River First Nation
Red Pheasant Cree Nation

Métis Locals

Beauval Sipishik (#37)
Dore/Sled Lake (#67)
Green Lake (#5)

Makwa / Loon Lake (#32)
Brightsand (#118)
Pierceland (#71)

Others

Métis Nation of Saskatchewan

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, Tolko will submit requests to amend the plan as appropriate.

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, stock piling and staging of wood)
- Road construction, maintenance, and reclamation
- Forest renewal

4.1 General

4.1.1 Harvest Event Planning

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, Tolko followed the FMP definition and only refined the boundary where events had already been reported as complete in the Forest Management Plan Annual Report. The events range in size from 47 ha to 64,582. 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.

Table 2 summarizes the newly delineated harvest events presented in the OP. Appendix A 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.

Table 2 Newly Delineated Harvest Events.

Operating Plan	Management Unit	Event ID	Event Duration (yrs)	Event Area (ha)	Year of New Road Construction
2023-2024	Makwa/Bronson	6	20	64,852	2018
2023-2024	Makwa/Bronson	18	20	32,871	2018
2023-2024	Green Lake/Sled Lake	26	5	1,487	2020
2023-2024	Green Lake/Sled Lake	28	10	2,890	2018
2023-2024	Green Lake/Sled Lake	31	2	47	2022
2023-2024	Green Lake/Sled Lake	32	20	5,856	2018
2023-2024	Green Lake/Sled Lake	30	20	16,104	2023
2023-2024	Makwa/Bronson	15	10	689	2020

4.1.2 Harvesting and Hauling

The primary method proposed for harvesting blocks within the Bronson-Green Lake TSA follows an even-aged silviculture system using a modified clear-cut with variable retention harvesting technique. Snag recruitment (dead standing and/or low utilization trees), diversity and stand structure features (clumps, islands, patches) will be provided by retention of coniferous understory, immature commercial deciduous species and representative trees.

Harvesting will be mechanical using feller bunchers, grapple skidders and processor. Trees are processed mainly at roadside. Once processed and piled roadside, the trees are loaded onto primarily B Train 8 axle trucks and brought to the destination mill.

4.1.3 Bush Staging and Stockpile Sites

Tolko is proposing to stage wood roadside in harvest blocks within the TSA. Staging roadside in harvest blocks and in stockpile sites is a critical strategy to manage moisture content within the Meadow Lake OSB mill and shortages in hauling capacity.

Focusing on managing dry and green wood in the mill has proven to substantially improve production. The most critical time for the mill to have the proper mix of green and dry is October through to April, when aspen is at its highest moisture content. The mill requires an adequate supply of dry wood during the winter period to keep up with the dryers. Without the supply of dry wood (roadside staged from the previous year) the mill production drops substantially.

Tolko requests approval for the 2023-2024 operating year to:

- exceed the 90-day time frame and allow for all forest products to be removed from harvest areas anytime throughout the operating year until March 31, 2024, as per Section 39(1) of the Forest Resources Management Regulations, and;
- leave wood in staging and stockpile areas listed in Table 2 beyond March 31, 2024. The list presented in Table 2 will be amended by March 15th, 2024, as locations required for staging and stockpiling of timber in the forest beyond the end of the operating year are more certain.

Approximately 63,000 m³ of hardwood and 3,000 m³ of softwood harvested in the 2023-2024 operating year is to be left roadside in harvest blocks and hauled prior to March 31st, 2025. Table 3 represents Tolko's current proposed plan for in bush staging.

Table 3 Proposed Bush Staging and Stockpile Locations.

Area Name	Description	Estimated Volume Swd (m ³)	Estimated Volume Hwd (m ³)
G5 – Hillyer South	In bush stage	250	13,000
G1 – Stewart Lake	In bush stage	250	10,000
M3 – Shack Lake	In bush stage	250	10,000
B21 – Bronson Lake N	In bush stage	250	20,000
B18 – Pipestone Creek	In bush stage	250	10,000
	Total	1,250	63,000

4.1.4 Ribbon Colour Scheme

Tolko equips harvesting contractors with Global Positioning System (GPS) units for the feller bunchers to facilitate ribbonless boundary harvest. The maps used in the bunchers also highlight sensitive features such as water, stakeholder commitments, old seral targets, and known trails. The use of GPS equipped bunchers is a significant technological advancement in the forest industry and recently incorporated as a practice in the Forest Operations Standard (July 2020).

