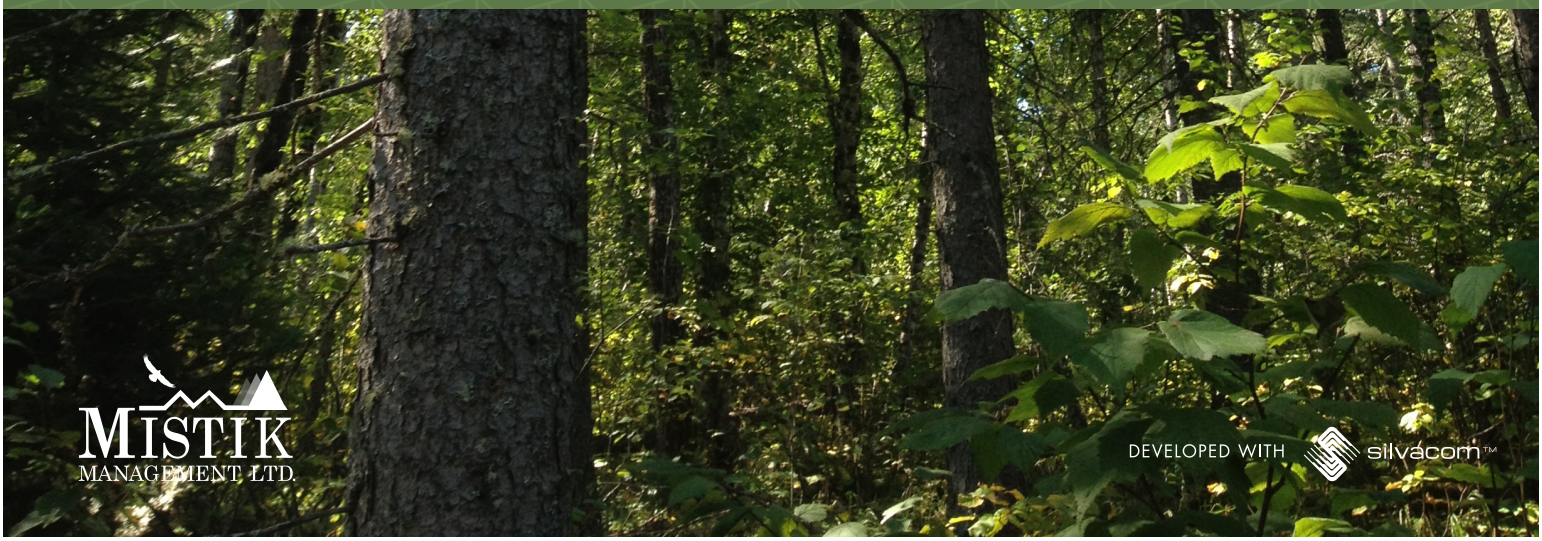
MISTIK MANAGEMENT LTD.

APRIL 2023
Revised: August 2023

2021/2022 ANNUAL REPORT

Meadow Lake Timber Supply Area and Glaslyn Timber Supply Area



MISTIK MANAGEMENT LTD.

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Mistik Management Ltd. 2019-2039 20-year Forest Management Plan

2021/22 Annual Report

for the

Meadow Lake Timber Supply Area and Glaslyn Timber Supply Area

Submitted by

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Planning Manager, Mistik Management Ltd.

April 28, 2023

Revised: August 2023

MISTIK MANAGEMENT LTD.

NorthWind FOREST PRODUCTS

PROUDLY OWNED BY THE MEADOW LAKE TRIBAL COUNCIL

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2 INTRODUCTION

Mistik Management Ltd. ("Mistik") provides forest management services on behalf of its owners, NorSask Forest Products LP ("NorSask"), and Meadow Lake Mechanical Pulp Inc. ("MLMP"), both located near Meadow Lake, SK. Mistik also provides forest management services for NorthWind Forest Products ("NorthWind") located in Glaslyn SK. Both NorSask and NorthWind are owned by Meadow Lake Tribal Council.

Mistik and NorthWind conduct their forestry operations within the context of a 20-year Forest Management Plan (FMP) as required under provincial legislation and forest management agreements in Saskatchewan, Forest Management Plans must meet the requirements of the *Saskatchewan Environmental Code, Forest Management Planning Standard* ("FMP standard"). Mistik's FMP provides strategic-level direction for management of forest resources within the Mistik and L&M Forest Management Agreement areas[1]. The FMP establishes goals, objectives, and strategies to guide forest management activities, describes desired future forest conditions, and seeks to address land and resource use. Mistik's 2019-2039 20-year FMP was approved on May 23, 2019.

This annual report is being submitted to fulfil the FMP reporting requirement of section 1-54 of the provincial FMP standard. The report covers the timeframe of April 1, 2021 – March 31, 2022, and assesses progress on FMP values, objectives, indicators, and targets ("VOITs"), public involvement, non-timber values, natural disturbances, compliance with legislation, and other FMP commitments.

Each FMP indicator has a defined assessment timeframe of annual, 5-year, or 10-year basis (refer to Section 4 – FMP Targets). Although most indicators are reported on annually, a more formal assessment is made according to the defined assessment timeframe. Annual reporting of indicators that are not being formally assessed outlines if the indicator is "on track" to meet the desired objective. The FMP Management Implementation Team (MIT) made up of company and Ministry of Environment representatives, reviews the annual report each year to determine why any indicators may be "off track" and if adjustments to procedures or operations need to be made.

For a full understanding of the FMP and indicators used, please refer to the *Mistik 2019-2039 20-year Forest Management Plan* which can be found on Mistik's website (www.Mistik.ca).

Note that Mistik amended the forest management plan in 2022-23 to gain alignment with the *Range Plan for Woodland Caribou in Saskatchewan*, which was finalized in October, 2021. The changes to the plan are expected to be approved and become effective April 1, 2023. Annual reports starting with the 2023-24 operating year will be updated to reflect these changes.

[1] The L&M Forest Management Agreement is now held by NorthWind Forest Products. References to "L&M" throughout the FMP and annual reports are in reference to activities undertaken on the L&M Forest Management Agreement area.

3 FMP TARGET SUMMARY

Category		Year										Current Status
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Assessed	On Target	7	8	8								
	Partially On Target	2	1	0								
	Off Target	0	0	1								
	Total	9	9	**9**								
Not Assessed	On Track	9	11	12								
	Monitor	7	8	7								
	N/A	7	4	4								
	Total	23	23	23								
Total		32	32	32								

4 FMP TARGETS

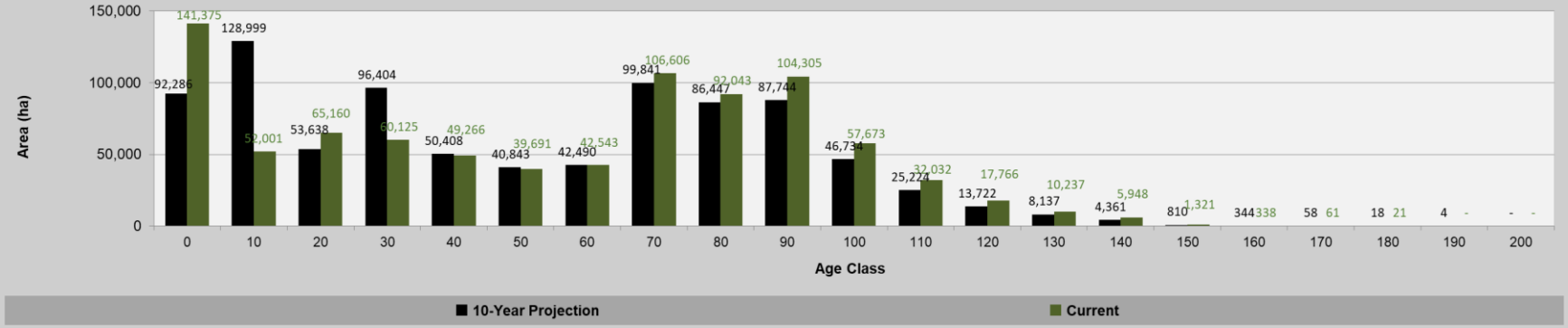
Reporting Item	Description	Status (Parts)	Reporting Cycle	Assessment Cycle	Next Assessment Year	Location
Target 1	Age Class Distribution	Not Assessed (N/A)	Annual	10-Year	2028	**Page 8.**
Target 2a	Percent for the forest landbase that is old and very old (**10 parts**)	Not Assessed (On Track)	Annual	10-Year	2028	**Page 10.**
Target 2b	Standard deviation of old forest area by	Not Assessed (Monitor)	Annual	10-Year	2028	**Page 12.**

Reporting Item	Description	Status (Parts)	Reporting Cycle	Assessment Cycle	Next Assessment Year	Location
	management unit (**5 parts**)					
Target 3	Size class distribution of harvest events (**5 parts**)	**Not Assessed (Monitor)**	5-year	10-Year	2028	**Page 13.**
Target 4	Tree retention after harvest (**2 parts**)	**Not Assessed (Monitor)**	Annual	5-Year	2023	**Page 14.**
Target 5	The softwood component in hardwood stands is maintained	**Not Assessed (N/A)**	Annual	5-Year	2023	**Page 15.**
Target 6	Relative abundance of SGR Forest Types are forecasted to be maintained at next rotation (**8 parts**)	**Not Assessed (Monitor)**	Annual	5-Year	2023	**Page 16.**
Target 7a	Current habitat availability for Fisher vs. predicted future (modelled) supply	**Not Assessed (On Track)**	Annual	5-Year	2023	**Page 17.**
Target 7b	Habitat availability for Caribou (**2 parts**)	**On Target (2/2)**	Annual	Annual	Annual	**Page 18.**
Target 7c	Current habitat availability for Moose vs. predicted future (modeled) supply	**Off Target**	Annual	Annual	Annual	**Page 21.**
Target 8	Seedlings are from wild or improved seed sources	**Not Assessed (On Track)**	Annual	5-Year	2023	**Page 22.**
Target 9	Post-harvest areas are successfully regenerated	**Not Assessed (On Track)**	Annual	5-Year	2023	**Page 23.**
Target 10	Change in the managed forest landbase area	**Not Assessed (On Track)**	Annual	5-Year	2023	**Page 24.**
Target 11	Net area disturbed by stand replacing natural events (fire)	**On Target**	Annual	Annual	Annual	**Page 25.**
Target 12	Proportion of a natural disturbance event retained un-salvaged	**Not Assessed (N/A)**	Annual	5-Year	2023	**Page 26.**
Target 13	Yield curve suitability; measured by actual harvest volume (m^3/ha) compared to predicted volume (**2 parts**)	**Not Assessed (On Track)**	5-year	5-Year	2023	**Page 27.**
Target 14	Utilization assumption consistency and implementation	**On Target**	Annual	Annual	Annual	**Page 29.**

Reporting Item	Description	Status (Parts)	Reporting Cycle	Assessment Cycle	Next Assessment Year	Location
Target 15	Operational adherence to the Tactical Plan	Not Assessed (On Track)	Annual	5-Year	2023	Page 30.
Target 16	Harvesting activities in compliance with all related requirements	Not Assessed (Monitor)	Annual	5-Year	2023	Page 31.
Target 17	Crossing activities in compliance with all related requirements	Not Assessed (Monitor)	Annual	5-Year	2023	Page 32.
Target 18	Event Duration	Not Assessed (On Track)	Annual	5-Year	2023	Page 33.
Target 19a	Utilization of harvest volume schedule (HVS) (**2 parts**)	Not Assessed (On Track)	Annual	5-Year	2023	Page 34.
Target 19b	Harvest plans designed to lower wildfire risks to communities	Not Assessed (N/A)	Annual	5-Year	2023	Page 36.
Target 20	Stakeholder and public engagement (Public Advisory Group meetings)	On Target	Annual	Annual	Annual	Page 37.
Target 21	Spatially identified non-timber resources and forest use activities	On Target	Annual	Annual	Annual	Page 38.
Target 22	Harvest operations are proportionally distributed across the FMA (**20 parts**)	Not Assessed (Monitor)	Annual	5-Year	2023	Page 39.
Target 23	Aboriginal community involvement in planning processes (**10 parts**)	On Target (10/10)	Annual	Annual	Annual	Page 41.
Target 24	Spatial Identification and protection of culturally significant Heritage and Aboriginal sites	On Target	Annual	5-Year	2023	Page 42.
Target 25	Impacts of Climate Change on the Mistik FMP Area (**2 Parts**)	This target is a voluntary commitment not related to the FMP VOITs. It has no associated target and is included for monitoring purposes only				Page 43.
Target 26a	Contributions to Co-management Boards	Not Assessed (On Track)	Annual	5-Year	2023	Page 46.
Target 26b	% of total annual vendor / contractor payments made to local businesses	Not Assessed (On Track)	Annual	5-Year	2023	Page 47.
Target 26c	Percent of 'within-FMA area' communities represented in the workforce	Not Assessed (On Track)	Annual	5-Year	2023	Page 48.

Reporting Item	Description	Status (Parts)	Reporting Cycle	Assessment Cycle	Next Assessment Year	Location
Target 27	Stakeholder Engagement	On Target	Annual	Annual	Annual	**Page 49.**

Indicator #1	Age Class Distribution	Status	Not Assessed (N/A)
Target #1	Monitor the age class distribution of the Managed Forest Landbase compared to the projected distribution in 10-years based on the Forest Estate Modeling.	Reporting Cycle Assessment Cycle	Annual 10-year



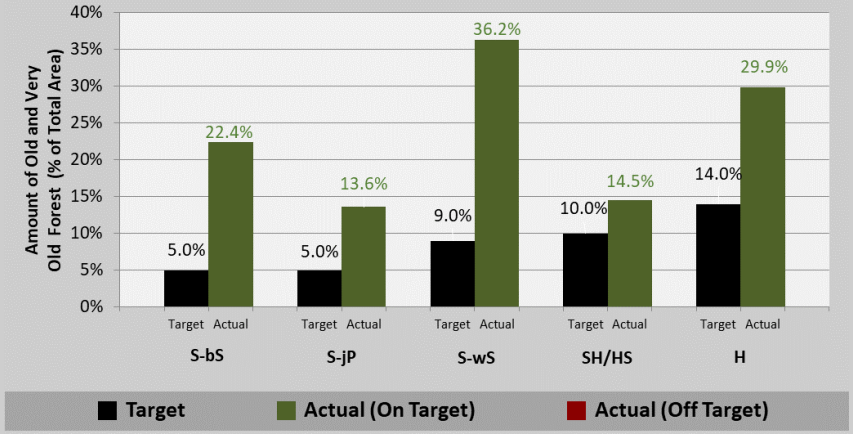
Age Class (Years)	Year of Measurement										Current Status	10-Year FMP Projection
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
0 (ha)	123,525	121,922	141,375							Assessment Year	**141,375**	92,286
10 (ha)	56,494	54,479	52,001								**52,001**	128,999
20 (ha)	110,983	62,385	65,160								**65,160**	53,638
30 (ha)	52,538	58,769	60,125								**60,125**	96,404
40 (ha)	41,449	50,341	49,266								**49,266**	50,408
50 (ha)	41,758	41,257	39,691								**39,691**	40,843
60 (ha)	110,828	43,492	42,543								**42,543**	42,490
70 (ha)	97,544	109,160	106,606								**106,606**	99,841
80 (ha)	110,189	96,932	92,043								**92,043**	86,447
90 (ha)	61,530	108,646	104,305								**104,305**	87,744
100 (ha)	33,914	60,237	57,673								**57,673**	46,734
110 (ha)	18,644	33,537	32,032								**32,032**	25,224
120+ (ha)	19,115	37,352	35,692								**35,692**	27,453

Variance	N/A – No associated target
Comments	• Maintenance of age class distribution of the Mistik FMP area is important for a number of ecological values that depend on the full suite of seral stages being present on the landscape.

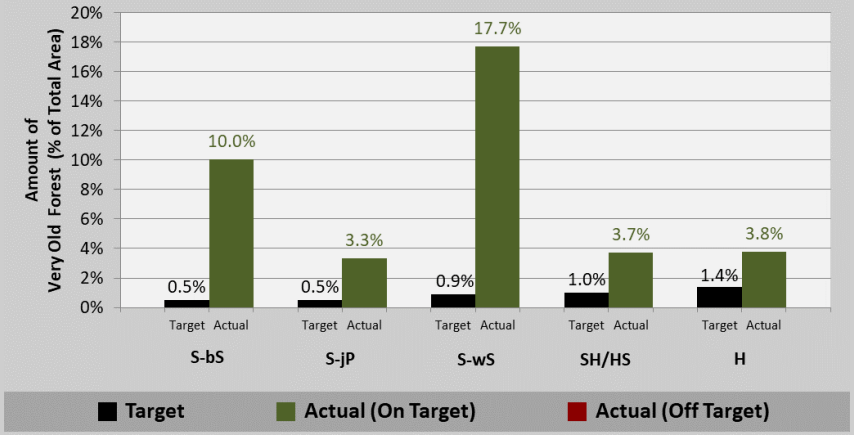
- Differences between age classes in 2019 and 2020 are largely caused by the aging of stands within the landbase rather than harvest, as stands are typically assigned an origin in the SFVI in an increment of 10 years (e.g., 1910, 1920, 1930, etc.), and these stands switch to the next age class also in years in increments of 10 (e.g., 2020).
- 2020 total ha for 120+ year age class was corrected due to an error.

Indicator #2a	Percent of the forest landbase that is old and very old	Status	Not Assessed (On Track)
Target #2a	Forest land base (managed forest landbase + eligible excluded forest) that is 'old' and 'very old' for the following six forest cover types: S-bS, S-jP, S-wS, SH, HS, and H, are maintained above the minimum thresholds of the 2nd quartile of the natural range of variation for a 74-year fire cycle.	Reporting Cycle	Annual
		Assessment Cycle	10-Year

Old Forest & Very Old Forest



Very Old Forest

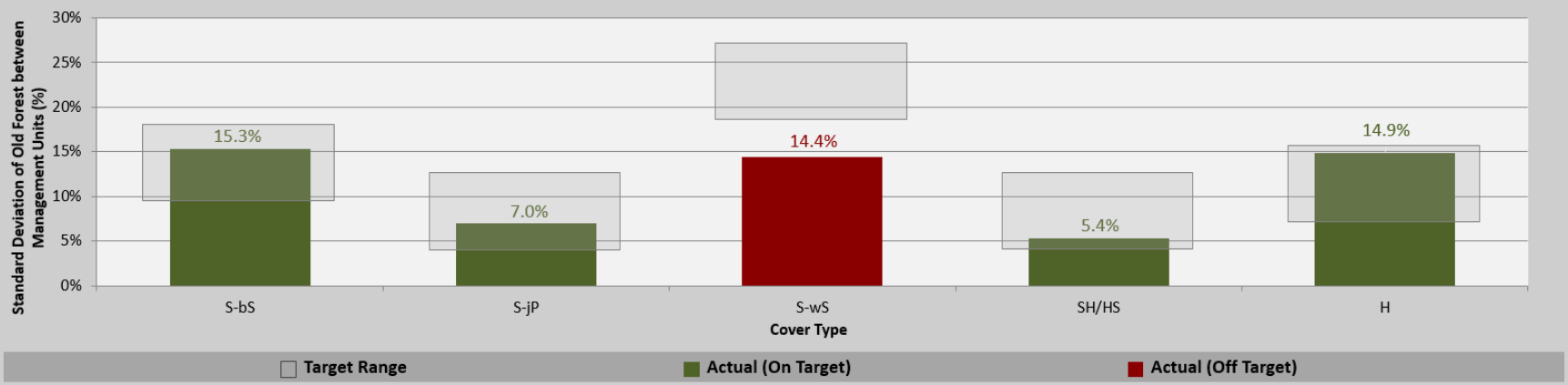


Age Class	Species Group	Year of Measurement										Current Status	Percent of Target	Target
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028			
Old Forest & Very Old Forest (%)	S-bS	15.3	15.2	22.4							Assessment Year	22.4	448%	5.0
	S-jP	7.8	7.6	13.6								13.6	271%	5.0
	S-wS	27.0	26.6	36.2								36.2	403%	9.0
	SH/HS	9.3	9.0	14.5								14.5	145%	10.0
	H	16.6	15.8	29.9								29.9	213%	14.0
Very Old Forest (%)	S-bS	6.3	6.3	10.0								10.0	2,006%	0.5
	S-jP	1.7	1.8	3.3								3.3	664%	0.5
	S-wS	12.6	12.4	17.7								17.7	1,966%	0.9
	SH/HS	2.0	1.9	3.7								3.7	373%	1.0
	H	1.9	1.9	3.8								3.8	268%	1.4

Variance	No acceptable variance
Comments	• "Old Forest" = older than 100 years (S-wS/jP/bS or SH), or 90 years (HS or H) / "Very Old Forest" = older than 120 years (all stands).

	• Differences between age classes in 2020 and 2021 are largely caused by the aging of stands within the landbase rather than harvest, as stands are typically assigned an origin in the SFVI in an increment of 10 years (e.g., 1910, 1920, 1930, etc.), and these stands switch to the next age class also in years in increments of 10 (e.g., 2021) in this indicator.