There may be times where boundaries and other features with flagging tape will be marked. In those cases, the following table lists the standardized flagging tape colors that will be used.

Table 4 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”	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

4.1.5 Temporary Work Camps

As per section 1-1 (2) of the Temporary Camp Standard (November 2022), Tolko requests a blanket Temporary Work Camp Permit (TWCP) to cover all forestry activities carried out on the TSL area during the 2023-2024 operating year. Temporary work camp locations will be kept updated in the Weekly Operations Report and made available to the Ministry of Environment Forester and Inspecting Officer on an ongoing basis. Notification will be provided 10 days prior to decommissioning. In addition, all requirements identified within section 1-1 (2) (b) of the Temporary Work Camp Standard will be provided prior to camp establishment.

4.1.6 Heritage Resource Surveys

Maps and operating information, including pre-harvest site prescriptions, 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 heritage resource impact assessments in areas where HCB has identified it is required. These normally occur where roads are constructed within 250 m of significant watercourses and lakes.

In addition to the HCB annual review, sites of archaeological or cultural significance may be identified during the operating plan consultation / engagement process or during forestry activities.

4.2 Proposed Forest Operations

4.2.1 Utilization Standards

The utilization standards approved in the 2018 Forest Management Plan, shown in Table 5, will be followed in this plan.

Table 5 Utilization Standards in 2018 FMP.

Product	Stump Height (cm)	Minimum Top Diameter inside Bark (cm)	Log Length (m)
SWD Sawlog	30	10	2.6
SWD Pulp (ws/other)	30	8	n/a
Swd Pulp (jp)	30	10	n/a
Hardwood	30	8	n/a

4.2.2 Proposed Year 1 Harvest Volumes and Attributes

The plan includes 557,615 m³ of softwood and hardwood combined for Tolko. This represents just under 2.0 times the annual allowable harvest (softwood and hardwood combined) specified in the Tolko licence (280,124). This does not include the Village of Green Lake allocation volume detailed in section 4.3.5. The volume of wood is to provide operational flexibility, allow for changes in markets, accounts for potential volume overestimates, and stakeholder concerns identified after plan submission. Table 6 details the approved harvest volume schedule (HVS) resulting from the 2018 Forest Management Plan and the allocations to Tolko.

The complete list of proposed harvest areas and their volume summaries is provided in Appendix C. Although the Village of Green Lake allocation and blocks is not included in Table 7, the detailed harvest blocks and summaries presented in Appendix C include the blocks allocated to the Village (Table 9).

Table 6 Forest Management Plan (2018) Harvest Volume Schedule and Tolko Allocation.

Description	Softwood Sawlog (m ³ /yr)	Hardwood Volume (m ³)	Softwood Pulp (m ³)	Total (m ³)
2018 FMP HVS	91,000	197,000	12,000	300,000
Tolko Licence	74,500	195,800	9,824	280,124

Table 7 Volume Represented in Year 1 of the Operating Plan.

Operating Year	Softwood Total	Hardwood Total	Total Volume
2023-2024	158,271.9	399,343.6	557,615.4

4.2.3 Silviculture Systems and Stand Level Retention

The silviculture systems used will be modified clearcut harvest with retention.

Consistent with the currently approved Forest Management Plan, at least 9% (a range of 3 – 15% by block) of a harvested event area will be left as a combination of insular or proximal retention.

Silviculture prescriptions (forest renewal) are guided by the silviculture ground rules (SGRs) found in the 2018 Tolko FMP. These SGRs were amended during Amendment 1 of the FMP submitted in Jan 2023 to allow for additional treatment options for certain stand types.

4.2.4 Riparian Area Harvesting

Harvesting and silviculture activities in riparian areas will comply with requirements in the recently updated Forest Operations Standards (July 2020) for riparian management areas.

4.2.5 Visually Sensitive Areas

Visually sensitive areas (VSA) were identified during development of the 2018 Forest Management Plan. Currently these include Highway 26 and Highway 21 in the Makwa / Bronson area as well as the Beaver River in the Green / Sled area. New areas can be identified through the development of the operating plan.

There are no year 1 blocks in the Makwa/Bronson Management Unit which include these identified VSAs.

In the Green/Sled Management Unit there are blocks planned in Stewart Lake and Forks South areas which are adjacent to the Beaver River. It should also be noted that there are blocks adjacent to Beatty Lake, but they are far enough away from the recreation site and lake that no additional measures are needed. There are no other VSA areas affected. VSA objectives along the Beaver River will be achieved through the 90 m hard buffer required on the river. A buffer larger than 90 m is not expected to be required anywhere for visual quality reasons.

4.3 Roads and Crossings

4.3.1 Proposed Roads and Watercourse Crossings

Proposed year 1 road construction and watercourse crossings are summarized in the tables provided with submission (location of files detailed in Appendix D). In total, 128.3 km of Class 1, 2 and 3 roads are planned for construction (Table 8). The roads and crossings have been planned for 2 times the harvest volume and exceed what is expected to be constructed.

Table 8 Summary of Proposed Year 1 Road Construction.

Road class	Road Length (km)
Class 1 Major IBR	0.0
Class 2 Minor IBR	4.4
Class 3 Bush Road	123.9
Grand Total	128.3

Class 1 and 2 Major and Minor Improved Bush Road (IBR) Construction

There is 4.4 km of planned IBR construction within the Makwa / Bronson management unit. In the 2021-2022 operating plan, the 4.4 km Class 2 Bronson South IBR was planned for construction. This planned IBR utilizes existing oil and gas infrastructure and is designed to connect the Canoxi Road with the Bronson Lake Road and will be a major artery for hauling harvested timber from the Bronson forest area. Construction of this road began in the fall of 2021 however there are portions of the road that remain unfinished. For this reason, the entire road is shown as proposed in the 2023-2028 operating plan.

Road Length (km)			
Road Class	Operating Area	Road Name	Total (km)
Class 1 Major IBR	n/a		0
Class 1 Major IBR Total			0.0
Class 2 Minor IBR	B18 - Pipestone Creek	Bronson South IBR	4.4
Class 2 Minor IBR Total			
Grand Total			4.4

4.3.2 Road Closures

Temporary and permanent road closures align with provincial resource protection methods. They are used to restrict vehicle access to help prevent overfishing or overhunting of an area, protect road infrastructure, and reduce liability. Road closures proposed for installation in Year 1 are provided in the submission documents (see Appendix D for file location and name).

The ability to install some short-term, temporary closures that don't block access to a large area may also be requested, particularly in the fall during hunting season. The purpose of those closures would be to help secure camps and equipment from vandalism and theft and prevent damage to newly developed roads.

Tolko requests approval to access any closed roads within the timber supply area to conduct approved forest management activities. Once those activities are completed the roads will be closed again except where specifically requested (see Section 4.3.3).

4.3.3 Request to Leave Closures Open

As mentioned in section 2.2, Tolko is requesting that certain road closures be left open when;

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

Table 9 Closures Proposed to be Left Open During Times when Forest Operations are Inactive.

Closure Location (Road Name)	Closure Location (UTM)	Rationale to Leave Open	Existing Trail or New Access
Makwa South (off Hwy 21)	E623128 N5965570	Gate is historically consistently being circumvented or damaged by public.	The Makwa IBR is new access as of 2018. The IBR did not impact pre-existing access. Historic quad access to Muckingham Lake remains.
Makwa South (off Hwy 21)	E619250 N5965239	Gate is historically consistently being circumvented or damaged by public.	The Makwa IBR is new access as of 2018. The IBR did not impact pre-existing access. Historic quad access to Muckingham Lake remains.
Makwa South (off Hwy 26)	E603928 N5960497	Gate is historically consistently being circumvented or damaged by public.	The Makwa IBR is new access as of 2018. From this location, the IBR did not impact historic truck (dry weather) access via the old rail line coming north from the farmland.
Makwa South (off Hwy 26)	E600359 N5963433	Gate is historically consistently being circumvented or damaged by public.	The Makwa IBR is new access as of 2018. From this location, the IBR did not impact historic truck (dry weather) access via the old rail line coming north from the farmland.
Line Lake	E618546 N5970972	Gate is historically consistently being circumvented or damaged by public.	The Line Lake IBR is new access completed in 2020. Pre-existing quad access into the forest was not impacted.
Bronson South IBR (proposed 2023)	E586847 N5963608	It is expected that there will be circumvention/damage to gate as this is a very active hunting/recreation area.	Road will be completed 2023. Historically there has been quad access into the area and truck access on very dry years. The IBR utilized this access. This changed in 2020 due to beaver flooding where access had become snowmobile only.