Indicator #2b	Standard deviation of old forest area by management unit	Status	Not Assessed (Monitor)
Target #2b	The current standard deviation of old forest area among the 13 management units for each of the five forest cover types: S-bS, S-jP, S-wS, SH/HS, and H, associated with any level of old forest amount shall not deviate by more than 5% of the modeled linear relationship of the natural range of variation of standard deviations among management units for a specified old forest amount (and never below 2%). (No acceptable variance).	Reporting Cycle	Annual
		Assessment Cycle	10-Year



Species Group	Year of Measurement										Current Status	Within Acceptable Range?	Target Range (%)
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028			
S-bS (%)	9.6	9.4	15.3							Assessment Year	15.3	Yes	10.9 - 20.9
S-jP (%)	4.5	4.3	7.0								7.0	Yes	4.7 - 14.7
S-wS (%)	14.5	14.6	14.4								14.4	No	21.6 - 31.6
SH/HS (%)	5.2	5.2	5.4								5.4	Yes	4.8 - 14.8
H (%)	8.9	8.5	14.9								14.9	Yes	8.5 - 18.5

Variance

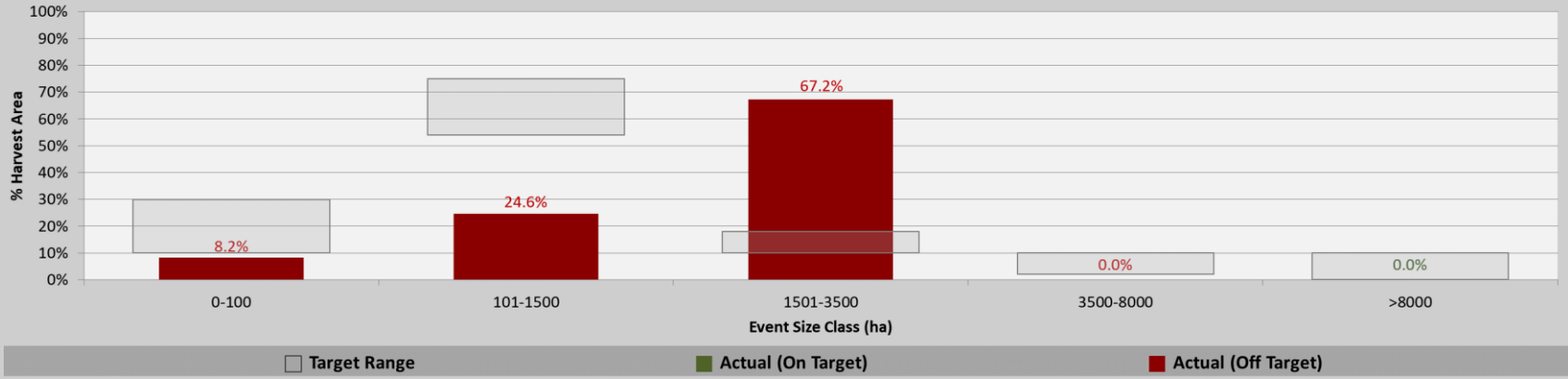
+/- 5% from the modelled standard deviation amount of old forest (See 'Target Range')

Comments

- "Old Forest" = older than 100 years (S-wS/jP/bS or SH), or 90 years (HS or H)
- This indicator reflects the distribution of old forest between management units. A standard deviation below target indicates that there are relatively equal amounts of old forest across management units, whereas a standard deviation above target indicates that old forest is clustered strongly in a few management units more than others. Targets for each species reflect an intermediate level of variation, based on the natural range of variation calculated for the Mistik FMA by Andison (2006)[1]. Note that targets change each year, based on the amount of old forest on the landbase, as the amount of old forest present in a given year will impact the desired range of variation in old forest between management units, and targets are scaled accordingly in each year.
- In 2020 and 2021, the observed standard deviation for S-wS (white spruce) is less than the target range, indicating that the old forest for this species is more evenly distributed than targeted. However, this likely reflects the fact that there is also a much greater amount of old S-wS forest on the landscape than targeted (see target 2a), which may reduce the observed standard deviation if this excess of old forest is relatively equally distributed between management units.

[1]*Andison, D. W. 2006. Natural Levels of Forest Seral-Stage Variability on the Mistik Management FMA Area in Saskatchewan. Bandaloop Landscape-Ecosystems, Belcarra, British Columbia, Canada. 84 pp.*

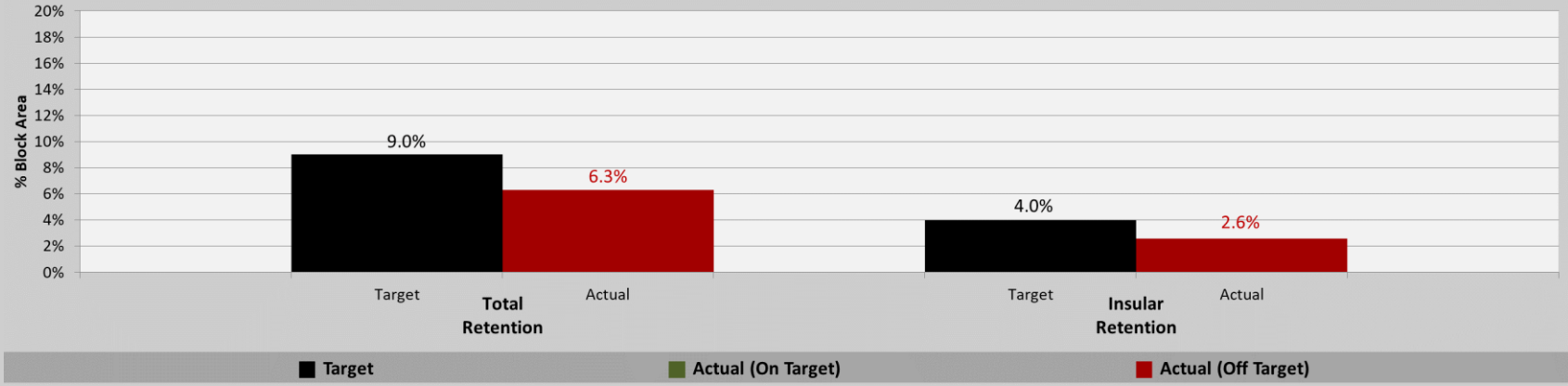
Indicator #3	Size class distribution of harvest events	Status	Not Assessed (Monitor)
Target #3	The targets for harvest distribution by event size class (based on a 10-year event measurement period) shall be within the acceptable range for each size class.	Reporting Cycle	5-Year
		Assessment Cycle	10-Year



Event Size Class (ha)	Year of Measurement										Cumulative Total	Within Acceptable Range?	Target Range
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028			
0-100 ha (%)	N/A	1.0%	25.8%							Assessment Year	**8.2%**	No	**10 – 30%**
101-1500 ha (%)	N/A	4.4%	74.2%								**24.6%**	No	**54 – 74%**
1501-3500 ha (%)	N/A	94.6%	0%								**67.2%**	No	**10 – 18%**
3500-8000 ha (%)	N/A	0%	0%								**0.0%**	No	**2 – 10%**
>8000 ha (%)	N/A	0%	0%								**0.0%**	Yes	**0 – 10%**

Variance	No acceptable variance outside of given range
Comments	• To determine harvest events, only blocks within a 10-year period (starting in 2019) are included*. Within the specified 10 years, blocks were buffered by 250m and blocks whose buffers overlapped were grouped together into an event. The outer boundaries of the combined buffers were buffered back inward by 250m and the resulting boundary is considered the event boundary. More information on this process and information on harvest events can be found in Appendix A, sections A6 and A7. Target is based on completed events only and only harvest events completed in 2019 and after are considered. • Six harvest events were completed in 2021 and these are broadly representative of the target size distribution. However, while the total number of completed events represent a variety of size classes (therefore meeting the intent of this indicator, which is to achieve a variety of disturbance event sizes), due to the very limited number of events completed at this time, it was not possible to achieve a precise distribution of harvest event sizes. **Harvest under the current tactical plan from 2017 and 2018 has been included in event TA058 in 2020, however this is an exception and normally only blocks harvested in the 2019/20 operating year or later are considered.*

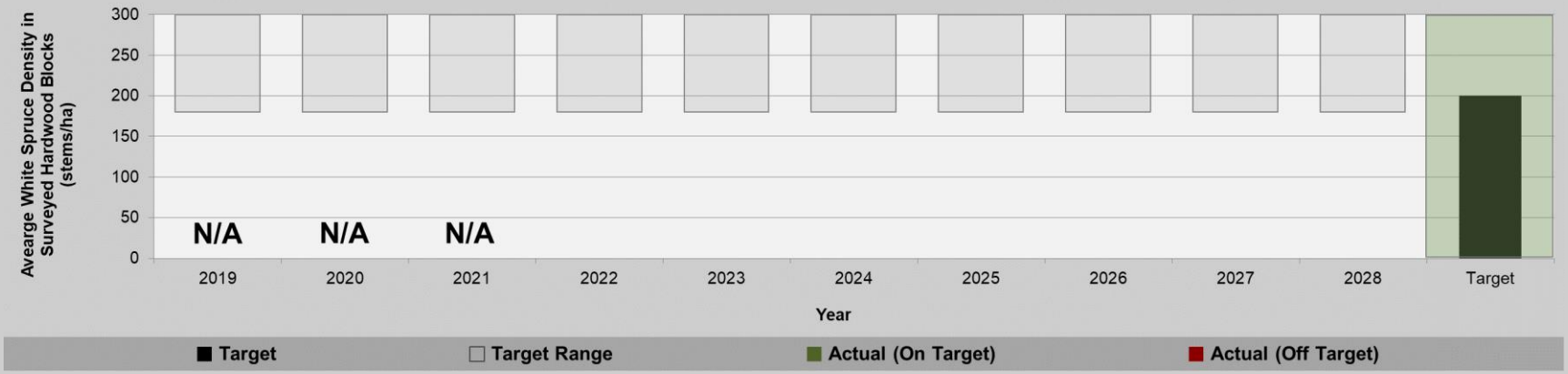
Indicator #4	Tree retention after harvest	Status	Not Assessed (Monitor)
Target #4	For harvest events with >20 ha of harvest area, total retention will be an average of 9% made up of at least 4% in insular retention, including clumps (<2 ha), islands (>2 ha), and individual trees (in groups of 4 trees or less). The remainder will be made up of proximal retention (connected to the block boundary).	Reporting Cycle	Annual
		Assessment Cycle	5-Year



Category	Year of Measurement										Cumulative Average	Current Status	Percent of Target	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028				
Total Retention (%)	N/A	4.9%	6.3%		Assessment Year					Assessment Year	5.3%	6.3%	70%	9%
Insular Retention (%)	N/A	1.5%	2.6%								1.8%	2.6%	65%	4%

Variance	No acceptable variance
Comments	• This target is based on completed events only. Only harvest events starting in 2019 and after are considered. • Individual harvest event data can be found in Appendix A, sections A6 and A7. • Note that the small clumps and single trees are not included in these measurements. • Mistik recognizes that these numbers are lower than the targets and we will work with contractors and supervisors to ensure adequate retention is being left in harvest blocks and events.

Indicator #5	The softwood component in hardwood stands is maintained	Status	Not Assessed (N/A)
		Reporting Cycle	Annual
Target #5	Hardwood stands with a white spruce component at the time of harvest will have an average of a minimum of 200 stems/ha of white spruce when measured in an Establishment survey (early FTG) or FTG survey.	Assessment Cycle	5-Year

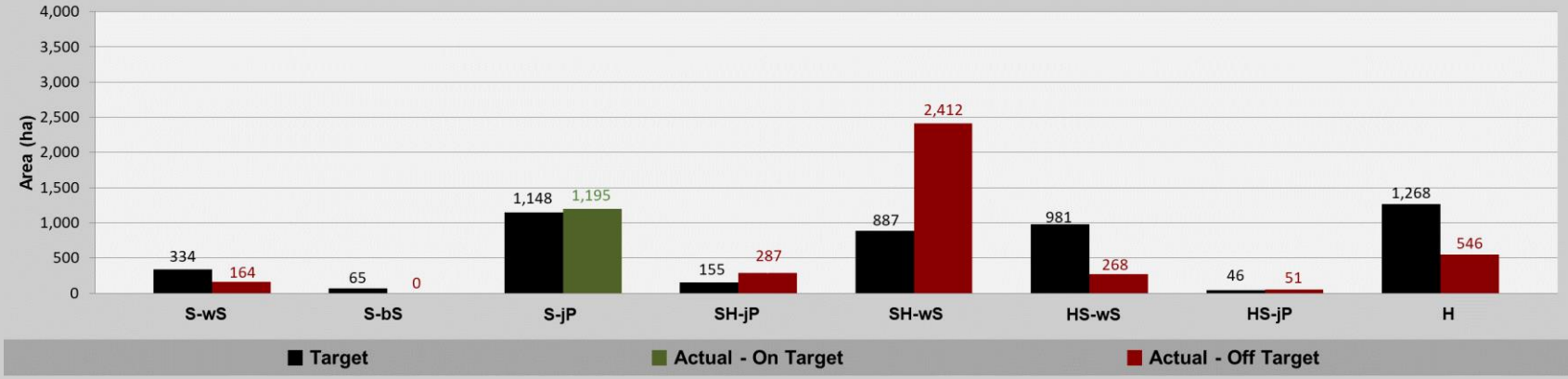


Category	Year of Measurement										Current Status	Within Acceptable Range?	Target Range
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028			
Area (ha) harvested in Hardwood Stands with WS component	635	722	614		Assessment Year					Assessment Year	**614**	**N/A**	**N/A**
Average WS Density in Target Hardwood Stands (stems/ha)	N/A	N/A	N/A								**N/A**	**N/A**	**≥180**

Variance	Acceptable variance is -10%, with no upper bound (target range: greater than or equal to 180 stems/ha)
Comments	• The harvest areas that this target applies to will be those portions of blocks that had a pre-harvest species group of H (80% or greater hardwood) and a white spruce component (at least 10% cover of WS in the overstorey or at least 20% cover of WS in the understory layer of the SFVI). • Early FTG survey results for blocks harvested after April 1, 2019, are not expected until 2024 at the earliest. • Softwood component in H stands is maintained using various methods. In blocks that are predominantly mixedwood, smaller hardwood stands may be planted if adjacent stands are either mixedwood or softwood leading. In hardwood leading blocks (where no planting is done), either understory protection of the spruce is implemented during harvesting or in-block roads may be planted to add a softwood component back into the block. • The definition of “hardwood stands with a white spruce component” has been updated to include only stands with a final development type of H (‘dt_spgp’ = ‘H’) to better align with Mistik’s FMP landbase (previously, any stand with an H-dominant understory was included, even if the stand had a final development type different than this, for instance stands where the understory was used to assign the final development type). The area of this indicator has been updated for 2019 using this new definition and therefore the numbers presented for 2019 may not align with previous annual reports.

Indicator #6	**Relative abundance of SGR Forest Types are forecasted to be maintained at next rotation**
Target #6	The area by stand type of regenerating stands, as measured at the Free to Grow survey, will be consistent with the transition assumptions used in the Forest Estate Modeling.

Status	**Not Assessed (Monitor)**
Reporting Cycle	**Annual**
Assessment Cycle	**5-Year**

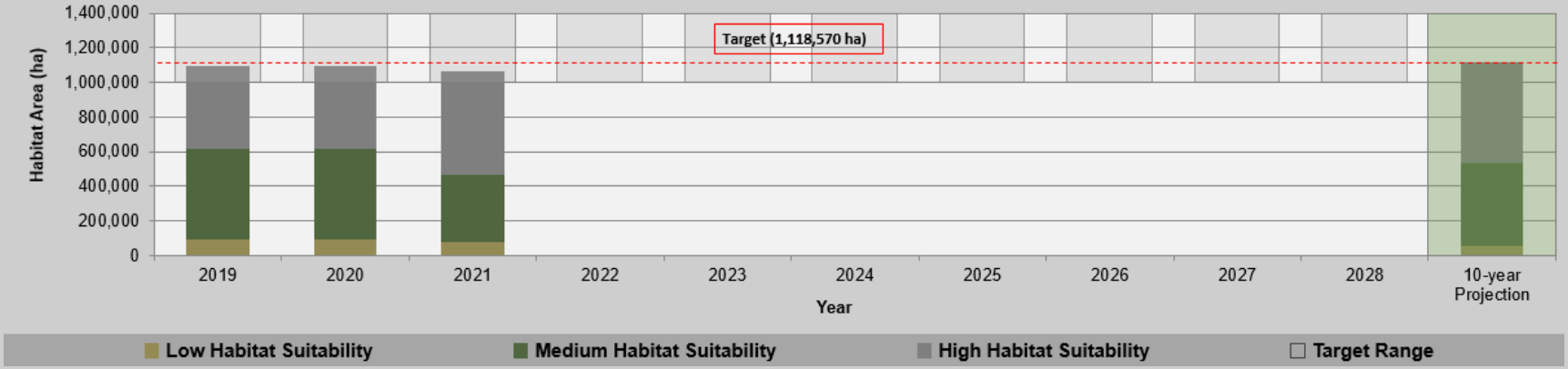


SGR Forest Types (Predicted Area)	Year of Measurement										Current Status	Percent of Target	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028			
S-wS (ha)	527.9	39.2	164.2		Assessment Year					Assessment Tear	164.2	49.1%	334.4
S-bS (ha)	0.0	0.0	0.0								0.0	0.0%	64.9
S-jP (ha)	995.3	1,924.8	1,195.0								1,195.0	104.1%	1,148.2
SH-jP (ha)	276.0	668.1	286.6								286.6	184.6%	155.2
SH-wS (ha)	3,283.7	1,494.1	2411.6								2411.6	271.9%	887.0
HS-wS (ha)	215.9	818.6	268.3								268.3	27.4%	980.5
HS-jP (ha)	81.0	102.6	50.9								50.9	110.4%	46.2
H (ha)	1,114.2	267.9	546.1								546.1	43.1%	1,267.8

Variance	+/- 10% of target area for each species group.
Comments	• All Free-to-Grow surveys completed in 2021 were performed aerially as per Government of Saskatchewan standards. The SGR Forest Types assigned to these surveys represent the predicted status at an expected rotation age, based on successional trajectories modelled by Gelhorn, L. (2009)[1]. Note that these results represent only a single year of survey data, and that these successional trajectories were modelled using a limited dataset and may not accurately represent future stand status. In the long-term, the potential for developing a more accurate model of stand successional trajectories, using a wider representation of available survey data, will be explored.

[1]*Gelhorn, L. 2009. Development of a Regenerating Mixedwood Succession Matrix. Timberline Natural Resource Group Ltd., Prince Albert, Saskatchewan, Canada.*

Indicator #7a	Current habitat availability for Fisher vs. predicted future (modeled) supply	Status	Not Assessed (On Track)
Target #7a	Total Fisher habitat will meet or exceed the 10-year projection.	Reporting Cycle	Annual
		Assessment Cycle	5-Year



Habitat Category	Year of Measurement										Current Status	Percent of Target	10-year Projection
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028			
High Suitability (ha)	477,118	476,936	596,493		Assessment Year					Assessment Year	596,493	N/A	587,558
Medium Suitability (ha)	597,354	80,294	386,998								386,998	N/A	473,447
Low Suitability (ha)	94,742	94,687	80,287								80,287	N/A	57,565
Total (ha)	1,093,695	1,092,311	1,064,646								1,064,646	95.2%	1,118,570

Variance	10% acceptable variance.
Comments	• Habitat is categorized based on scores given for the presence of disturbance, stand type and age, canopy closure, and shrub cover. These scores are added up for each stand, with the total score determining the habitat type. This process is based on work by Dr. Gilbert Proulx of Alpha Wildlife aimed and developing predictive criteria for use in the analysis of current and future habitat supply for fisher (as described in Mistik's 2019 20-Year Forest Management Plan, Volume III, page 66). A summary of scoring criteria is provided in the supplemental data package.