Closure Location (Road Name)	Closure Location (UTM)	Rationale to Leave Open	Existing Trail or New Access
Rancher Road	E226704 N5985755, E217696 N5986180	It is expected that there will be circumvention/damage to gates as this is a very active hunting/recreation area. The existing gates (installed by the co-op and the gas company) saw damage in fall 2022. The access will be co-managed with the Bronson Coop Managers. Generally, plan is to keep gate locked when not active in area however dependent upon public breaching/damage.	Road will be completed 2023. Historically there has been quad access into the area and truck access to both sides on pre-existing roads but not right through. The Rancher Road uses portions of the pre-existing that did not historically go right through.

4.3.4 Road Reclamation

Roads no longer needed for forest management purposes are generally reclaimed and returned to productive status. Road reclamation will be carried out in the manner specified in the Forest Operations Standards (July 2020). In-block roads (Class 4) are reclaimed within two years of harvest completion. Inter-block roads are reclaimed at the same time if no longer required.

There is no planned reclamation of any Class 1 or 2 roads in this operating plan.

4.4 Area Specific Wildlife Concerns

North Tower and West Muckingham Lake

The area south of Muckingham Lake (M4-North Tower and the western portion of M7-Muckingham Lake) have been identified by stakeholders and in previous Operating Plan reviews as important elk areas. Tolko, in discussion with MoE and local stakeholders, has developed strategies to mitigate concerns with respect to the construction of the Makwa South IBR and forest harvest activities which include;

- **Access Control.** There are currently many access points into this area for primarily quad access but occasional truck access in dry years. The completed Makwa South IBR has 4 gates installed to control access into the area. There are 2 gates on both ends of the road. There are also 2 gates that are located on creeks to ensure access control from vehicle traffic (i.e. half tons). All gates will be closed during periods of inactivity. The 4 existing gates on the Makwa South IBR as well as the gate on the Line Lake IBR may have occasions where they remain unlocked when we are inactive in the area. This is primarily due to the vandalism and destruction of the gates/locks that have taken place over the last number of years.
- **Access Control.** In-block roads will be reclaimed in a timely fashion or blocked off to minimize public traffic in newly harvested blocks.
- **Log Hauling Restrictions.** Tolko has committed to not haul during elk calving period (April 15th to June 15th). This specifically relates to the Makwa South IBR in North Tower and West Muckingham Lake areas. If hauling is required due to unforeseen circumstances, MoE will be notified.
- **Hunting Pressure.** To minimize sight lines into blocks, a 90-meter buffer was established along the entirety of the Makwa South IBR. This buffer is temporary, and will eventually be harvested, once regrowth of the adjacent harvested blocks is sufficiently high enough to hide ungulates

Block Design. In this area, blocks are designed to ensure retention of mature forest structure. This does result in a more traditional cut and leave pattern along the proposed Makwa IBR. Block T01_04_217 was redesigned to exclude the eastern portion of the block. This removal from the plan will be part of a larger wildlife travel corridor connecting the farmland in the south to the forested Muckingham area in the north. Tolko has agreed to not harvest in this corridor until the adjacent cuts have regenerated to a sufficient height (to be determined by a joint Forest Service / Tolko discussion). Another Elk travel corridor was identified at the 2020/2021 open house in St Walburg. This travel corridor contained 3, year 3-5 blocks, that have been removed from this Operating Plan. These blocks 01_07_006, 007, and 008 will be added back into the Operating Plan at a future date once regeneration in the Berry Lake event areas have become established

M3 Shack Lake

- A local stakeholder indicated that the area around Little Caribou Lake (T01-03-105 and T01-03-108) is an important moose calving area and has a good population of resident moose. Through engagement with the stakeholder, a strategy was devised to leave significant areas of vertical structure. This will involve strategically placed “no harvest” commitments as well as fisheries buffers,

retention, and non-merchantable areas. The blocks referenced above are shown as proposed for 2024-2025.