Indicator #7b	Part 1: Habitat availability for Caribou – CM-1, CM-2, & CM-4	Status	On Target (2/2)
Target #7b	No new timber harvesting or related activities will be planned for Mistik Caribou Habitat Management (CM) areas CM-1, CM-2, or CM-4 in the next 10 years. Mistik-caused disturbance in each CM area will be less-than or equal to the current disturbance percentage.	Reporting Cycle	Annual
		Assessment Cycle	Annual

Part 1 – CM-1 / CM-2 / CM-4

New Harvest, by Caribou Habitat Management Area	Year of Measurement										Current Status	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
CM-1 (ha)	0	0	0								0	0
CM-2 (ha)	0	0	0								0	0
CM-4 (ha)	0	0	0								0	0
CM-1 (% Disturbance)	N/A	N/A	N/A								N/A	N/A
CM-2 (% Disturbance)	N/A	N/A	N/A								N/A	N/A
CM-4 (% Disturbance)	N/A	N/A	N/A								N/A	N/A

Variance	2% acceptable variance.
Comments	• Note that Mistik CM areas are not directly correlated to provincial caribou tier areas. • CM-1, CM-2, and CM-4 are caribou management areas that were identified as areas with high-quality or important caribou habitat, or that which is important for habitat connectivity. Mistik has committed to staying out of these areas. • Disturbance percentage will be addressed once the provincial range plan for Caribou is finalized and the FMP is amended as required. • No area was harvested in these areas in 2021. • The FMP was amended effective April 1, 2023 to gain alignment with the *Range Plan for Woodland Caribou in Saskatchewan (SK2 West Caribou Administration Unit. The 2023/24 Annual Report will reflect the new indicators for this target.*

Indicator #7b	Part 2: Habitat availability for Caribou – CM-1a, CM-2a	Status	On Target (2/2)
Target #7b	All harvest-related activities in CM-1a and CM-2a areas will follow "least-impact" forestry practices identified in the Woodland Caribou Habitat Mitigation Plan.	Reporting Cycle	Annual
		Assessment Cycle	Annual

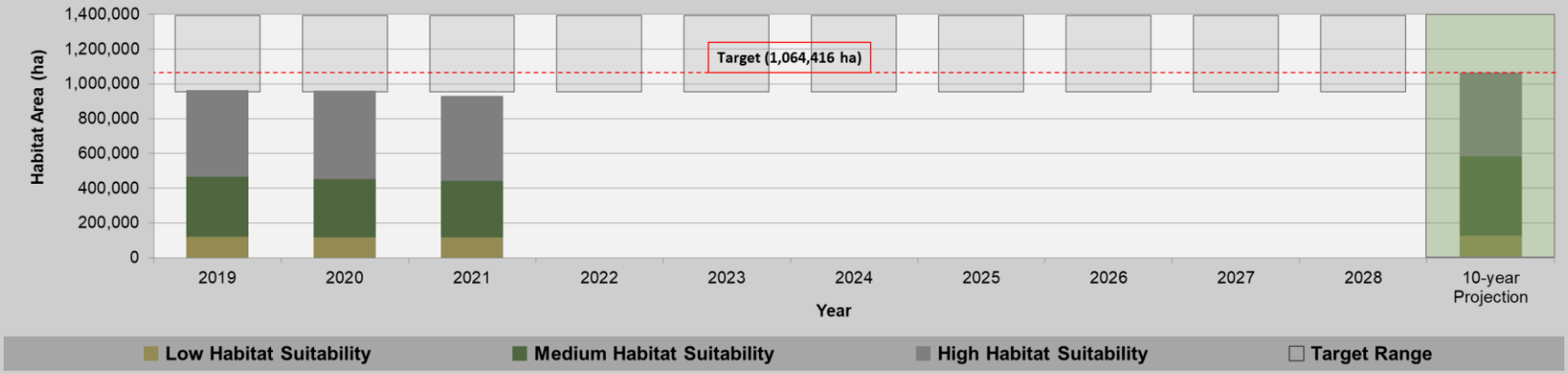
Part 2 – CM-1a / CM-2a

New Harvest, by Caribou Habitat Management Area	Year of Measurement										Current Status	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
CM-1a Area Harvested (ha)	0	0	0								**0**	**N/A**
CM-2a Area Harvested (ha)	0	0	0								**0**	**N/A**
CM-1a Blocks (blk. numbers)	N/A	N/A	N/A								**N/A**	**N/A**
CM-2a Blocks (blk. numbers)	N/A	N/A	N/A								**N/A**	**N/A**
CM-1a (% Blocks, by Area, Meeting "Least-Impact" Practices)	N/A	N/A	N/A								**N/A**	**100%**
CM-2a (% Blocks, by Area, Meeting "Least-Impact" Practices)	N/A	N/A	N/A								**N/A**	**100%**

Variance	2% acceptable variance.
Comments	• "Least-impact" forestry practices includes block designs that follow natural forest pattern principles, winter harvest, temporary/minimal access construction, road reclamation within 1 year of harvest/haul completion, renewal activities within 1 year of harvest, no activity between March 1 – June 1. • At this time, there is no previous harvest with outstanding requirements in these areas. Any variance reported in the table above, if any, is related to new harvest under the 2019 FMP. There was no harvest in CM-1a or CM-2a in 2021.

	• The FMP was amended effective April 1, 2023, to gain alignment with the Range Plan for Woodland Caribou in Saskatchewan (SK2 West Caribou Administration Unit. Reporting on the new indicators for this target will begin with the 2023/24 Annual Report.

Indicator #7c	Current habitat availability for Moose vs. predicted future (modeled) supply	Status	Off Target
		Reporting Cycle	Annual
Target #7c	Total moose habitat will meet or exceed the 10-year projection.	Assessment Cycle	Annual



Habitat Category	Year of Measurement										Current Status	% of Target	10-year Projection
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028			
High Suitability (ha)	500,419	509,682	488,630								488,630	N/A	479,740
Medium Suitability (ha)	345,658	333,954	326,921								326,921	N/A	457,707
Low Suitability (ha)	119,659	118,969	117,168								117,168	N/A	126,969
Total (ha)	965,736	962,605	932,720								932,720	87.6%	1,064,416

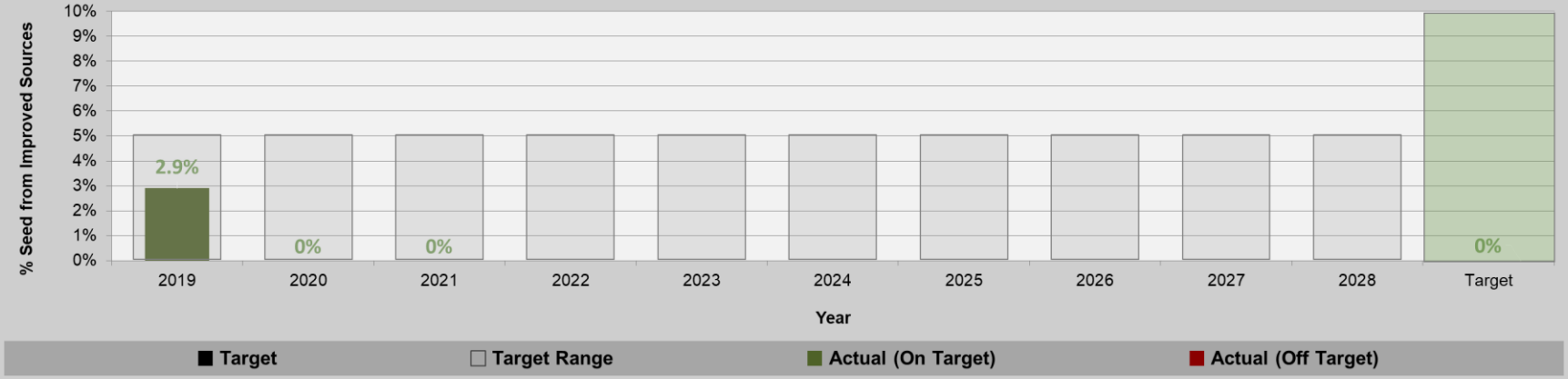
Variance

10% acceptable variance.

Comments

- Habitat is categorized based on scores given for the presence of disturbance, stand type, % conifer, canopy closure, and adjacency to young stands and/or riparian vegetation. These scores are added up for each stand, with the total score determining the habitat type. This process is based on work by Dr. Gilbert Proulx of Alpha Wildlife aimed and developing predictive criteria for use in the analysis of current and future habitat supply for moose (as described in Mistik's 2019 20-Year Forest Management Plan, Volume III, page 58). A summary of scoring criteria is provided in the supplemental data package.
- This indicator will be reviewed and monitored annually, however despite the FMP identifying it as being assessed annually, as per the 2017 FMP Standard, it will not be formally assessed until year 5 (2023).
- This indicator is off target in 2021. In this analysis, the best habitat for moose is defined as old, multi-story conifer stands that are adjacent to both early seral stage forest and aquatic vegetation/streams. Mitigation therefore involves leaving more retention in harvest events to create a "mosaic" of old and young forest next to riparian areas. This minimizes losses of moose habitat due to harvest, and can also create new, or higher-quality moose habitat by providing an early seral stage component to some areas.

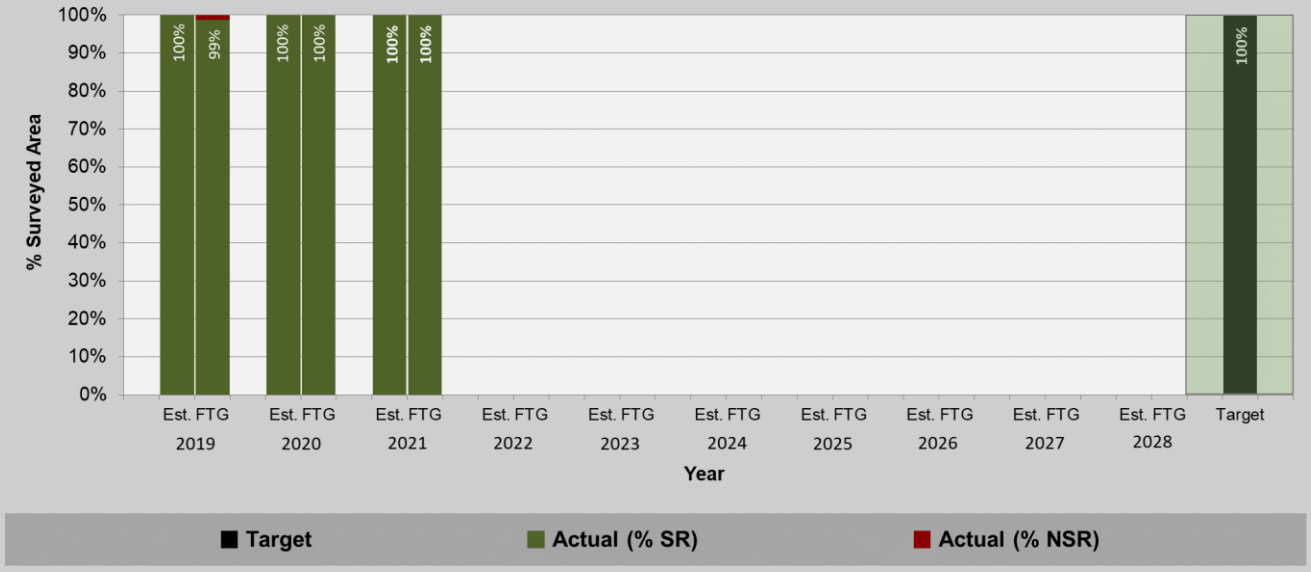
Indicator #8	Seedlings are from wild or improved seed sources	Status	Not Assessed (On Track)
Target #8	No tree seedlings planted on the Mistik FMP area shall be from 'improved' seed sources.	Reporting Cycle	Annual
		Assessment Cycle	5-Year



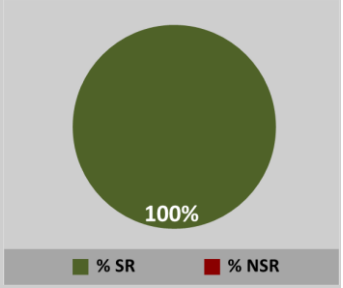
Category	Year of Measurement										Current Status	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
Trees Planted (Improved Seed)	22,680	0	0								**0**	**N/A**
Total Trees Planted	784,320	1,100,650	1,199,245		Assessment Year					Assessment Year	**1,199,245**	**N/A**
% Seed from Improved Sources	2.9%	0%	0%								**0%**	**0%**

Variance	5% acceptable variance
Comments	• Mistik received approval in 2019 to utilize seedlings grown from Alberta seed lot sources. One of these seed lots had been improved, however none were genetically modified. Seed lots were located parallel to the Mistik FMA and are expected to be suitable for growing conditions in Mistik's FMA. This seed was used to grow 2.9% of seedlings planted in 2019. • No trees from improved seed were planted in 2020 or 2021. • Discussion was held with the Public Advisory Group in order to refine the definition of "improved seed" for the purposes of this target. The use of improved stock via selective tree breeding and improvement programs is considered positive; the concerns of this indicator refer more to "artificially" improved stock such as GMOs. The new target (starting in 2023/24) will be: *No tree seedlings planted on the Mistik FMP area shall be from GMO sources, and the amount of seedlings from improved sources will be tracked separately (Target revised at October 2022 PAG meeting).*

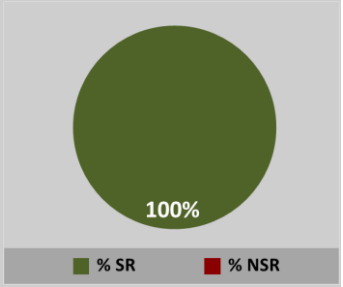
Indicator #9	Post-harvest areas are successfully regenerated	Status	Not Assessed (On Track)
Target #9	100% of surveyed post-harvest area shall meet provincial stocking requirements according to the provincial Regeneration Assessment Standard (Establishment and Free to Grow surveys).	Reporting Cycle	Annual
		Assessment Cycle	5-Year



Current – Est. Surveys



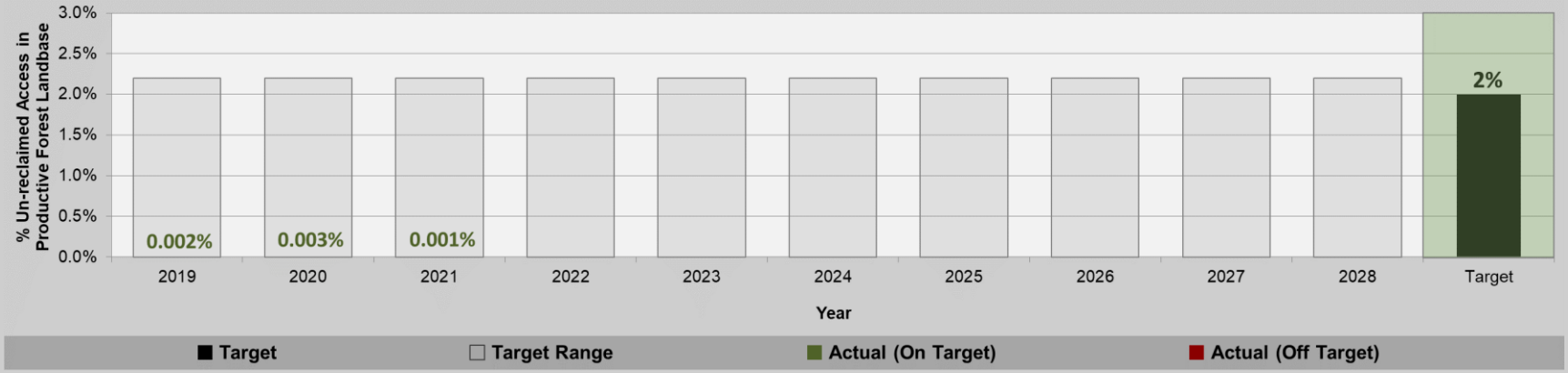
Current – FTG Surveys



Survey Type	Year of Measurement										Current Status	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
Establishment Surveys (% ha SR)	100.0%	100.0%	100.0%		Assessment Year					Assessment Year	100.0%	100%
Free-To-Grow Surveys (% ha SR)	98.7%	100.0%	100.0%								100.0%	100%

Variance	No acceptable variance.
Comments	• Surveys reported are those that are completed in each respective year, regardless of year of harvest. • All NSR blocks are tracked and an action plan is developed to ensure full stocking of all NSR blocks.

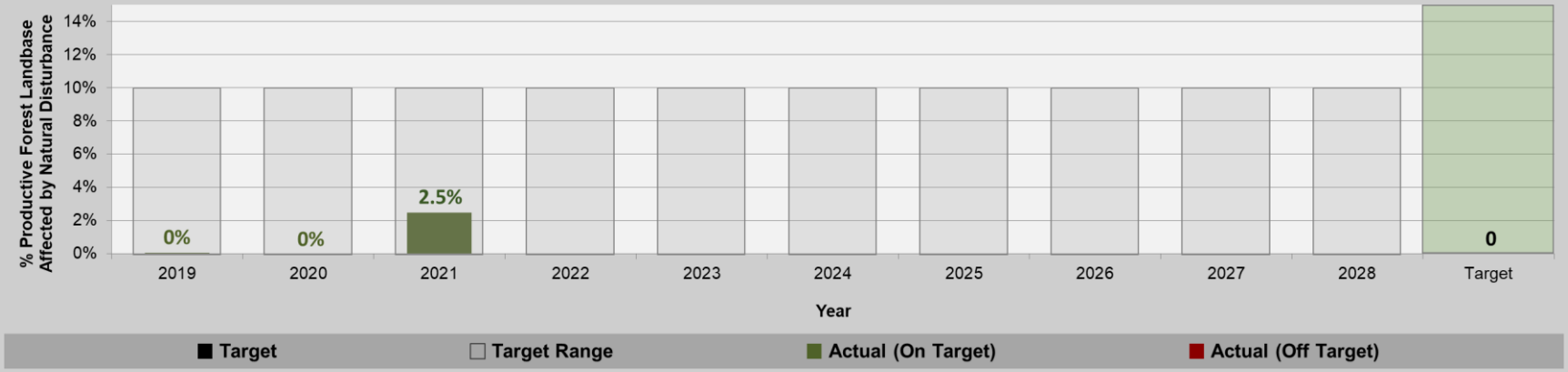
Indicator #10	Change in the managed forest landbase area	Status	Not Assessed (On Track)
Target #10	Less than 2% of the productive forest land base shall be converted to permanent or currently not reclaimed Mistik- and L&M-related access structures (roads and gravel / borrow pits).	Reporting Cycle	Annual
		Assessment Cycle	5-Year



Category	Year of Measurement										Current Status	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
% Productive Forest Landbase Converted	0.002%	0.003%	0.001%		Assessment Year					Assessment Year	0.001%	2%
Total Permanent Road Added (km)	4.5	6.4	2.8								2.8	N/A
Contributing Area Converted (Roads) (ha)	16.1	24.6	10.7								10.7	N/A
Contributing Area Converted (Gravel/Borrow Pits) (ha)	0	0	0								0	N/A

Variance	2% disturbance is the target maximum, but maximum acceptable variance is 10% (i.e., less than 2.2% disturbance)
Comments	• Only permanent (Class 1 or Class 2) roads are considered and a total right-of-way width of 40m (20m buffer from centerline) is used for both Class 1 and Class 2 roads. Note that the maximum right-of-way width as per the Forest Operations Standard is 40m total. Values from previous reports had been assuming a larger right-of-way width, and these values have been corrected to 40m width in this report for all years. • Note that the contributing area converted is less than the total right-of-way area due to the fact that only part of the area covered by these roads is considered contributing. • Construction on one class 2 road occurred in 2021 (9 Mile Pine Road)

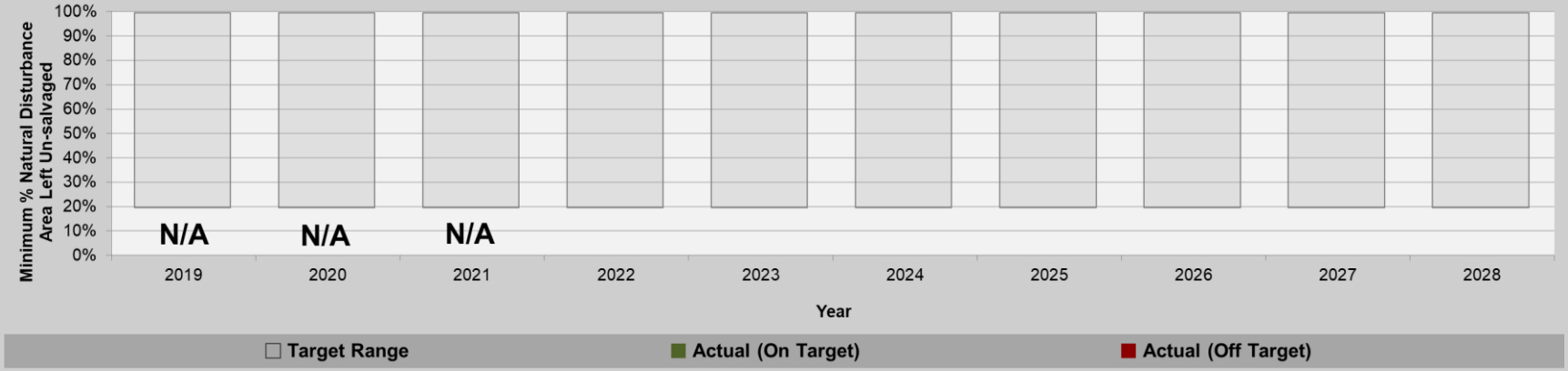
Indicator #11	Net area disturbed by stand replacing natural events (fire)	Status	On Target
		Reporting Cycle	Annual
Target #11	Net area impacted by stand replacing natural disturbance (fire) will be monitored against a threshold of 10% over the 10-year period, above which re-evaluation of the FMP would need to occur.	Assessment Cycle	Annual



Category	Year of Measurement										Current Status	Cumulative Percent	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028			
% Disturbance - Fire	0%	0%	2.5%								**2.5%**	**2.5%**	**0%**

Variance	0% disturbance is the target, but maximum acceptable variance is 10% disturbance.
Comments	• Based on fire data provided by the Ministry of Environment • There were 21,873 ha of contributing area burned on the Mistik FMA in 2021.

Indicator #12	Proportion of a natural disturbance event retained un-salvaged	Status	Not Assessed (N/A)
Target #12	In all salvage harvesting activities occurring in natural disturbance events >100 ha, at least 20% of the disturbance area will be left unharvested.	Reporting Cycle	Annual
		Assessment Cycle	5-Year

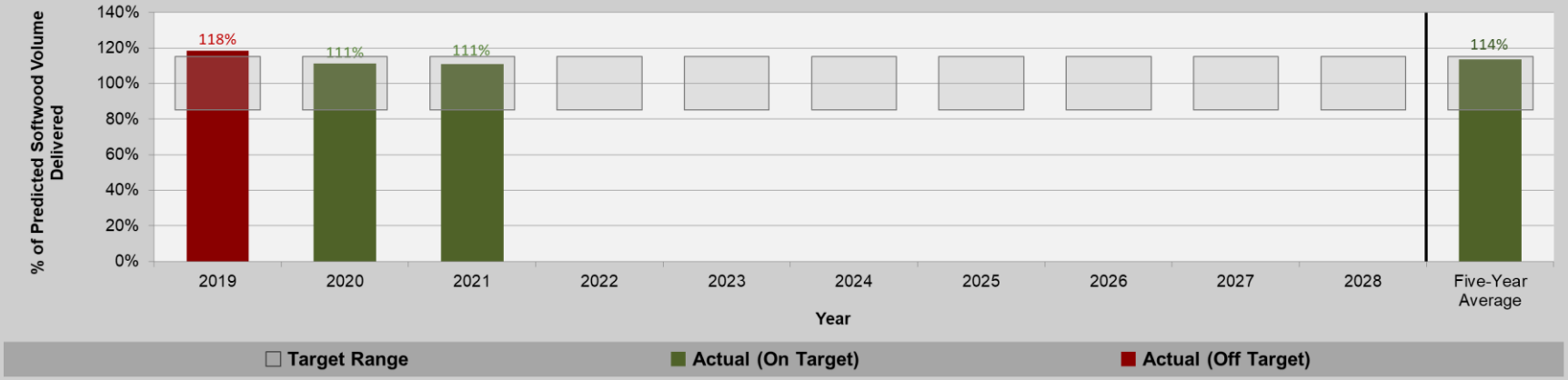


Category	Year of Measurement										Current Status	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
# of Salvage Events	0	0	2		Assessment Year					Assessment Year	**2**	**N/A**
Total Area of Disturbance Events (ha)	0	0	7,274								**21,873**	**N/A**
Salvage Area in Disturbance Events (ha)	0	0	144								**0**	**N/A**
Minimum % Disturbance Area Left Un-salvaged	N/A	N/A	N/A								**N/A**	**20%**

Variance	Acceptable range is ≥ 20% and <100%
Comments	• This target only includes disturbance events where salvage operations occurred. • There were 21,873 ha of fire on the Mistik landbase in 2021. Salvage harvest of burned area occurred in two blocks (10.0 ha of block 07015021 in fire 21LX-FORKS, and 133.6 ha of block 85006078 in fire 21BR-HELENE), for a total of 144 ha. Salvage harvest of these events has not yet been completed and un-salvaged % will be reported in 2022 once salvage harvest has been completed.