B 18 Pipestone Creek

- A local stakeholder provided Tolko with the GPS location of a bear den located within T02-18-005 after reviewing maps online in the Virtual Open House. A 90 meter no harvest zone was placed on the den to ensure its protection.

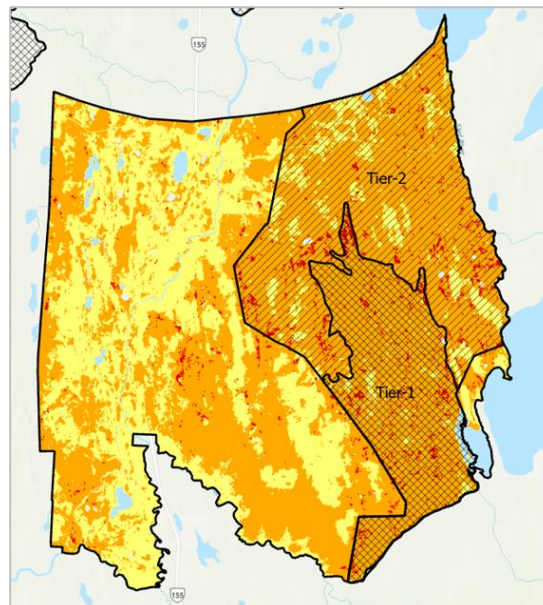
B19 Bronson Lake South

- A past siting of a Whooping Crane was identified in the CDC (Conservation Data Centre) database. This area was reconned in the summer of 2021, and no nest or evidence of usage was found.
- A gate is planned for construction on the Bronson South IBR to deter half ton loop road access from the Canoxi Road to the Bronson Lake Road.

Green / Sled Lake

This plan aligns with the published (October 2021) Caribou Range Plan for the SK2 West area. Generally, caribou concerns are addressed largely through planning, specifically avoiding planning any harvesting on the eastern portion of the TSL (Tier 1 and Tier 2 caribou zones). The eastern and northeastern portions of the TSL contain the most attractive caribou habitat. This area was identified as a Caribou Habitat Management Area in the Tolko 2018 Forest Management Plan and subsequently identified as Tier 1 and Tier 2 habitat zones. Consistent with the FMP strategy, there are no blocks planned within this area.

Figure 2 Caribou Habitat Management Zones in the Green / Sled Management Unit.



4.5 Third Party Operators and the Northern Village of Green Lake Allocation

There are no blocks being submitted on behalf of Third-Party Operators in this operating plan.

The Northern Village of Green Lake has an allocation of 16,978 m³ per year of softwood on the Tolko TSL. This volume has been included in the development of this plan. The Northern Village of Green Lake will obtain a Forest Products Permit from the Ministry. The blocks that are expected to produce the Northern Village of Green Lake allocation are identified below. All currently identified blocks are softwood leading and as such harvesting responsibility has been identified as the Northern Village of Green Lake (see block level details Appendix C). It is expected that the blocks required to meet the Northern Village of Green Lake's allocation may change. Tolko will work with the Village and the purchaser of the softwood to facilitate the harvest of the allocation.

Table 10 Northern Village of Green Lake Blocks.

Block Number	Block Responsibility	Softwood Total m ³	Hardwood Total m ³	Total Volume m ³
T04-01-032	NV Green Lake	833	1,752	2,585
T04-01-033	NV Green Lake	441	1,143	1,584
T04-01-034	NV Green Lake	1,788	4,685	6,472
T04-01-039	NV Green Lake	462	116	577
T04-01-040	NV Green Lake	1,037	2,011	3,048
T04-01-041	NV Green Lake	83	262	345
T04-01-042	NV Green Lake	693	221	914
T04-06-606	NV Green Lake	3,339	4,664	8,004
T04-06-612	NV Green Lake	565	204	769
T04-06-618	NV Green Lake	2,145	2,784	4,929
T04-06-619	NV Green Lake	4,495	4,185	8,681
T04-06-620	NV Green Lake	2,864	846	3,709
Total		18,744	22,873	41,617

It should be noted that Appendix C which provides block level detail, including roads and crossings, and summaries by operating area and management unit includes the blocks above.

4.6 Renewal

4.6.1 Planned Year 1 Renewal Activities

Tables that identify blocks planned for treatment are included in the submission documents and the file location is provided in Appendix E. There are no blocks requiring retreatment.

In the 2023-2024 operating year, approximately 455,600 white spruce and 18,400 black spruce seedlings are planned to be planted on approximately 498 hectares. Most of the area harvested in the Bronson / Green Lake TSA is pure hardwood left for natural regeneration (trembling aspen). Tree planting is carried out where softwood stand types (spruce) are harvested. The renewal activities include areas harvested by other operators on the Bronson / Green Lake TSA area including areas where volume was delivered under the Northern Village of Green Lake's allocation.

In pine dominated areas, scarification for natural regeneration is the most common method of treatment. In 2023-2024, there are 4 blocks planned for scarification totaling approximately 298 ha. It is expected that the number of hectares will reduce once the area is harvested. Only those hectares which are predominantly jack pine will be scarified.

There are two blocks to report where renewal remains outstanding (i.e., blocks where renewal not completed within 3 years). The Cache Lake South blocks were identified last year and although not scarified were found to have jack pine and aspen growing. In the summer of 2022, these blocks were ground surveyed to verify treatment decisions which are identified below.

Operating Area	Harvest Year	Block Number	Renewal Treatment	Planned Area (ha)
M1-Cache Lake South	2018/19	T01-01-114	LFN-S	71
M1-Cache Lake South	2019/20	T01-01-116	Plant JP – 2024	16

No site preparation for tree planting, herbicide or insecticide treatments are planned for the 2023-2024 operating year.

4.6.2 Regeneration Assessments

Regeneration assessments to be completed in 2023-2024 include:

- Establishment surveys on areas harvested in 2016-2017, by Tolko or third-party operators.
- Free to Grow assessments on areas harvested in 2009-2010, by Tolko or third-party operators.

Tolko continues to work with the Forest Service on an Alternative Solution to regeneration surveys of hardwood leave for natural (LFN) areas. In consultation with Ministry renewal staff, dependent on an analysis of the results from the past 3 years, this solution may be applied operationally. Determination will be made in collaboration with MoE.

5 Forest Protection

5.1 Fire Protection and Suppression

The Saskatchewan Public Safety Agency (SPSA) is a Treasury Board Crown Agency responsible for: provincial emergency management, fire safety and wildfire management in the province. Responsibilities include the prevention, detection, and suppression of forest fires where identified values, including tracts of valuable timber, are at risk. The Wildfire Act and Regulations provide legislative requirements for industrial and commercial operators related to wildfire preparedness and response. Tolko will submit a Fire Protection and Suppression Plan by March 31, 2023, to the Vice President of Operations of the Saskatchewan Public Safety Agency (SPSA) (formally Executive Director of the Wildfire Branch).

5.2 Insect and Disease Protection

At a provincial level, the surveillance, monitoring and management of insects and disease are completed by MoE. At the time of preparing this plan, there are no significant insect and disease concerns on the Tolko TSL area.

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 retention (including in riparian areas) is made up of species not susceptible to mistletoe and sanitizing areas adjacent to the block. There are no mistletoe control blocks planned in 2023-2024. If identified during harvest operations, activities will align with the Forest Operations Standard (July 2020).