Indicator #13	Yield curve suitability; measured by actual harvest volume (m^3/ha) compared to predicted volume	Status	Not Assessed (On Track)
Target #13	On an annual and five-year basis and based on updated harvest block boundaries, the total actual delivered softwood and hardwood harvest volume from all sources on the FMA area shall deviate by less than the acceptable variance (15% on a five-year basis) from the volume predicted by the yield curve estimates for the same harvested forest stands.	Reporting Cycle	5-Year
		Assessment Cycle	5-Year

Part 1 – Softwood

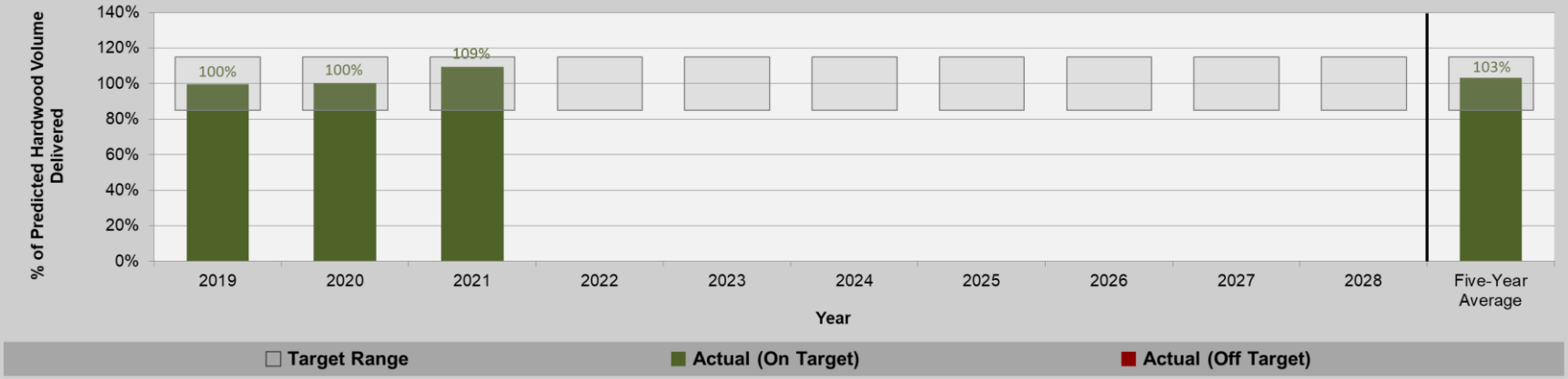


Category	Year of Measurement										Five-Year Average	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
Predicted Volume (m^3)	189,652	154,869	207,314		Assessment Year					Assessment Year	**183,945**	**N/A**
Delivered Volume (m^3)	224,451	172,338	230,525								**209,105**	**N/A**
Delivered Volume (% Predicted)	118.3%	111.3%	111.2%								**113.7%**	**100%**

Variance	+/-15% acceptable variance.
Comments	• Differences between predicted and delivered volumes are likely due to a relatively old forest inventory (based on imagery acquired between 1994-2005) being used for these estimates. While there is an upper bound on this target, it should be noted that delivering more volume than predicted is positive as it means that less area needs to be harvested to meet wood supply requirements. • One block (01048891) was operated by a third party and the volumes have not been included.

Indicator #13	Yield curve suitability; measured by actual harvest volume (m^3/ha) compared to predicted volume	Status	Not Assessed (On Track)
Target #13	On an annual and five-year basis and based on updated harvest block boundaries, the total actual delivered softwood and hardwood harvest volume from all sources on the FMA area shall deviate by less than the acceptable variance (15% on a five-year basis) from the volume predicted by the yield curve estimates for the same harvested forest stands.	Reporting Cycle	5-Year
		Assessment Cycle	5-Year

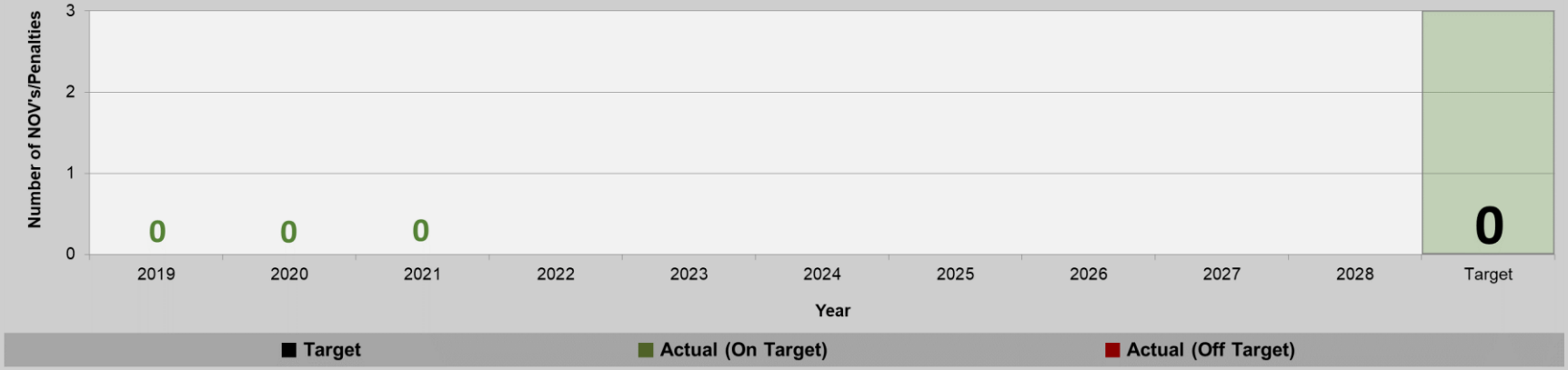
Part 2 – Hardwood



Category	Year of Measurement										Five-Year Average	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
Predicted Volume (m^3)	455,878	451,366	467,237		Assessment Year					Assessment Year	458,160	N/A
Delivered Volume (m^3)	454,730	453,205	511,851								473,262	N/A
Delivered Volume (% Predicted)	99.7%	100.4%	109.5%								103.3%	100%

Variance	+/-15% acceptable variance.
Comments	• Differences between predicted and delivered volumes are likely due to a relatively old forest inventory (based on imagery acquired between 1994-2005) being used for these estimates. While there is an upper bound on this target, it should be noted that delivering more volume than predicted is positive as it means that less area needs to be harvested to meet wood supply requirements.

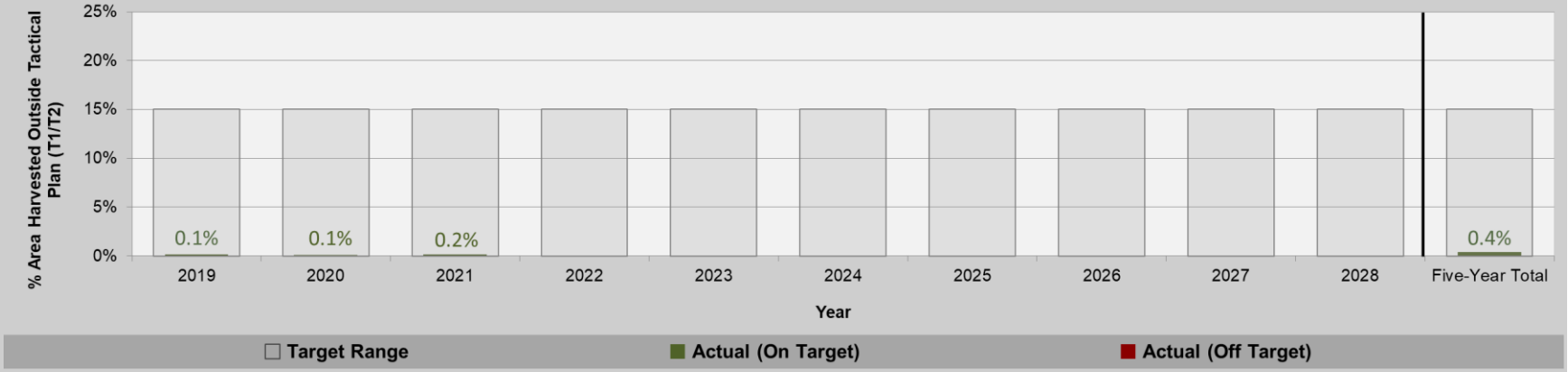
Indicator #14	Utilization assumption consistency and implementation	Status	On Target
Target #14	There shall be 0 Notices of Violation or Administrative Penalties for operators not meeting the current or otherwise approved utilization specifications.	Reporting Cycle	Annual
		Assessment Cycle	Annual



Category	Year of Measurement										Current Status	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
NOV's / Penalties	0	0	0								0	0

Variance	No acceptable variance.
Comments	• No notices of violation or administrative penalties were issued in 2021/22 for not following approved utilization specifications. • As part of ongoing harvest supervision, Mistik does weekly inspections on all contractors to ensure that they are following the approved utilization specifications. • For additional information on regulatory compliance, see section 5.2.4.

Indicator #15	Operational adherence to the Tactical Plan	Status	Not Assessed (On Track)
		Reporting Cycle	Annual
Target #15	Over the 10-year period, the area harvested outside of the Tactical Plan (T1 and T2 combined) will not exceed 15% of the total Tactical Plan area.	Assessment Cycle	5-Year



Category	Year of Measurement										Five-Year Total	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
Total Area Harvested Outside of T1/T2 (ha)	372	200	444		Assessment Year					Assessment Year	**1,016**	**37,347**
% Total Area Harvested Outside of T1/T2	0.1%	0.1%	0.2%		Assessment Year					Assessment Year	**0.4%**	**15%**

Variance

Acceptable range is 0% - 15%.

Comments

- Total Tactical Plan area (T1 + T2) = 248,979 ha. Maximum target area harvested outside of the Tactical Plan is (248,979 ha * 0.15) = 37,347 ha.
- In some areas, not all operable stands have been included in the tactical plan due to the coarse-scale nature of that level of planning. These stands are often harvested in conjunction with tactical plan blocks so that merchantable wood is not left isolated.

Indicator #16	Harvesting activities in compliance with all related requirements	Status	Not Assessed (Monitor)
Target #16	100% of harvesting activities are in compliance with provincial and federal acts & regulations, approved operating plans, and SK Environmental Code.	Reporting Cycle	Annual
		Assessment Cycle	5-Year

Category	Year of Measurement									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
All Harvesting Activities in Compliance	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐

2021 Compliance Summary

Category	Mistik Inspection Data		Ministry Identified Non-Compliances (Enforcement Action Taken)					
	# of Inspections	# In Compliance	Total Items Non-Compliant	No Action Taken	Voluntary Compliance Opportunity	Notice of Violation	Stop Work Order	Administrative Penalty
Harvesting Activities	221	216	10	7	3	0	0	0

Variance	No acceptable variance.
Comments	• A total of 10 non-compliances were identified by the ministry related to harvesting in 2021/22. Note that harvesting also includes road inspections. • Three voluntary compliance opportunities were given related to incomplete sanitization of a dwarf mistletoe block, failing to spread of burn slash within a two-year timeframe, and failing to reclaim an in-block road within a two-year timeframe. • Seven non-compliances resulted in no further enforcement action taken. • There were no notices of violation, stop work orders, or administrative penalties issued related to harvesting. • Mistik conducted a total of 221 harvest-related and road inspections in 2021/22 and in 216 instances, harvesting activities were found to be in compliance. • There were no ministry-identified non-compliant inspections for NorthWind in 2021/22. • For additional information on regulatory compliance see section 5.2.4

Indicator #17	Crossing activities in compliance with all related requirements	Status	Not Assessed (Monitor)
Target #17	100% of watercourse crossings are in compliance with provincial & federal acts / regulations / approved operating plans /SK Environmental Code and aquatic habitat protection permits (AHPP).	Reporting Cycle	Annual
		Assessment Cycle	5-Year

Category	Year of Measurement									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
All Watercourse Crossings in Compliance	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐

2020 Compliance Summary

Category	Mistik Inspection Data		Ministry Identified Non-Compliances (Enforcement Action Taken)					
	# of Inspections	# In Compliance	Total Items Non-Compliant	No Action Taken	Voluntary Compliance Opportunity	Notice of Violation	Stop Work Order	Administrative Penalty
Watercourse Crossings	38	37	4	4	0	0	0	0

Variance	No acceptable variance.
Comments	• A total of 4 non-compliances were identified by the ministry related to watercourse crossings in 2021/22. • All four resulted in no further enforcement action taken. • Mistik conducted a total of 38 watercourse crossing inspections in 2021/22 and in 37 instances, crossing activities were found to be in compliance. • There were no ministry-identified non-compliant inspections for NorthWind in 2021/22. • For additional information on regulatory compliance see section 5.2.4.

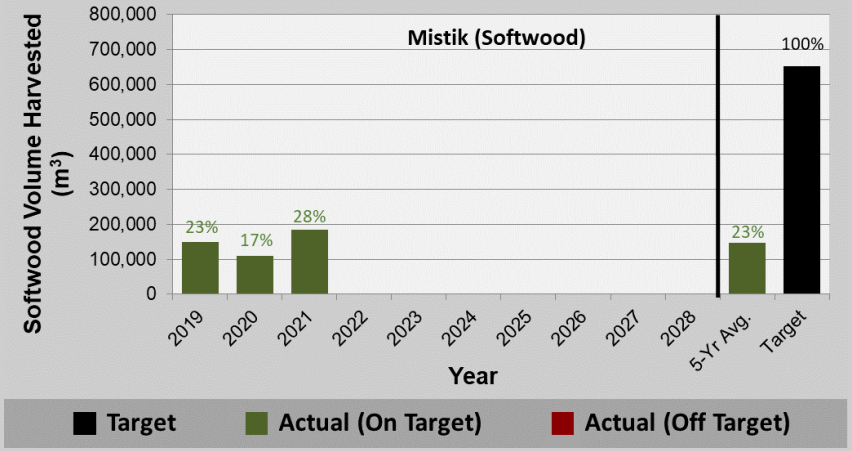
Indicator #18	Event Duration	Status	Not Assessed (On Track)
Target #18	100% of harvest events have a duration of 10 years or less.	Reporting Cycle	Annual
		Assessment Cycle	5-Year

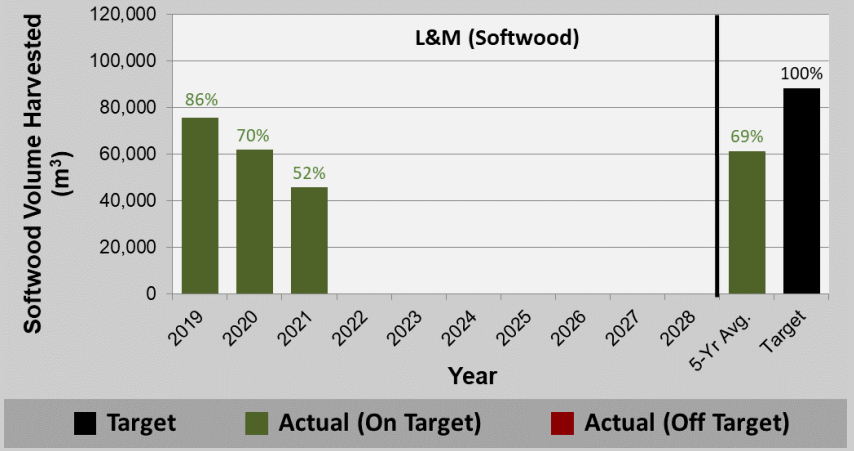
Category	Year of Measurement										Cumulative Total	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
Completed Harvest Events	N/A	3	6		Assessment Year					Assessment Year	**9**	**N/A**
% of Completed Harvest Events with >10-year Duration	N/A	100%	100%								**100%**	**100%**

Variance	No acceptable variance.
Comments	• This target is based on completed events only. Only harvest events starting in 2019 and after are considered. • Harvest event data, including a list of events initiated and completed in each year, can be found in Appendix A, Sections A6 and A7.

Indicator #19a	Utilization of harvest volume schedule (HVS)	Status	Not Assessed (On Track)
Target #19a	The annual average harvest (based on a five-year period) shall not exceed the approved HVS for softwood or hardwood.	Reporting Cycle	Annual
		Assessment Cycle	5-Year

Part 1 – Softwood

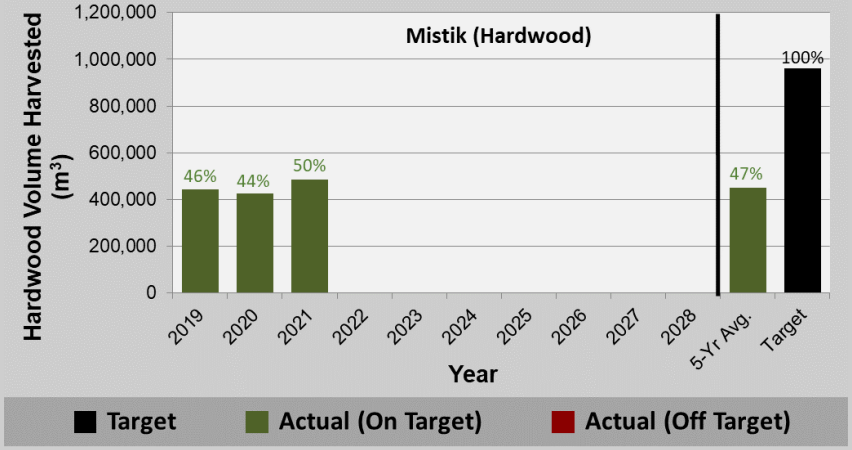


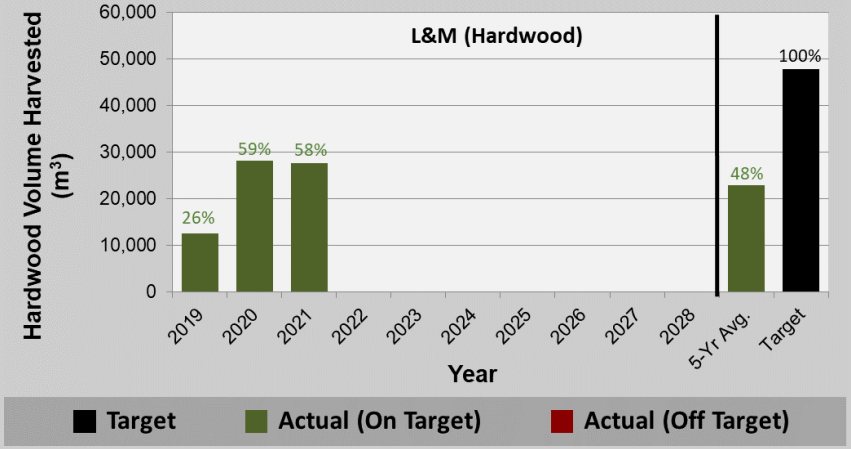


Category	Year of Measurement										Five-Year Average	2019 FMP HVS
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
Softwood Volume Harvested (m^3) – Mistik	148,778	110,367	184,553		Assessment Year					Assessment Year	147,899	652,906
Softwood Volume Harvested (m^3) – L&M	75,673	61,971	45,972								61,205	88,329
Variance	No acceptable variance.											
Comments	• Block 01048891 in 2021 was not included in these numbers as this block was harvested by a third-party operator.											

Indicator #19a	Utilization of harvest volume schedule (HVS)	Status	Not Assessed (On Track)
Target #19a	The annual average harvest (based on a five-year period) shall not exceed the approved HVS for softwood or hardwood.	Reporting Cycle	Annual
		Assessment Cycle	5-Year

Part 2 – Hardwood





Category	Year of Measurement										Five-Year Average	2019 FMP HVS
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
Hardwood Volume Harvested (m^3) – Mistik	442,072	424,941	484,138		Assessment Year					Assessment Year	450,383	959,763
Hardwood Volume Harvested (m^3) – L&M	12,659	28,265	27,713								22,879	47,903

Variance	No acceptable variance.
Comments	• Block 01048891 in 2021 was not included in these numbers as this block was harvested by a third-party operator.

Indicator #19b	Harvest plans designed to lower wildfire risks to communities	Status	Not Assessed (N/A)
Target #19b	Work with MOE on 100% of community wildfire risks as identified by and requested by the Saskatchewan Public Safety Agency (SPSA) or within-FMA communities.	Reporting Cycle	Annual
		Assessment Cycle	5-Year

Category	Year of Measurement										Current Status	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
Number of Areas Identified and Requested by SPSA	0	0	0		Assessment Year					Assessment Year	**0**	**N/A**
Number of Areas Actioned	0	0	0								**0**	**N/A**
% Areas Actioned	N/A	N/A	N/A								**N/A**	**100%**

Variance	Economic feasibility and merchantability are the key criteria when determining if fuel reduction projects can be undertaken. Operators will not be expected to harvest areas that do not meet these criteria.
Comments	• There were no requests for fuel reduction-type projects in 2019, 2020, or 2021 by SPSA or the communities.

Indicator #20	Stakeholder and public engagement (Public Advisory Group meetings)	Status	On Target
Target #20	Organize a minimum of 2 public engagement meetings (e.g., PAG meetings) annually.	Reporting Cycle	Annual
		Assessment Cycle	Annual

Category	Year of Measurement										Cumulative Average	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
PAG Meetings Held	2	1	2								1.5	2

Variance	Acceptable variance is -1 meeting.
Comments	• Only one PAG meeting was held in 2020 due to COVID-related cancellations. This meeting was held remotely on Oct. 22, 2020.

Indicator #21	Spatially identified non-timber resources and forest use activities	Status	On Target
Target #21	On an annual basis, acquire and input into GIS 100% of all known 'special places', non-timber resources and non-timber forest-use activities and produce a thematic map product which can be produced as a single theme or in combination with other map products.	Reporting Cycle	Annual
		Assessment Cycle	Annual

Category	Year of Measurement									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Number of New Additions	0	0	1							
Map Produced?	☑	☑	☑	☐	☐	☐	☐	☐	☐	☐

Variance

No acceptable variance.

Comments

- "Special Places" includes areas of public concern, rare wildlife, traditional use areas, unique landforms, visually sensitive areas, and archaeological/heritage sites.
- Mistik was made aware of 1 new heritage site in 2021. This has been reported in both this indicator, and in Indicator #24.
- See attached Special Places map.

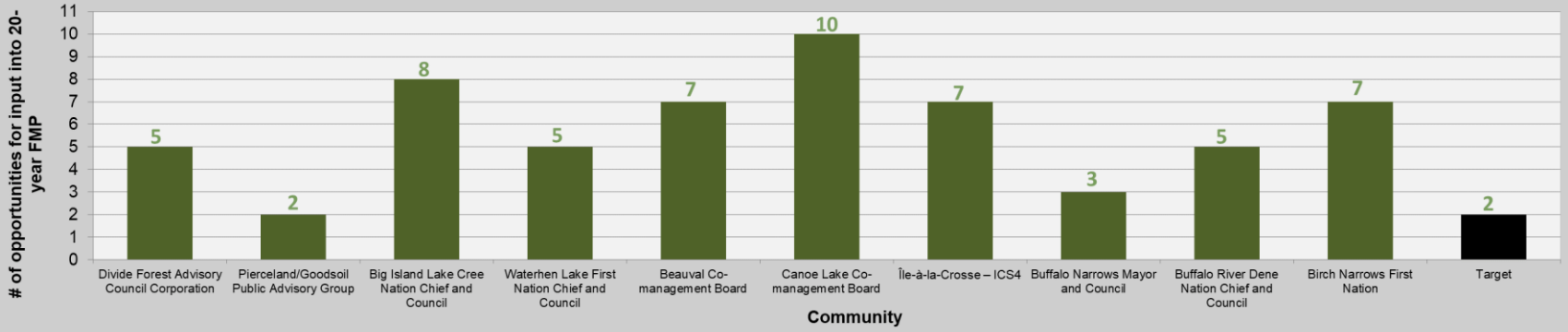
Indicator #22	Harvest operations are proportionally distributed across the FMA	Status	Not Assessed (Monitor)
Target #22	Harvest area by species grouping and Planning Unit will not exceed 50% of the 10-year Forest Estate Modeling outputs in either of the first two 5-year periods.	Reporting Cycle	Annual
		Assessment Cycle	5-Year

Planning Unit	Species Group	Year of Measurement										5-Year Total	% of Target	Target (5-year)	Target (10-year)
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028				
North	H/HS (ha)	0	0	0		Assessment Year					Assessment Year	0	0%	2,754	5,508
	SH (ha)	0	0	0								0	0%	414	828
	S-WS (ha)	0	0	0								0	0%	259	517
	S-Other (ha)	0	0	0								0	0%	2,430	4,859
West	H/HS (ha)	907	773	793								2,473	45%	5,537	11,073
	SH (ha)	18	41	30								88	28%	311	622
	S-WS (ha)	32	10	28								70	36%	194	388
	S-Other (ha)	70	146	130								346	10%	3,495	6,990
Central	H/HS (ha)	851	746	856								2,454	21%	11,551	23,101
	SH (ha)	69	21	51								141	13%	1,086	2,171
	S-WS (ha)	28	20	55								104	15%	677	1,353
	S-Other (ha)	138	78	191								407	6%	7,298	14,595
Divide	H/HS (ha)	707	520	618								1,844	49%	3,727	7,453
	SH (ha)	45	132	81								258	60%	427	854
	S-WS (ha)	115	4	49								169	38%	440	880
	S-Other (ha)	199	151	243								593	29%	2,045	4,089
L&M	H/HS (ha)	56	251	252								559	45%	1,254	2,507
	SH (ha)	52	40	35								127	59%	216	432
	S-WS (ha)	80	51	21								153	106%	144	287
	S-Other (ha)	257	234	241								732	39%	1,890	3,779

Variance	No acceptable variance.
Comments	• A map of the planning units can be found in Appendix A.

	• Note that targets are based on model-derived volumes for each planning unit, not the total amount of Tactical Plan area for each species group, resulting in targets that are stricter in some cases than what is actually sustainable. Therefore, despite the proportionally large % of S-WS harvested in the L&M Planning Unit, it has been demonstrated to the MIT that harvest in this species group is nonetheless occurring within sustainable thresholds. Additional details have been provided in the Supplementary Data submission. Mistik will work with the MIT to refine the reporting of this indicator in order to ensure sustainability of harvest levels while accounting for operational realities.

Indicator #23	Aboriginal community involvement in planning processes	Status	On Target (10/10)
Target #23	Provide a minimum of two opportunities annually for Indigenous communities to have input in Mistik's 20-Year Forest Management Plan processes and implementation. Provide notification to specific co-management/advisory boards annually if no harvesting is planned in their area. This would be used in the case where a group is inactive due to lack of forestry activity in their area and has chosen not to be in regular contact with Mistik/L&M.	Reporting Cycle	Annual
		Assessment Cycle	Annual



Number of Opportunities for Input, by Community	Year of Measurement										Current Status	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
Divide Forest Advisory Council Corporation	7	7	5								5	2
Pierceland/Goodsoil Public Advisory Group *	2	2	2								2	2
Big Island Lake Cree Nation Chief and Council	6	5	8								8	2
Waterhen Lake First Nation Chief and Council	2	3	5								5	2
Beauval Co-management Board	6	8	7								7	2
Canoe Lake Co-management Board	8	7	10								10	2
Île-à-la-Crosse – ICS4	4	5	7								7	2
Buffalo Narrows Mayor and Council	2	2	3								3	2
Buffalo River Dene Nation Chief and Council	4	3	5								5	2
Birch Narrows First Nation	1	1	7								7	2

Variance	No acceptable variance.
Comments	• *The Pierceland/Goodsoil advisory group voluntarily has disbanded and representatives from the area attend the PAG and open houses held for operating plan review each fall. • The number of opportunities for input for the Canoe Lake Co-management Board includes Canoe Lake Cree First Nation and the communities of Jans Bay, and Cole Bay who are also represented on the co-management board.

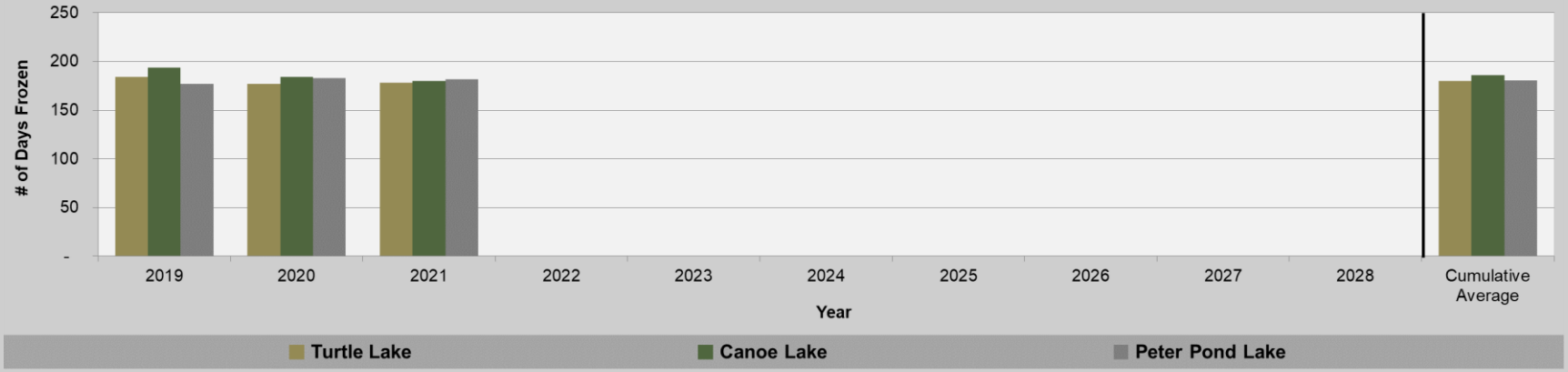
Indicator #24	Spatial Identification and protection of culturally significant Heritage and Indigenous sites	Status	On Target
Target #24	On an annual basis, acquire and input into GIS 100% of all known locations of cultural, heritage or traditional Indigenous forest values and develop operating plans that protect these known sites of heritage, cultural and Indigenous forest values.	Reporting Cycle	Annual
		Assessment Cycle	5-Year

Category	Year of Measurement									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Number of New Additions	4	0	1		Assessment Year					Assessment Year
Map Produced?	☑	☑	☑	☐	☐	☐	☐	☐	☐	☐

Variance	No acceptable variance.
Comments	• Note: Mistik will keep a spatial dataset of known special places; however, due to confidentiality issues, specific details on type may not be available to the general public. • One new heritage site was identified in 2021. • See attached Special Places Map.

#25	Impacts of Climate Change on the Mistik FMP Area	Status	N/A
#25	1. The number of "days frozen" annual for three important lakes in the FMP area 2. Operational days lost due to "abnormal" weather/environmental conditions	Reporting Cycle	N/A
		Assessment Cycle	N/A

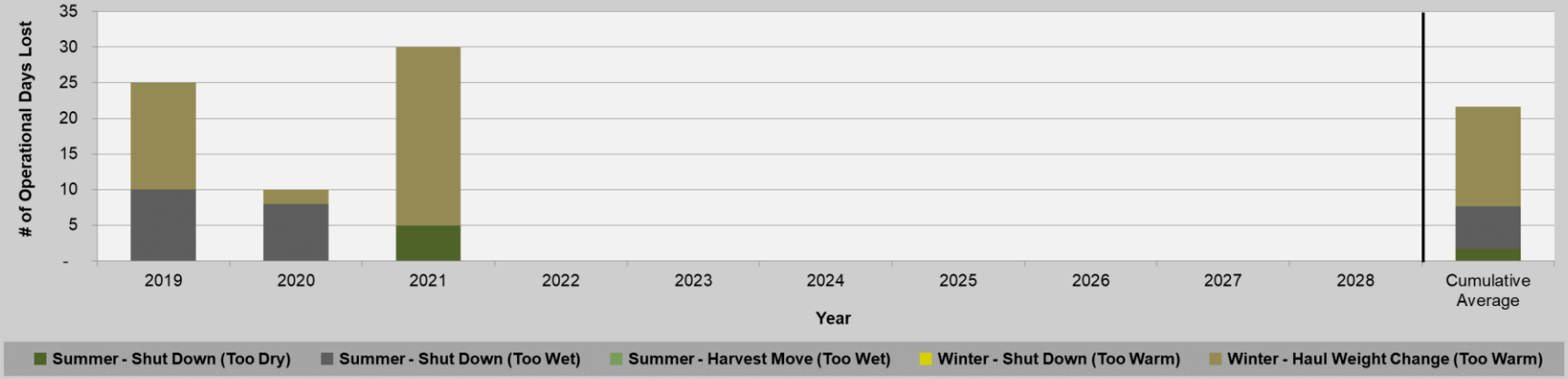
Part 1 – Annual Days Frozen (Selected Lakes)



Category	Year of Measurement										Cumulative Average
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Number of Days Frozen (Turtle Lake)	184	177	178								**180**
Number of Days Frozen (Canoe Lake)	194	184	180								**186**
Number of Days Frozen (Peter Pond Lake)	177	183	182								**182**
Variance	N/A										
Comments	• The three lakes chosen are all locally important for fishing/sustenance and recreation within the FMP area. Local people near each lake assist Mistik with monitoring ice conditions. The trend over time may show a decline in each lake's total number of "frozen days" per year which has impacts to the local people. • "Days frozen" begin when the entire lake is frozen and end when all the ice is gone. • This indicator is voluntary monitoring commitment described in Mistik's 2019 20-Year Forest Management Plan, Volume III, Section 3.8 related to a study focusing on the impacts of climate change on sustainable forest management on the Mistik FMP area[1]. As such, there are no associated targets. [1]*Andrews-Key, S. A. 2018. Vulnerability and Adaptation to Climate Change in Sustainable Forest Management and the Forest Industry in Saskatchewan. (Unpublished doctoral dissertation). University of Saskatchewan, Saskatoon, Saskatchewan, Canada.*										

#25	Impacts of Climate Change on the Mistik FMP Area	Status	N/A
#25	1. The number of “days frozen” annual for three important lakes in the FMP area 2. Operational days lost due to “abnormal” weather/environmental conditions	Reporting Cycle	N/A
		Assessment Cycle	N/A

Part 2 – Operational Days Lost due to Abnormal Environmental Conditions



Season	Category	Year of Measurement										Cumulative Average
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Summer	Harvest Shut Down (Too Dry)	0	0	5*								2
	Harvest Shut Down (Too Wet)	10	8	0								6
	Harvest Moved (Too Wet)	0	0	0								0
Winter	Harvest Shut Down (Too Warm)	0	0	0								0
	Haul Weight Change (Too Warm)	15	2	25								14
Total		25	10	30								22
Variance		N/A										

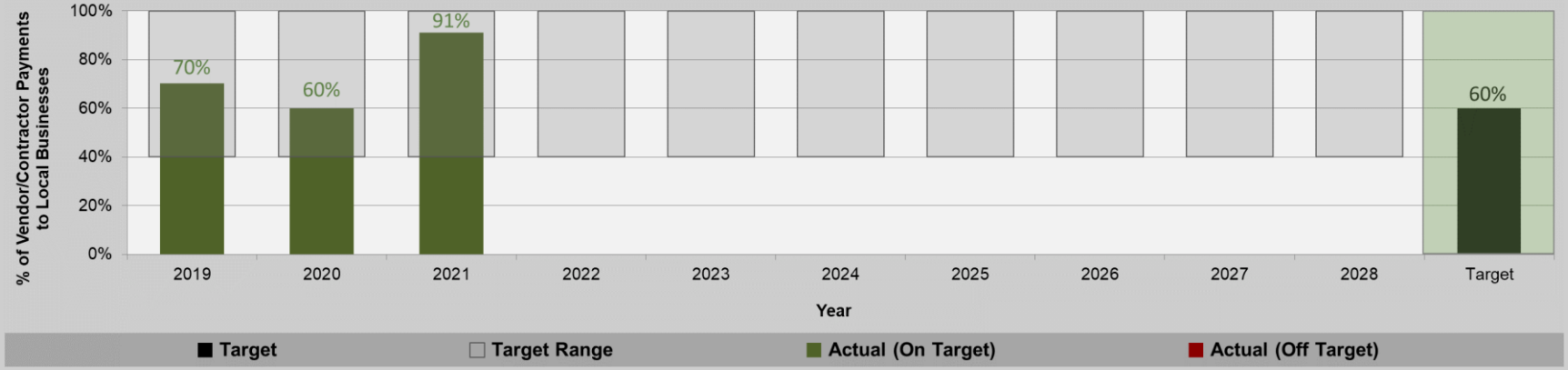
Comments	• Mistik monitors the following (number of days):
	  ○ In Summer (Start-up until October 31):
	  ▪ Harvesting shut-downs due to extremely dry (high fire hazard) or extremely wet conditions.
	  ▪ Harvesting moves directly related to wet conditions.
	  ○ In Winter (November 31 until February 28) – note that in the FMP, winter dates were defined as November 1 – March 31. Mistik does not consider warmer temperatures in March abnormal, and as such does not record these days.
	  ▪ Harvesting shut-downs due to warm temperatures.
	  ▪ Winter haul weight changes due to warm temperatures
	• This indicator is voluntary monitoring commitment described in Mistik's 2019 20-Year Forest Management Plan, Volume III, Section 3.8 related to a study focusing on the impacts of climate change on sustainable forest management on the Mistik FMP area[1]. As such, there are no associated targets.
	
	** There were an additional 16 days in July with bunching and skidding limited to night shift due to fire risk.*
	
	[1]*Andrews-Key, S. A. 2018. Vulnerability and Adaptation to Climate Change in Sustainable Forest Management and the Forest Industry in Saskatchewan. (Unpublished doctoral dissertation). University of Saskatchewan, Saskatoon, Saskatchewan, Canada.*

Indicator #26a	Contributions to Co-management Boards	Status	Not Assessed (On Track)
Target #26a	On an annual basis, contribute financially to co-management boards according to the terms and conditions of co-management agreements.	Reporting Cycle	Annual
		Assessment Cycle	5-Year

Category	Year of Measurement									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Contributions Met?	☑	☑	☑	☐	☐	☐	☐	☐	☐	☐

Variance	Acceptable variance is 20% of the 5-year target, based on the terms of the agreement.
Comments	• As part of Mistik's annual financial audit, an assessment is made on co-management fee payments. The assessment is done to determine if the payment amounts were correctly calculated based on the fee payment schedule.

Indicator #26b	% of total annual vendor / contractor payments made to local businesses	Status	Not Assessed (On Track)
Target #26b	On an annual basis, 60% of total annual vendor/contractor payments made by Mistik & L&M will be to businesses from local communities in, and adjacent to, the FMA area.	Reporting Cycle	Annual
		Assessment Cycle	5-Year



Category	Year of Measurement										Current Status	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
% Vendor Payments to Local Businesses	70.2%	60.0%	91.0%		Assessment Year					Assessment Year	91.0%	60%

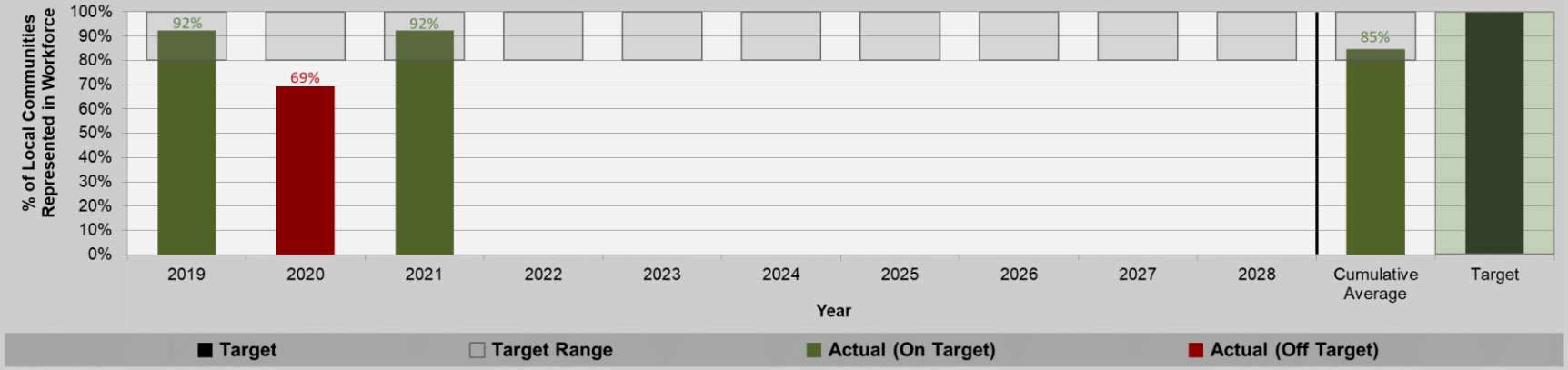
Variance

Acceptable variance is 20% of total annual vendor/contractor payments (acceptable range: 40% - 100%).

Comments

- The following communities are considered “local”: Michel Village, St. Georges Hill, Dillon, Buffalo Narrows, Canoe Lake, Jan’s Bay, Cole Bay, Beauval, Île-à-la-Crosse, Waterhen, Meadow Lake, Glaslyn (L&M), and Spiritwood (L&M).