6 Reporting and Self-Inspections

6.1.1 Activities Reporting

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

- Active Operations. A weekly Operations Report detailing the locations and status of active operations will be submitted to the Ministry of Environment, Forester, and Inspecting Officer or to other Ministry staff as directed by the Forest Service. This report will also include all camp locations.
- Crossings. A monthly crossings report outlining where active construction or maintenance work on crossings has occurred is emailed to the Ministry of Environment, Forester, and Inspecting Officer or to other Ministry staff as directed by the Forest Service.
- As per the AHPP, 4 days notification will be given to the Ministry Forester (or other Ministry staff as directed by the Forest Service) prior to commencement and completion of any in-stream work. This applies to new construction and reclamation of crossings except for ephemeral or intermittent water courses.
- Forest Data Submission. A Report of all activities completed in the 2021-2022 Operating Year will be submitted by February 15th, 2023, as agreed to by the Ministry of Environment and in accordance with the Forest Data Submission Standard.
- As per the Temporary Work Camp Standard (October 2021), notification of construction will be provided to the Ministry Forester (or other Ministry staff as directed by the Forest Service) prior to construction and will include information as per section 1-1 (2) (b). Removal and reclamation of camps will be reported within 10 days of the work occurring.

6.1.2 Self-Inspection and Reporting

Section 32(e) of the Forest Resources Management Regulations requires Tolko to self-inspect landbase activities.

- Prior to operations beginning, a pre-work is completed with the contractor. The pre-work details requirements of how each harvesting block is to be developed and any approval commitments. This form is completed digitally in Tolko's online environmental management system (EMS) site.
- An EMS Monitoring Completion Form is completed following completion of each harvest area. This form is completed digitally and stored in Tolko's EMS.
- Non-compliances will be reported either verbally, by e-mail or by letter to the Ministry of Environment, Forester or designate 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.
- EMS documentation (pre-works and inspection reports) will be made available to MoE upon request.

7 Amendments

Request for amendments to this operating plan will be submitted by email or letter to the Area Forester or Forester. Where it's deemed there may be impact to 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. If this is not the case, the submission will indicate this.

Appendix A Harvest Event Details

File location:

outgoing/2023_BGLTSA_Operating_Plan/Tables

File Name:

BGL TSA Events 2023.xls

Appendix B Engagement and Information Sharing

Poster published on www.tolko.com



This is your
opportunity to review
our operating plans
and,
provide comments.

Thank you!

OPPORTUNITY TO REVIEW FOREST OPERATING PLANS

Tolko Industries Ltd.,
Meadow Lake OSB Division

Forest Operating Plan: 2023-2028

Open houses are being held in the following communities to provide the public with an opportunity to review Tolko's planned forest operations over the course of the next five years, with a focus on the 2023-2024 operating year.

Village of Green Lake	Dec 9 3:00 p.m. – 5:00 p.m.	Mervin Sayese Memorial Arena
Meadow Lake	Dec 9 11:00 a.m. – 1:00 p.m.	Grace United Church Hall, 502 6th Ave West
Loon Lake	Dec 8 10:30 a.m. – 12:00 p.m.	Loon Lake Senior Centre
St Walburg	Dec 8 2:00 p.m. – 4:00 p.m.	St Walburg Senior Centre

Forest Management Plan Amendment

This amendment (Amendment #1) addresses the requirement to update the FMP to reflect the approved Caribou Range Plan for SK2 West and will also update Silviculture Ground Rules to allow for additional treatment options. See note in Forest Management Plan section.

If you have any questions or would like to comment on this plan, please email us at:
sk.tolkowoodlands@tolko.com

www.tolko.com

TOLKO

Appendix C Harvest Areas and Volumes

Includes:

- Volume details per block for the 2023-2024 operating year including the source of data used to determine the volume estimate.
- Volume summaries by management unit.
- Harvest distribution by species group and management unit.
- Designation of the harvest responsibility by block.

See files or folder titled:

File location:

outgoing/2023_BGLTSA_Operating_Plan/Tables

File Name:

BGL TSA Planned Harvest 2023.xls

BGL TSA Events Operating Plan Profile Analysis MU.xls

Appendix D Roads, Watercourse Crossings, Closures

See files or folder titled:

File location:

outgoing/2023_BGLTSA_Operating_Plan/Tables

File Name:

BGL TSA Proposed Roads 2023.xls

BGL TSA Proposed Crossings 2023.xls

BGL TSA Proposed Road Closures 2023.xls

Appendix E Renewal Activities

See file or folders titled:

File location:

outgoing/2023_BGLTSA_Operating_Plan/Tables

File Name:

BGL TSA Reforestation Plan 2023.xls