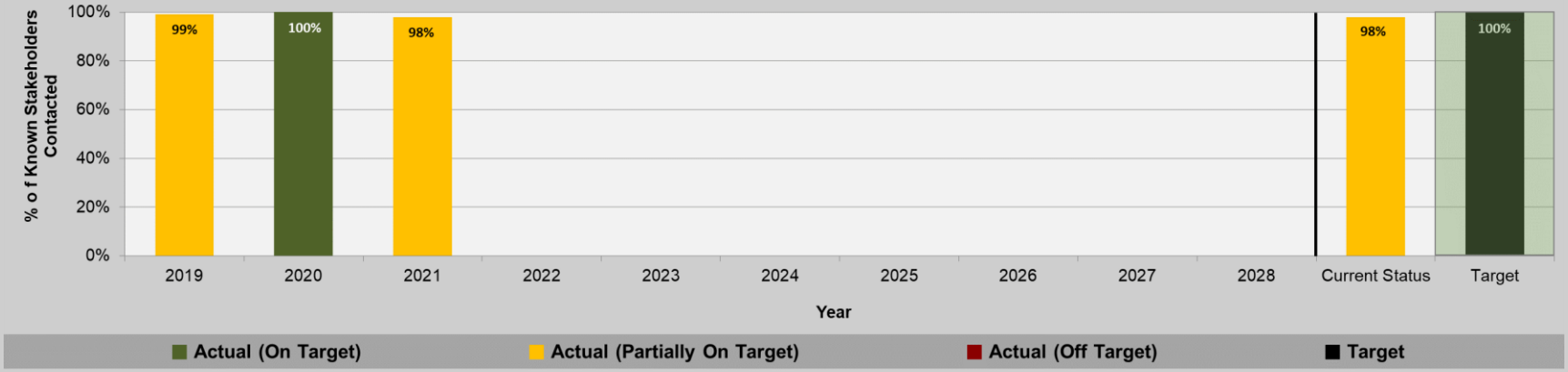
Indicator #26c	Percent of 'within-FMA area' communities represented in the workforce	Status	Not Assessed (On Track)
Target #26c	100% of 'within-FMA area' communities shall be represented in the L&M and Mistik-related workforce.	Reporting Cycle	Annual
		Assessment Cycle	5-Year



Category	Year of Measurement										Cumulative Average	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
% of Local Communities Represented in Workforce	92%	69%	92%		Assessment Year					Assessment Year	85%	100%

Variance	Acceptable variance is 20% (acceptable range is 80% - 100% of 'within-FMA area' communities).
Comments	• The following communities are considered "local": Michel Village, St. Georges Hill, Dillon, Buffalo Narrows, Canoe Lake, Jan's Bay, Cole Bay, Beauval, Île-à-la-Crosse, Waterhen, Meadow Lake, Glaslyn (L&M), and Spiritwood (L&M). • 12 out of 13 communities were represented in 2021. Limited operations in the north of the FMA resulted in limited opportunities for some communities.

Indicator #27	Stakeholder Engagement	Status	On Target
Target #27	Send letters annually to 100% of known "within-FMP area" stakeholders in areas where harvesting is proposed for the upcoming operating year. The letters will notify the stakeholder of Mistik/L&M plans to operate in their area and provide the opportunity for the individual to have input in planning process.	Reporting Cycle	Annual
		Assessment Cycle	Annual



Category	Year of Measurement										Current Status	Target
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028		
# of Known Stakeholders	108	117	122								122	N/A
# with Contact Initiated by Letter	102	117	118								118	N/A
# with Contact Initiated by Other Means	5	0	2								2	N/A
% of Known Stakeholders Contacted	99%	100%	98%								**98%**	**100%**

Variance	No acceptable variance.
Comments	• It should be noted that letters represent only a small portion of the ways Mistik engages local stakeholders. • Throughout each operating year, a number of new stakeholders are added. An example is when an existing business is purchased by someone new. This transaction may take place outside of the timeframe when the operating plan is being developed (i.e., not in the fall), so an operating plan engagement letter is not sent at that time. Mistik contacts new stakeholders as we are made aware of them and reviews plans for the current/upcoming operating year. New stakeholders receive engagement letters for the next operating plan and going forward from that point. • Two additional cabin owners were identified through co-management processes in 2021. Mistik did not operate in the operating areas where the cabins were located. The cabin owners will be contacted for future plans.

5 FMP STANDARD REPORTING REQUIREMENTS

Reporting requirements, in addition to the indicators above, are outlined in the *Saskatchewan Environmental Code – Forest Management Planning Standard* (Section 1-54).

5.1 MANAGEMENT IMPLEMENTATION TEAM (MIT)

The MIT met February and March of 2022 to begin the process of amending the FMP to gain alignment with the *Range Plan for Woodland Caribou in Saskatchewan (SK2 West Caribou Administration Unit).* The MIT will be engaged in the presentation of the final 2021-22 annual report in May 2023. Going forward, the MIT will be engaged as often as necessary with respect to implementation of the forest management plan and annual reports.

5.2 ANNUAL REPORT CONTENT

5.2.1 VOIT Tracking and Monitoring

VOIT updates in this annual report include an assessment of each target and notes on deviations and why they are occurring. Supporting data is either provided in this document or to the ministry separately (for confirmation/analysis). In some cases, the data is confidential (financial or stakeholder-related) and therefore not all background data is included in this document.

Mechanisms employed in Mistik monitoring processes include several systems:

- The environmental management system (EMS) and certification processes include standard operating procedures, annual staff and contractor training, a self-inspection program and report, and an external audit. The EMS also includes procedures for regular (typically daily) monitoring of various operational activities and administrative processes.
- There are several databases that are maintained that contribute to VOIT monitoring including GIS and associated data, tracking of silviculture and indicator-related information, stakeholder commitments, operating plan approval and amendment conditions, watercourse crossing activity and other certification, operational and planning-related data. Some of this information is provided to the ministry at various required intervals (e.g., annual data submission, monthly stakeholder commitments, etc.).

- Stakeholder and public engagement records are maintained at Mistik. As many of these contain confidential information, they are not included in this document. The records are made available to the ministry and external certification auditors. A summary of public concerns can be found in Appendix A. Mistik posts an advertisement in the local newspaper each year during operating plan development (fall) inviting the public to have input in the planning process. Mistik also has ongoing, regular engagement with stakeholders throughout the operating year.
- External certification audit results are provided to Mistik and can also be found on the Mistik website.

5.2.2 FMP Registry

The status of each of Mistik's 2019 20-Year FMP Commitments is as follows.

Mistik 2019 20-Year Forest Management Plan Commitments (Volume III Registry Items)			
Commitment	**Measurement Criteria**	**Schedule for Completion**	**Annual Update**
Public Involvement (Public Engagement Process)			
Mistik will update the Mistik Register of Public Issues and Concerns on an annual basis	Evidence of the review process and publicly available Register	Annual implementation and reporting (August 31)	Registry has been updated. There were no public complaints made to Mistik during 2021/22. Register of public concerns can be found in Section A4.
Non-Timber Values			
Identify visually sensitive areas (VSA) and maintain specified visual quality objectives (VQO).	Evidence in the annual report of the identification of visually sensitive areas and specified visual quality objectives	Annual implementation and reporting (August 31)	VSA are inspected based on established VQO's during harvest operations, as part of the annual external audit and the EMS self-inspection process.
Maintain database of watercourse crossings	Mistik/L&M GIS layer and operating plans maps to illustrate location, type, and size of crossing	GIS layer and maps to be updated annually.	Mistik's GIS is updated on a regular basis as watercourse crossings are installed and removed. Data is provided to the ministry annually in the operating plan and under the Forest Data Submission Standard.

Mistik 2019 20-Year Forest Management Plan Commitments (Volume III Registry Items)			
Commitment	**Measurement Criteria**	**Schedule for Completion**	**Annual Update**
Natural Disturbance			
With respect to an incipient outbreak of an invasive insect, Mistik will collaborate with the Ministry of Environment in mapping, monitoring, and assisting in facilitating a control program	Resources allocated to mapping, monitoring, and assisting with a control program	As required.	There have been no reported invasive insect outbreaks on the Mistik or L&M FMA in 2021/22
Conformance with the Tactical Plan			
With respect to independent operators, Mistik will collaborate with Saskatchewan Ministry of Environment to obtain annual records.	Independent operator "report" (geospatial and attribute data) provided to Mistik by MoE on an annual basis. Independent operator harvest area records retained in Mistik's GIS system.	Annual implementation and reporting (August 31).	Independent operator report for 2021/22 was provided to Mistik on February 24, 2023.

Additionally, the status of Mistik's 2019 FMP approval conditions, is as follows.

Mistik 2019 20-Year Forest Management Plan Approval Conditions	
Condition	**Current Status**
(a) Proceed with the development in accordance with the FMP	Implementation of the FMP began effective April 1, 2019.
(b) Provide notification of any changes	No notifications of changes have been submitted to the ministry as of the submission of this annual report.
(c) Follow the requirements of *The Forest Resources Management Act,* other laws, and the Saskatchewan Environmental Code	Results are reported annually and can be found in Section 5.2.4.

Mistik 2019 20-Year Forest Management Plan Approval Conditions	
Condition	**Current Status**
(d) Adapt the FMP based on the direction provided by the Range Plan for Woodland Caribou in Saskatchewan	The plan amendment was submitted to the ministry for review in January 2023 and was approved effective April 1, 2023.
(e) Adapt Silvicultural Ground Rules as better knowledge becomes available	This was done as part of the amendment submitted to the ministry in January 2023.
(f) Complete a study to assess average historical fire-cycle on the Mistik Management Ltd. and L&M Wood Products (2018) Limited Partnership FMA areas within seven years of this approval	This study has not been finalized.
(g) Complete a study to assess species specific softwood sawlog degrade factors on the Mistik Management Ltd. and L&M Wood Products (2018) Limited Partnership FMA areas within seven years of this approval	This study has not been initiated yet.

5.2.3 Silviculture Effectiveness Monitoring

Status of regenerated areas. All renewal activity and regeneration survey data are provided to the ministry annually through the Forest Data Submission Standard process. See also Target #9 (“Post-Harvest Areas are Successfully Regenerated”), as well as Silviculture Effectiveness Indicators #1-3, located in Appendix A.

Areas where strategies and implementation techniques are inadequate or need improvement. Mistik and L&M have a very high success rate of harvested blocks achieving required Free to Grow status (see Target #9 Post Harvest Areas are Successfully Regenerated). Strategies to improve the regeneration in any “not sufficiently regenerating” (NSR) areas are provided in Mistik’s annual operating plans. Currently all NSR areas are due to fires that occurred in 2015. These areas have had field inspections and are showing good signs of natural regeneration in the burned areas. They are scheduled for a Free-to Grow re-survey in 2029. There are no indications that Mistik or L&M should change the methods used for regenerating harvested areas at this time.

Polygons are on the yield trajectories that are identified in the associated SGR. Silviculture effectiveness indicators can be found in Appendix Section A5. These indicators measured observed Free-to-Grow surveys against thresholds identified in Table 14-2 of the Mistik 2019 20-Year Forest Management Plan – Silviculture Ground Rules. These silviculture indicators show that the regenerating mixedwood areas surveyed had both hardwood and softwood densities well above the targets set in the SGRs (Silviculture Effectiveness Indicators #1 and #2). Furthermore, both softwood and hardwood heights in all regenerating areas surveyed were well above the thresholds determined in the SGRs (Silviculture Effectiveness Indicators #3 and #4). It can be determined based on these indicators that the areas surveyed were either consistent with, or exceeding, the trajectories assumed in the Silviculture Ground Rules.

Assumptions in the forest estate modelling. The Silviculture Ground Rules provide assumptions and thresholds for regenerating stand performance used in the Forest Estate Modelling. Performance relative to these thresholds can be found in Appendix Section A5 (see section iii. above for more information). Additionally, FMP Indicators #5, #6, and #9 provide further verification of Forest Estate Modelling assumptions, including whether a.) the softwood component of regenerating stands is maintained, b.) regenerating area is projected to meet targets for future forest composition, and c.) regenerating area meets stocking requirements.

Renewal tracking log. Mistik tracks renewal using several tools including the GIS system and regeneration survey database. All renewal activity and survey data are provided to the ministry annually through the Forest Data Submission Standard process. The data provided includes year of harvest, size of area harvested, renewal treatment applied (planting, leave for natural, site preparation, etc.), and regeneration survey results. NSR area renewal strategies are addressed in Mistik's annual operating plans.

Pre-harvest cover species group and projected SGR classification for all blocks with a Free-to-Grow survey are also provided in the Supplementary Data submission for Indicator #6.

5.2.4 Operational Implementation of the FMP

The following table summarizes non-compliances in 2021/22. Note that Mistik inspections may include items not in compliance with internal administrative processes.

Mistik 2021-2022 Annual Report – Non-Compliances									
Target #/Activity	Mistik Inspection Data			Ministry Identified Non-Compliances (Enforcement Action Taken)					
	# of Inspections	# In Compliance	Not in Compliance	Total Items Non-Compliant	No Action Taken	Voluntary Compliance Opportunity	Notice of Violation	Stop Work Order	Administrative Penalty
Target #14 (Utilization)	7	7	0	0	0	0	0	0	0
Target #16 (Harvesting)	221	216	5	10	7	3	0	0	0
Target #17 (Crossings)	38	37	1	4	4	0	0	0	0
Other - Camps*	Incl. with #16	N/A	N/A	2	1	0	1	0	0
Other - EMS	7	7	0	N/A	N/A	N/A	N/A	N/A	N/A
Other - Roads*	Incl. with #14	N/A	N/A	2	0	2	0	0	0
Total	**271**	**265**	**6**	**18**	**12**	**5**	**1**	**0**	**0**

*Ministry data has included any non-compliance items in the "VOIT#16 Harvest" category

Non-compliances are either identified through a ministry inspection, or they are self-reported by Mistik to the ministry upon discovery. The following actions were taken to address these non-compliances.

1. Mistik received two non-compliances for not spreading or burning slash within the 2-year timeframe. The first resulted in no further action being taken, the second resulted in a voluntary compliance opportunity. Overdue burning was completed.
2. There were three non-compliances related to in-block road reclamation not being completed within two years. The first two resulted in no further action being taken, the third resulted in a voluntary compliance opportunity. Roads were reclaimed in the fall of 2021.
3. In one block, a road closure (berm) was installed without authorization where road reclamation should have been done as outlined in the OP. Mistik received no further action being taken for these. Road was reclaimed and berm was removed.
4. An IBR was found to have inadequate kilometer markers. No further enforcement action was taken for this. Additional signs were put up.
5. One block was found to have incomplete dwarf mistletoe sanitation (all stems over 1m in height were not removed). Mistik received a voluntary compliance opportunity for this. Remaining stems over 1m were felled in the harvest area.
6. Four non-compliances were identified related to watercourse crossings. Two were related to reporting activity to the ministry and the other two were related to inadequate erosion protection and slopes at one crossing location. Mistik received no further enforcement action for these items. Updates were made to internal systems to ensure adequate and timely crossing activity reporting. Additional work was done at the crossing to make erosion protection and slopes compliant with provincial standards.
7. There were two non-compliances related to sewage and grey water disposal at temporary work camps. Mistik received no further enforcement action being taken for the first instance, and a notice of violation for the second. Mistik has increased the frequency of camp inspections and the contractor improved their equipment for handling sewage and grey water containment/disposal.

8. Two voluntary compliance opportunities were given for having staged wood in the harvest area for over 90 days and not scaling the same wood within 90 days of harvest. The wood was not hauled and an extension for these two activities was not requested prior to the end of the operating year. The wood was hauled in the fall of 2021.

APPENDIX A: SUPPORTING DATA

TABLE OF CONTENTS

A1. HARVESTED BLOCK SUMMARY

The following table lists the harvested blocks included in this report.

Mistik 2021-2022 Annual Report – Harvested Blocks					
Opening Number	Operating Year	Area (ha)	Opening Number	Operating Year	Area (ha)
01010091	2021-2022	63.0	**04021018**	2021-2022	72.2
01010092	2021-2022	64.1	**04021022**	2021-2022	12.2
01012012	2021-2022	48.8	**04040002**	2021-2022	125.5
01012028	2021-2022	81.2	**04040006**	2021-2022	179.3
01012029	2021-2022	6.2	**04040008**	2021-2022	101.9
01012036	2021-2022	74.3	**04040012**	2021-2022	191.3
01014016	2021-2022	172.0	**07012005**	2021-2022	69.6
01026093	2021-2022	170.7	**07015021**	2021-2022	88.6
01036020	2021-2022	319.1	**08011005**	2021-2022	71.5
01048891	2021-2022	3.2	**08011008**	2021-2022	101.3
02011028	2021-2022	206.7	**08015017**	2021-2022	68.5
02017016	2021-2022	63.2	**08025002**	2021-2022	45.4
02017018	2021-2022	11.4	**08025006**	2021-2022	25.4
02017020	2021-2022	25.2	**85003078**	2021-2022	93.0
02017021	2021-2022	25.6	**85004077**	2021-2022	43.5
02017023	2021-2022	118.3	**85004097**	2021-2022	35.7
03004001	2021-2022	105.6	**85006078**	2021-2022	155.5
03004007	2021-2022	72.7	**85007021**	2021-2022	82.1
03004010	2021-2022	88.1	**85007022**	2021-2022	90.2
03010017	2021-2022	268.8	**85007023**	2021-2022	52.0
04010011	2021-2022	8.1			
Total					**3,701.4**

A2. PLANNING UNITS (MAP)

Planning Units

A3. MANAGEMENT UNITS (MAP)

Management Units

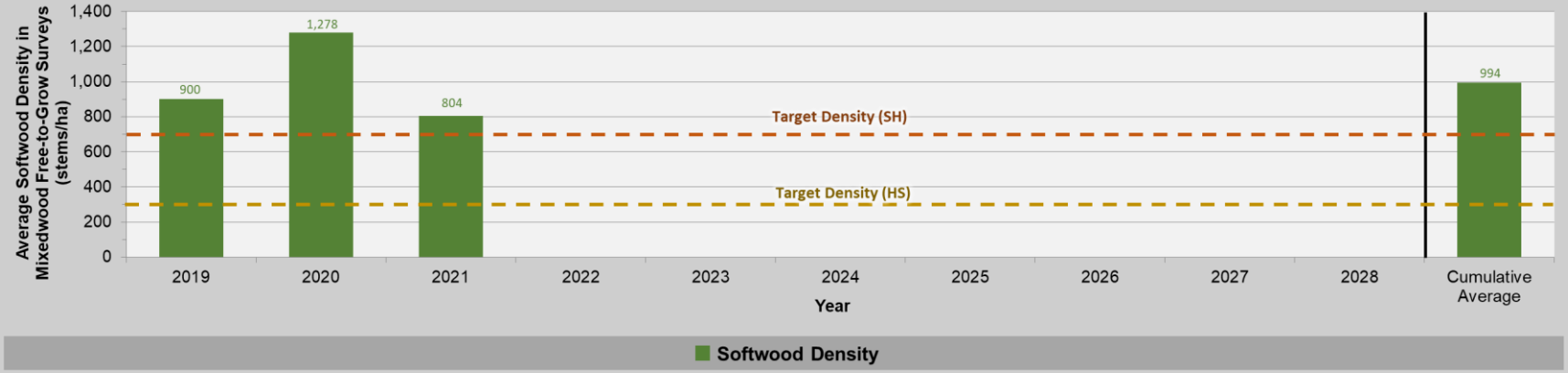
A4. REGISTER OF PUBLIC CONCERNS

Mistik 2019 20-Year Forest Management Plan							
Register of Issues and Concerns related to the Mistik or L&M FMA							
No.	Name and Affiliation	Community Affiliation	Forum and Date	Issue Raised	Mistik Response and Proposed Action Plan	Completion Date of Proposed Action	Other Comments

Note: There were no new additions to the register of public concerns in 2021

A5. SILVICULTURE EFFECTIVENESS INDICATORS

Silviculture Indicator #1	Average Softwood Density in Mixedwood Blocks (14 Years Post-Harvest)	Reporting Cycle	Annual

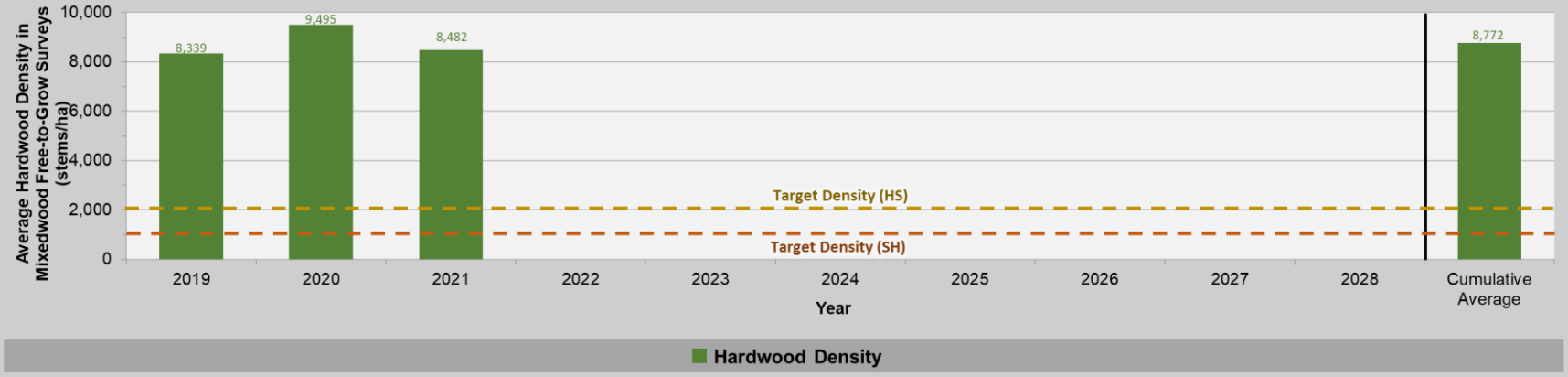


Category	Year of Measurement										Cumulative Average
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Average Softwood Density (stems/ha)	900	1,278	804								**994**

Comments

- Surveys reported include any Free-to-Grow surveys conducted in 2021 that were assigned a projected mixedwood SGR classification (SH or HS) at rotation age. See Target #6 for more information.
- Densities of 300 stems/ha and 700 stems/ha are provided as target softwood density thresholds for HS and SH stands, respectively, in Mistik's 2019 20-Year FMP Silviculture Ground Rules.

Silviculture Indicator #2	Average Hardwood Density in Mixedwood Blocks (14 Years Post-Harvest)	Reporting Cycle	Annual



Category	Year of Measurement										Cumulative Average
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Average Hardwood Density (stems/ha)	8,339	9,495	8,482								**8,772**

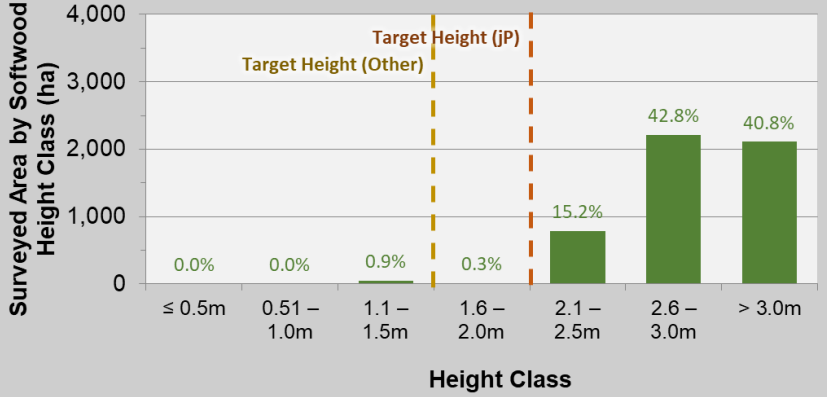
Comments

- Surveys reported include any Free-to-Grow surveys conducted in 2021 that were assigned a projected mixedwood SGR classification (SH or HS) at rotation age. See Target #6 for more information.
- Densities of 1,000 stems/ha and 2,000 stems/ha are provided as target hardwood density thresholds for SH and HS stands, respectively, in Mistik's 2019 20-Year FMP Silviculture Ground Rules.

Silviculture Indicator #3	Average Softwood Tree Heights (14 Years Post-Harvest)	Reporting Cycle	Annual

Average Softwood Height

Area by Softwood Height Class



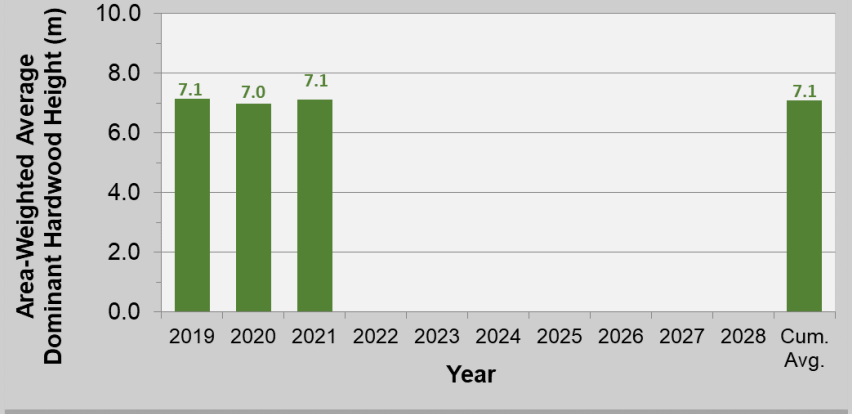
Softwood Height Class	Year of Measurement										Cumulative Average
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
% Area ≤ 0.5m	0%	0%	0%								**0.0%**
% Area 0.51 – 1.0m	0%	0%	0%								**0.0%**
% Area 1.1 – 1.5m	0%	0.5%	2.4%								**0.9%**
% Area 1.6 – 2.0m	0.8%	0%	0%								**0.3%**
% Area 2.1 – 2.5m	13.8%	24.9%	6.5%								**15.2%**
% Area 2.6 – 3.0m	57.1%	26.4%	43.3%								**42.8%**
% Area > 3.0m	28.4%	48.3%	47.8%								**40.8%**
Area-Weighted Average Height (m)	3.2	3.7	3.6								**3.5**

Comments

- Softwood heights refer to the average height of the dominant softwood species within a surveyed area.
- Heights of 2m and 1.5m are provided as target heights for Jack Pine and other softwood species, respectively, in Mistik's 2019 20-Year FMP Silviculture Ground Rules.

Silviculture Indicator #4	Average Hardwood Tree Heights (14 Years Post-Harvest)	Reporting Cycle	Annual

Average Hardwood Height



Area by Hardwood Height Class

Hardwood Height Class	Year of Measurement										Cumulative Average
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
% Area ≤ 2.0m	0%	0%	0%								**0%**
% Area 2.1 – 3.0m	0%	0%	0%								**0%**
% Area 3.1 – 4.0m	0%	0%	0%								**0%**
% Area 4.1 – 5.0m	1.6%	2.0%	0.8%								**1.5%**
% Area 5.1 – 6.0m	14.7%	12.3%	12.7%								**13.4%**
% Area 6.1 – 7.0m	39.4%	55.8%	36.1%								**43.4%**
% Area > 7.0m	44.4%	29.9%	50.5%								**41.7%**
Area-Weighted Average Height (m)	7.1	7.0	7.1								**7.1**

Comments

- Hardwood heights refer to the average height of the dominant hardwood species within a surveyed area.
- A height of 3m is provided as a target for hardwood species in Mistik's 2019 20-Year FMP Silviculture Ground Rules.

A6. HARVEST EVENTS (SUMMARIES)

The tables below indicate the status of harvest events on the Mistik FMA as of the 2021/22 operating year. Events are only considered “completed” if all harvesting, silviculture, and reclamation activities have been completed. Six events were considered “complete” in 2021/22.

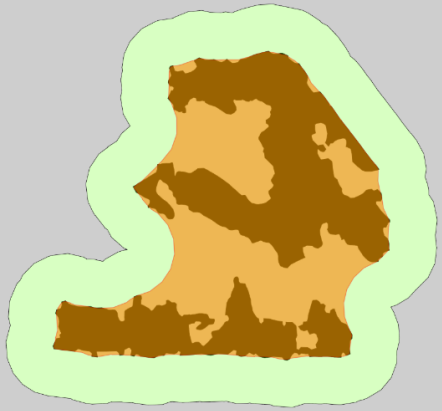
The following figure illustrates the process used to generate the boundaries of harvest events and retention.

Harvest Events – Process

The process to determine harvest "events" is as follows:

Step 1: Cutblocks (black) that are harvested within the given 10-year period are buffered outwards by 250m (blue).

Step 2: Buffers are merged (green).

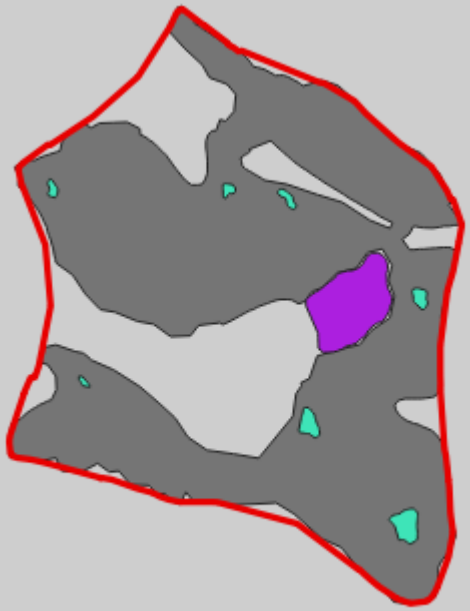


Step 3: Resultant polygon (green) is buffered inwards by 250m (orange).

Step 4: Resulting polygon (orange) is considered the event boundary.

Harvest Event Retention – Process

The process to determine retention within harvest events is as follows:



Harvest cut block (grey) boundaries are generated manually using high-resolution photography to complete cutover updates after harvest. Event boundaries (red) are generated using the buffering rules as per the FMP standard (described above). Polygons of insular (green) and proximal (purple) retention are generated manually by reviewing cutover update photography, pre-harvest photography, SFVI inventory, merchantability layers, and other spatial data as required using GIS software.

"Retention" for this process is defined as un-harvested area that meets the following criteria:

a.) Within the harvest event boundary (red), both inside and outside of cut block boundaries (grey).

b.) Contains standing timber that is reasonably representative of that harvested within the surrounding cut block(s).

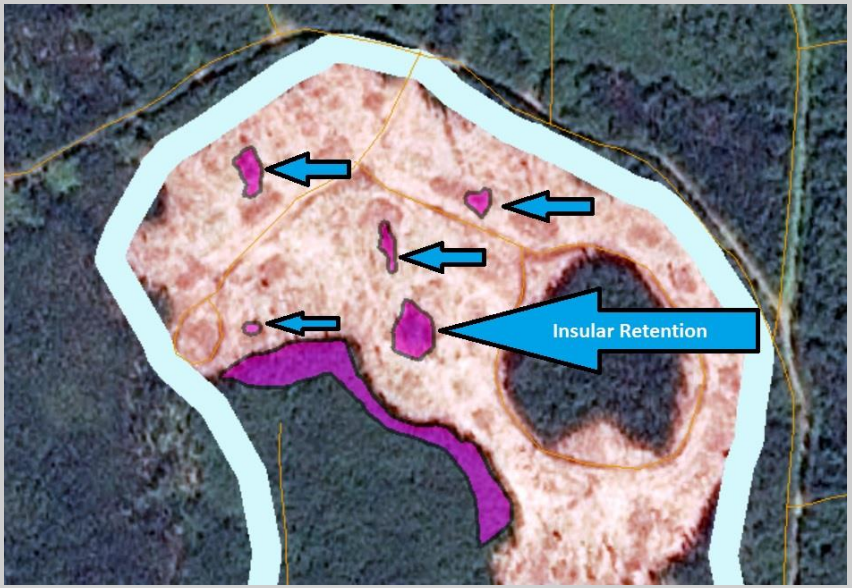
c.) Is otherwise harvestable based on ground conditions, topography, and any other operational factors (e.g., is not overly wet, steep, etc.).

d.) Meets all other requirements for retention as per Mistik's 2019 Forest Management Plan and all other operational requirements.

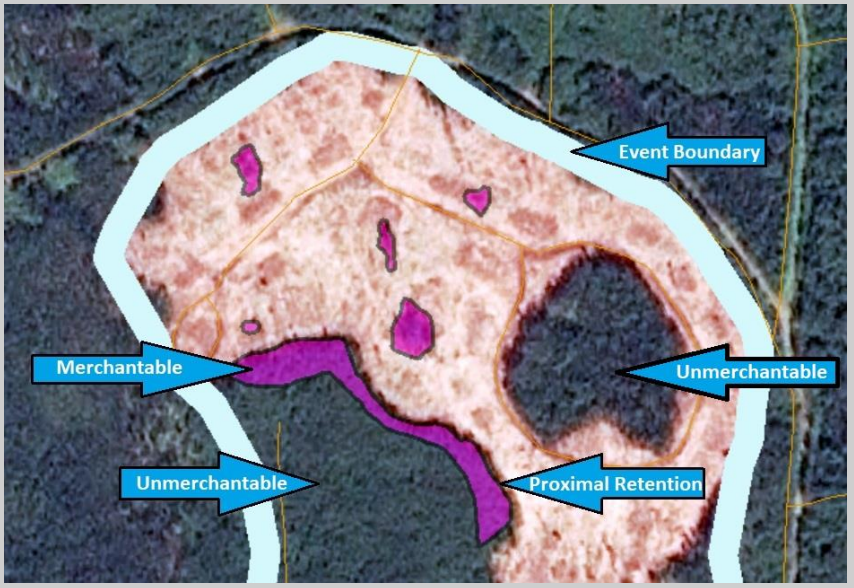
"Insular" retention is defined as those patches within a harvest event that also fall within a harvested cut block boundary.

"Proximal" retention is defined as those patches that are adjacent to and/or not within a harvested cut block boundary.

Example of insular retention:



Example of proximal retention:



Note that while this process is completed manually for harvest events in the 2021/22 timber year, Mistik is currently developing methodology to complete this retention delineation in a partially or fully automated manner, using updated inventory data.

Additionally, the following tables summarize the number of completed events, and details of each event, including in-progress events. Note that these are updated on an annual basis based on actual harvest boundaries and observed activities, and that all harvested areas reported only include area operated under Mistik's 2019 Forest Management Plan (i.e., harvested in the 2019/20 operating year or later).

Mistik 2019-2028 Harvest Events (Summary)		
Year	**Events Completed (#)**	**% Events Completed in 10 Years or Less**
2019	0	N/A
2020	3	100%
2021	6	100%
2022		
2023		
2024		
2025		
2026		
2027		
2028		
Total	**9**	**100%**

Mistik 2019-2028 Harvest Events											
Event No.	General Area	Status	OP Year Event Started	OP Year Event Completed	Total Years Open	Area Harvested* to Date (ha)	Planned (T1/T2) Harvest Area (ha)	Completed Events			
								Total Area (ha)	Harvested Area (ha)	Total Retention %	Insular Retention %
TA282	Beauval Pastures	Closed	2019/20	2021/22	2	189.6	229.0	352.7	189.6	8.0%	4.1%
TA276	Keeley River Crossing	Closed	2019/20	2021/22	2	134.2	173.4	223.6	134.2	5.1%	1.8%
TA271	Pringle Lake	Closed	2020/21	2021/22	1	83.1	98.8	117.2	83.1	5.2%	0.6%
TA150	Musk Creek	Closed	2020/21	2021/22	1	38.7	52.4	56.2	38.7	5.4%	2.0%
TA055	Lavalle	Closed	2020/21	2021/22	1	84.4	84.2	91.8	84.4	6.9%	3.6%
TA002	Helene West	Closed	2020/21	2021/22	1	53.5	76.1	93.6	53.5	3.8%	1.1%
TA252	Booth Bay Road	Closed	2019/20	2020/21	1	16.9	18.5	23.6	16.9	6.9%	1.4%
TA249	Booth Bay Road	Closed	2019/20	2020/21	1	60.3	67.6	100.7	60.3	7.9%	1.2%
TA058	Rat Lake	Closed	2017/18	2020/21	3**	1,663.7	1,900.1	2,296.30	1,663.70	4.8%	1.5%
TA005	Helene South	Open	2019/20	TBD	TBD	571.8	2,711.9	TBD	TBD	TBD	TBD
TA026	Burness East	Open	2019/20	TBD	TBD	981.1	9,055.7	TBD	TBD	TBD	TBD
TA042	Divide/L&M	Open	2019/20	TBD	TBD	1,267.0	28,213.0	TBD	TBD	TBD	TBD
TA115	9 Mile Pine	Open	2019/20	TBD	TBD	550.0	6,736.7	TBD	TBD	TBD	TBD
TA118	Gold Lake	Open	2019/20	TBD	TBD	790.5	8,127.1	TBD	TBD	TBD	TBD
TA177	Mallard	Open	2019/20	TBD	TBD	278.4	4,556.4	TBD	TBD	TBD	TBD
TA209	Low Creek	Open	2019/20	TBD	TBD	1,421.0	3,471.7	TBD	TBD	TBD	TBD
TA004	Moose Country	Open	2020/21	TBD	TBD	11.1	776.2	TBD	TBD	TBD	TBD
TA022	Divide South	Open	2020/21	TBD	TBD	231.3	2,954.5	TBD	TBD	TBD	TBD
TA025	Divide South	Open	2020/21	TBD	TBD	133.1	830.1	TBD	TBD	TBD	TBD
TA141	Porcupine Lake	Open	2020/21	TBD	TBD	446.5	1,632.1	TBD	TBD	TBD	TBD
TA237	McCallum Lake	Open	2020/21	TBD	TBD	155.7	1,455.6	TBD	TBD	TBD	TBD
TA260	Beauval Mistletoe	Open	2020/21	TBD	TBD	158.1	4,735.2	TBD	TBD	TBD	TBD

Mistik 2019-2028 Harvest Events											
Event No.	General Area	Status	OP Year Event Started	OP Year Event Completed	Total Years Open	Area Harvested* to Date (ha)	Planned (T1/T2) Harvest Area (ha)	Completed Events			
								Total Area (ha)	Harvested Area (ha)	Total Retention %	Insular Retention %
TA030	Divide South	Open	2021/22	TBD	TBD	43.5	44.0	TBD	TBD	TBD	TBD
TA044	Old Scorcher North	Open	2021/22	TBD	TBD	170.8	856.2	TBD	TBD	TBD	TBD
TA050	Hunting Lake North	Open	2021/22	TBD	TBD	172.0	1,678.8	TBD	TBD	TBD	TBD
TA128	Green Grass Lake	Open	2021/22	TBD	TBD	50.9	563.1	TBD	TBD	TBD	TBD
TA149	Cold Lake	Open	2021/22	TBD	TBD	206.8	346.6	TBD	TBD	TBD	TBD
TA245	Gold Creek	Open	2021/22	TBD	TBD	101.3	153.2	TBD	TBD	TBD	TBD
TA254	Booth Bay	Open	2021/22	TBD	TBD	71.5	494.5	TBD	TBD	TBD	TBD
TA273	Beauval Mistletoe	Open	2021/22	TBD	TBD	88.6	491.1	TBD	TBD	TBD	TBD
TA311	Grubb Lake	Open	2021/22	TBD	TBD	70.8	533.0	TBD	TBD	TBD	TBD
TA039	Scorcher West	Open	2019/20	TBD	TBD	327.2	1,447.4	TBD	TBD	TBD	TBD
TA108	Gravel Ridge	Open	2019/20	TBD	TBD	220.9	3,921.3	TBD	TBD	TBD	TBD
TA151	Horseshoe Lake	Open	2019/20	TBD	TBD	201.8	6,498.3	TBD	TBD	TBD	TBD
TA158	Musk Creek	Open	2019/20	TBD	TBD	105.7	385.1	TBD	TBD	TBD	TBD
TA162	Martineau South	Open	2019/20	TBD	TBD	11.9	20.7	TBD	TBD	TBD	TBD
TA168	Martineau South	Open	2019/20	TBD	TBD	527.0	1,411.0	TBD	TBD	TBD	TBD
TA002	Helene West	Open	2020/21	TBD	TBD	53.5	76.1	TBD	TBD	TBD	TBD
TA007	Helene North	Open	2020/21	TBD	TBD	71.8	1,348.9	TBD	TBD	TBD	TBD
TA129	Waterhen Cut-Across	Open	2020/21	TBD	TBD	59.0	968.4	TBD	TBD	TBD	TBD
TA262	Keeley Portage	Open	2020/21	TBD	TBD	23.2	4,158.6	TBD	TBD	TBD	TBD
TA263	Booth Bay Road	Open	2020/21	TBD	TBD	65.9	228.9	TBD	TBD	TBD	TBD

Mistik 2019-2028 Harvest Events											
Event No.	General Area	Status	OP Year Event Started	OP Year Event Completed	Total Years Open	Area Harvested* to Date (ha)	Planned (T1/T2) Harvest Area (ha)	Completed Events			
								Total Area (ha)	Harvested Area (ha)	Total Retention %	Insular Retention %

** Area harvested refers only to blocks harvested in the 2019-2020 operating year or later*
*** In some cases, the cutblocks within an event may be completed however reclamation/renewal may be outstanding. Events are not considered complete until reclamation/renewal work is completed and will therefore be reported as complete in future years.*
**** Harvest under the current tactical plan from 2017 and 2018 has been included in event TA058, however this is an exception and normally only blocks harvested in the 2019/20 operating year or later are considered.*

A7. HARVEST EVENTS (MAPS)

Maps are provided below for the following events completed in 2021/2022:

- TA002
- TA055
- TA150
- TA271
- TA276
- TA282

HARVEST EVENT MAP

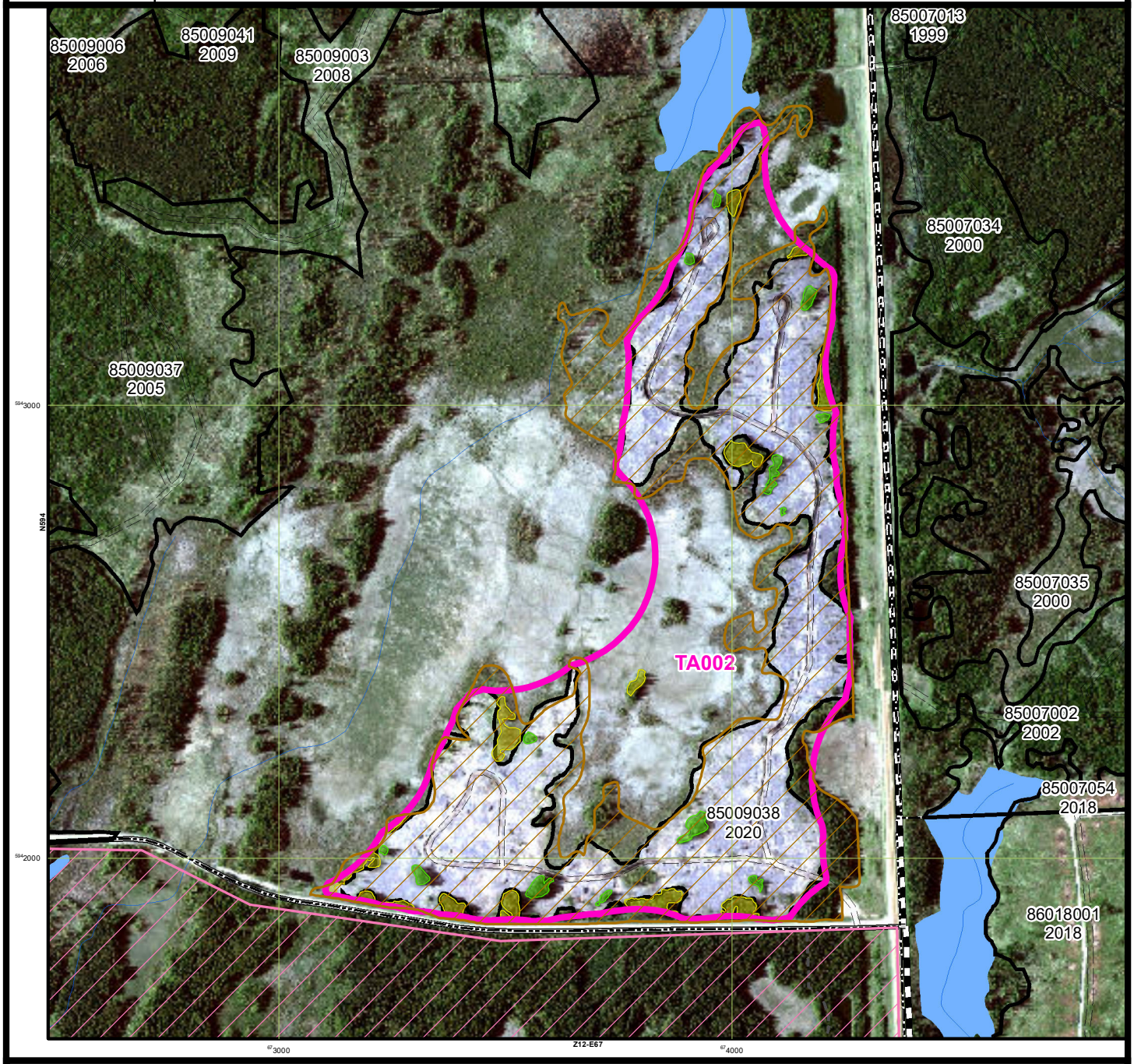
EVENT NUMBER: TA002

silvacom™

Map Version: 1.00
Map Date: April 4, 2023
Map Production: Silvacom Ltd.
Silvacom Ref: E-206
Map File: ..\maps\HarvestEventMap.mxd

1:13,000

0 130 260 520
Metres



Features of Interest
- Harvest Events
- Havested Blocks
- Insular Retention
- Proximal Retention

Tactical Plan
- T1
- T2

Roads
- Paved Road
- Gravel Road
- Class 1 (FRR)
- Class 2 (IBR)
- Class 3 (Bush Road)
- Class 4 (Bush Road)
- Non-Mistik
- Oil / Gas
- 3rd Party
- Trail

Water
- Lake / River
- River
- Perennial
- Intermittent
- Indefinite
- Flooded Land
- Aquatic Regime

THIS MAP WAS DEVELOPED USING AVAILABLE INFORMATION AND MAY NOT ACCURATELY REPRESENT THE LOCATION, DEFINITION OR DISTRIBUTION OF LAND BASE FEATURES.

HARVEST EVENT MAP

EVENT NUMBER: TA055

silvacom™

Map Version: 1.00
Map Date: April 4, 2023
Map Production: Silvacom Ltd.
Silvacom Ref: E-206
Map File: ..\maps\HarvestEventMap.mxd

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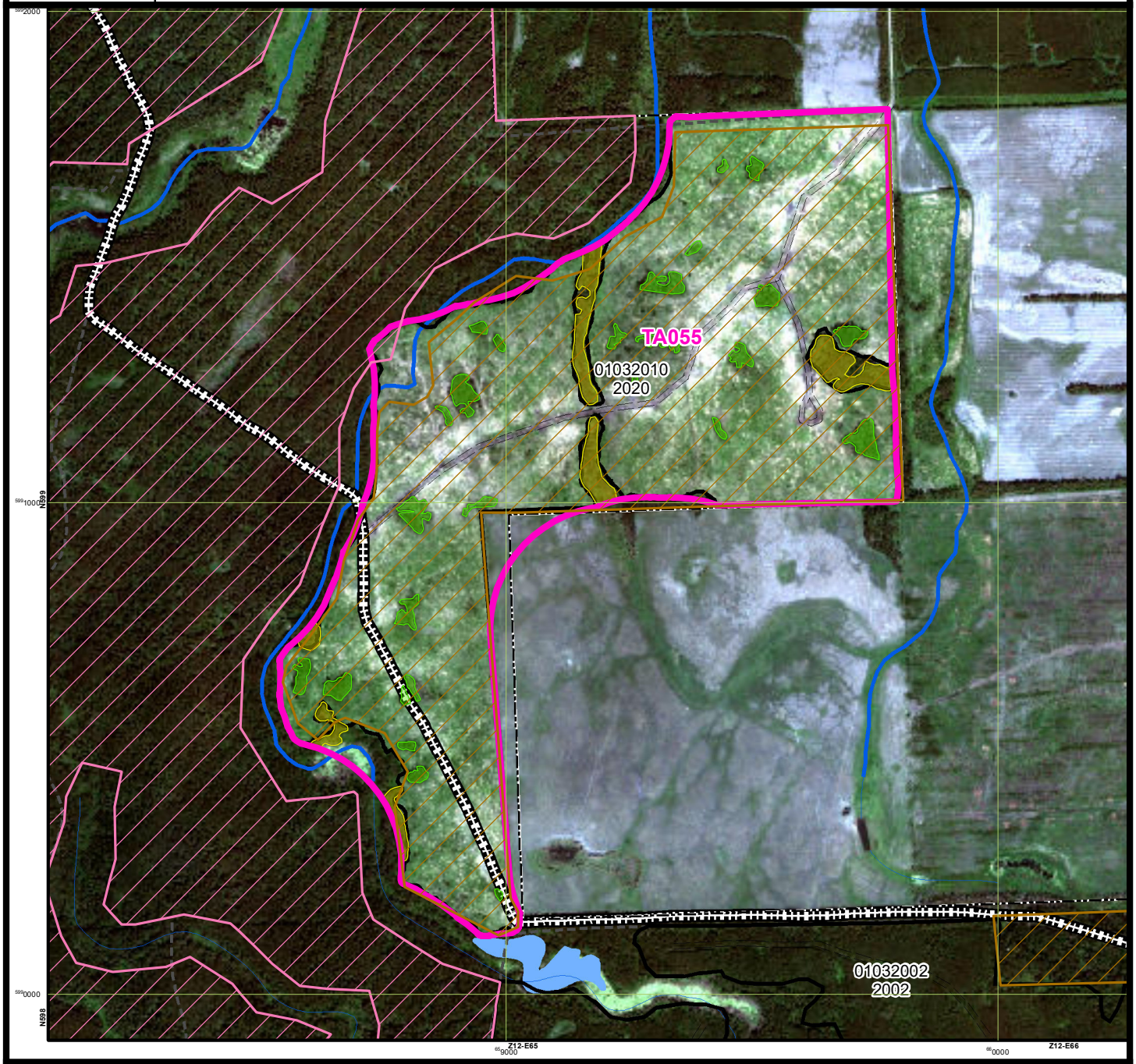
0 120 240 480
Metres



Features of Interest
- Harvest Events
- Havested Blocks
- Insular Retention
- Proximal Retention

Tactical Plan
- T1
- T2

Roads
- Paved Road
- Gravel Road
- Class 1 (FRR)
- Class 2 (IBR)
- Class 3 (Bush Road)
- Class 4 (Bush Road)
- Non-Mistik
- Oil / Gas
- 3rd Party
- Trail

Water
- Lake / River
- River
- Perennial
- Intermittent
- Indefinite
- Flooded Land
- Aquatic Regime

HARVEST EVENT MAP

EVENT NUMBER: TA150

silvacom™

Map Version: 1.00
Map Date: April 4, 2023
Map Production: Silvacom Ltd.
Silvacom Ref: E-206
Map File: ..\maps\HarvestEventMap.mxd

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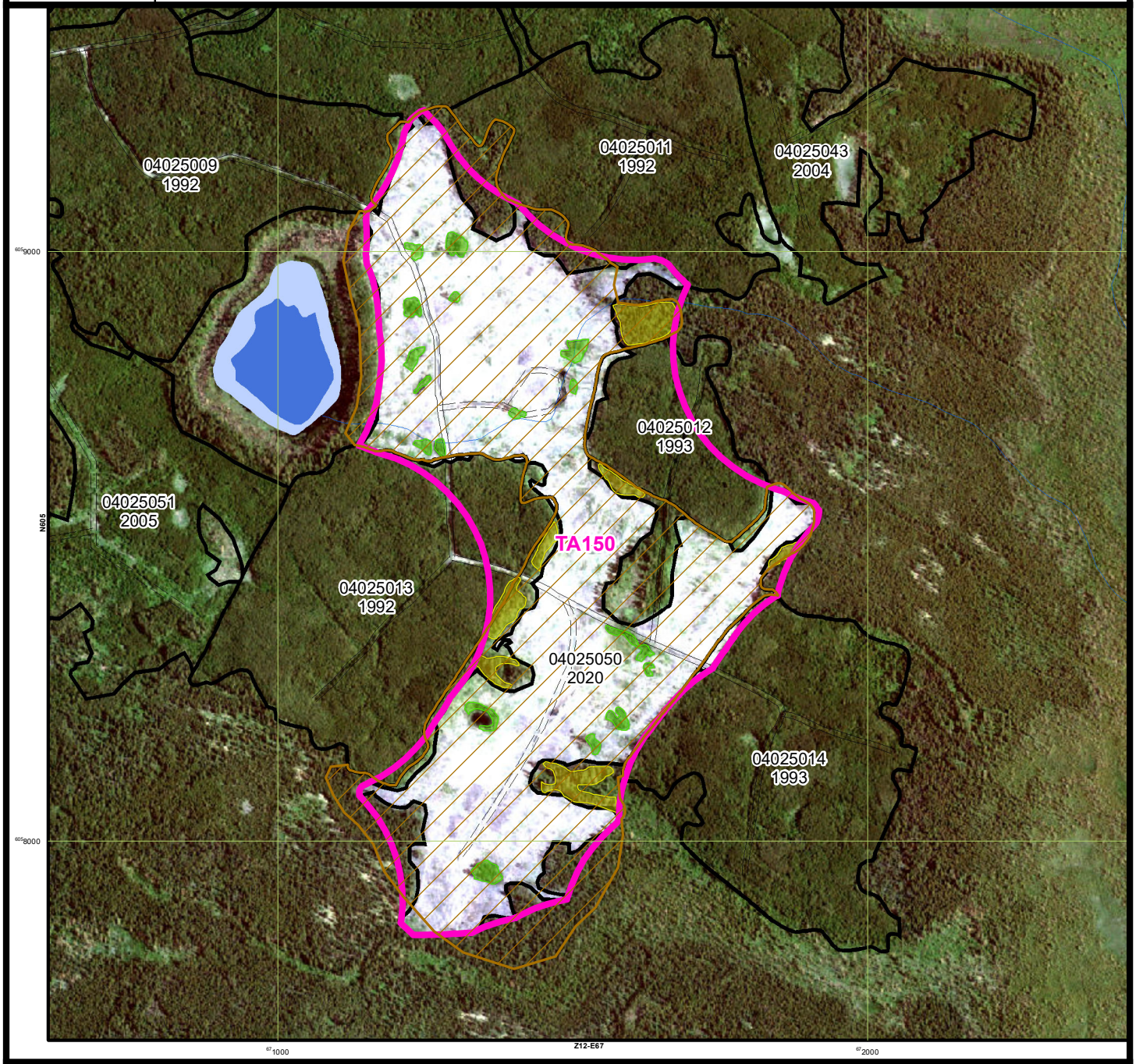
Metres



Features of Interest
- Harvest Events
- Havested Blocks
- Insular Retention
- Proximal Retention

Tactical Plan
- T1
- T2

Roads
- Paved Road
- Gravel Road
- Class 1 (FRR)
- Class 2 (IBR)
- Class 3 (Bush Road)
- Class 4 (Bush Road)
- Non-Mistik
- Oil / Gas
- 3rd Party
- Trail

Water
- Lake / River
- River
- Perennial
- Intermittent
- Indefinite
- Flooded Land
- Aquatic Regime

THIS MAP WAS DEVELOPED USING AVAILABLE INFORMATION AND MAY NOT ACCURATELY REPRESENT THE LOCATION, DEFINITION OR DISTRIBUTION OF LAND BASE FEATURES.

HARVEST EVENT MAP

EVENT NUMBER: TA271

MISTIK MANAGEMENT LTD.

silvacom™

Map Version: 1.00
Map Date: April 4, 2023
Map Production: Silvacom Ltd.
Silvacom Ref: E-206
Map File: ..\maps\HarvestEventMap.mxd

1:13,000

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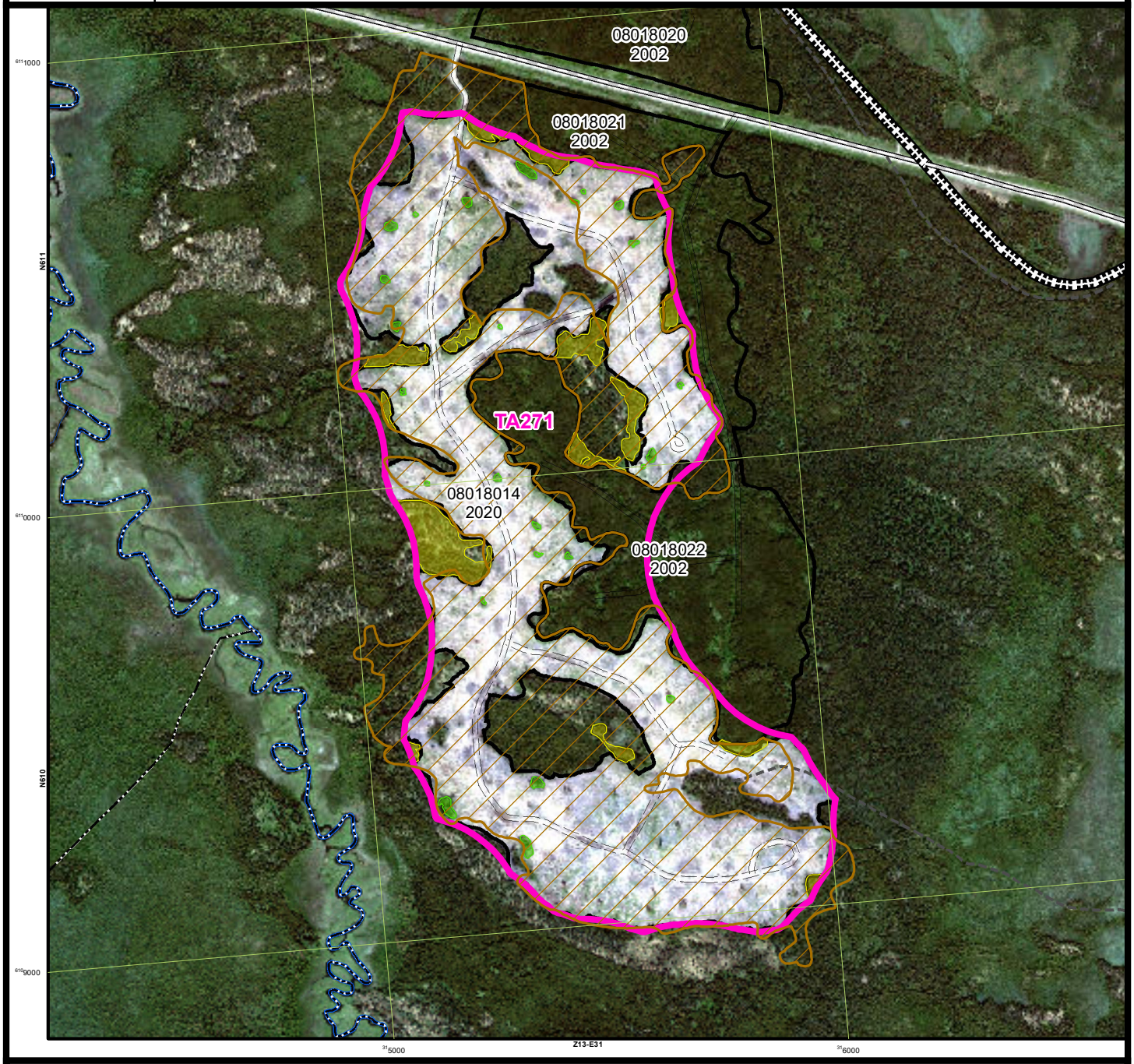
Metres



Features of Interest
- Harvest Events
- Havested Blocks
- Insular Retention
- Proximal Retention

Tactical Plan
- T1
- T2

Roads
- Paved Road
- Gravel Road
- Class 1 (FRR)
- Class 2 (IBR)
- Class 3 (Bush Road)
- Class 4 (Bush Road)
- Non-Mistik
- Oil / Gas
- 3rd Party
- Trail

Water
- Lake / River
- River
- Perennial
- Intermittent
- Indefinite
- Flooded Land
- Aquatic Regime

THIS MAP WAS DEVELOPED USING AVAILABLE INFORMATION AND MAY NOT ACCURATELY REPRESENT THE LOCATION, DEFINITION OR DISTRIBUTION OF LAND BASE FEATURES.

HARVEST EVENT MAP

EVENT NUMBER: TA276

silvacom™

Map Version: 1.00
Map Date: April 4, 2023
Map Production: Silvacom Ltd.
Silvacom Ref: E-206
Map File: ..\maps\HarvestEventMap.mxd

1:18,000

0 185 370 740
Metres

Features of Interest
- Harvest Events
- Havested Blocks
- Insular Retention
- Proximal Retention

Tactical Plan
- T1
- T2

Roads
- Paved Road
- Gravel Road
- Class 1 (FRR)
- Class 2 (IBR)
- Class 3 (Bush Road)
- Class 4 (Bush Road)
- Non-Mistik
- Oil / Gas
- 3rd Party
- Trail

Water
- Lake / River
- River
- Perennial
- Intermittent
- Indefinite
- Flooded Land
- Aquatic Regime

THIS MAP WAS DEVELOPED USING AVAILABLE INFORMATION AND MAY NOT ACCURATELY REPRESENT THE LOCATION, DEFINITION OR DISTRIBUTION OF LAND BASE FEATURES.

HARVEST EVENT MAP

EVENT NUMBER: TA282

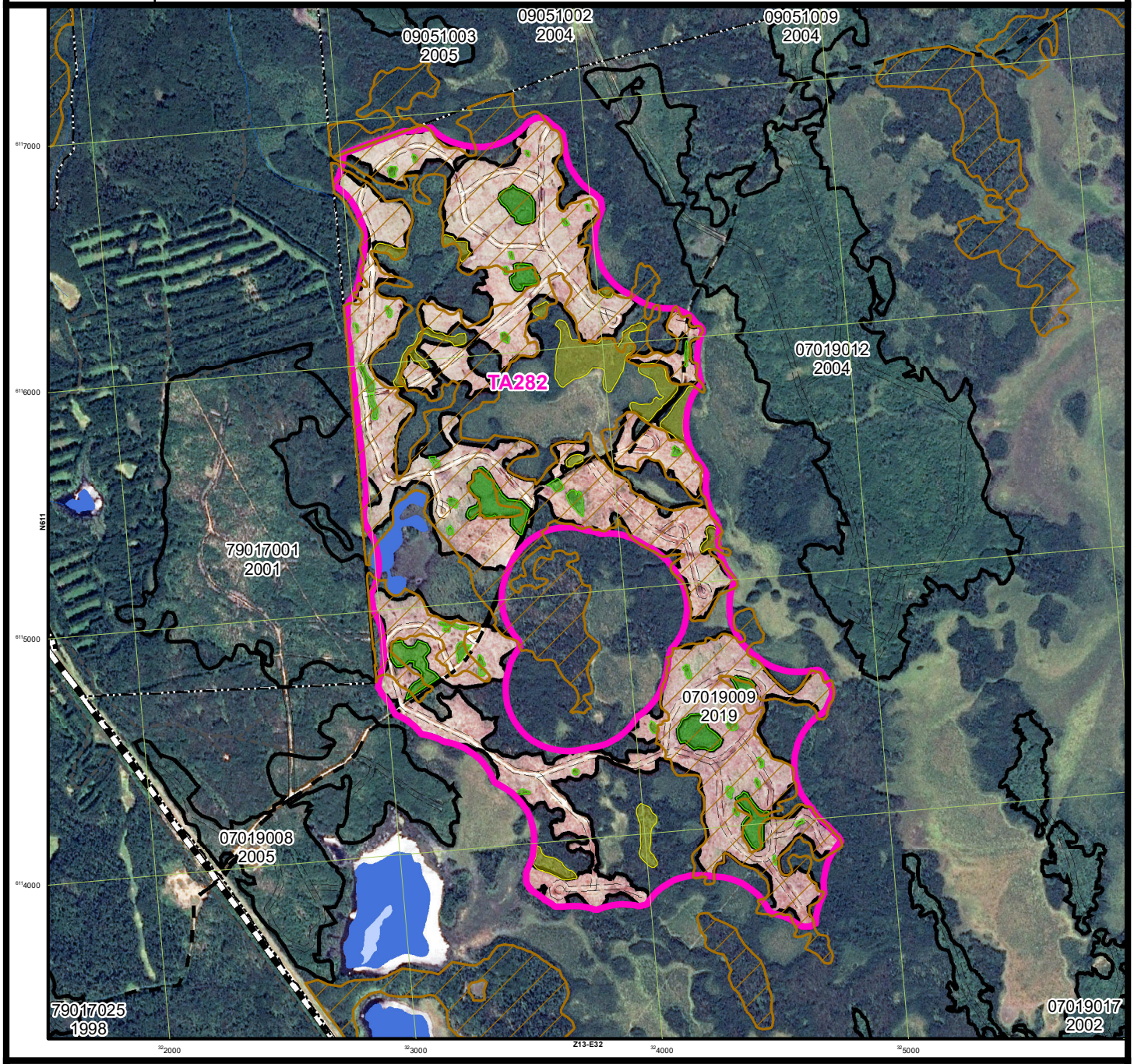
MISTIK MANAGEMENT LTD.

silvacom™

Map Version: 1.00
Map Date: April 4, 2023
Map Production: Silvacom Ltd.
Silvacom Ref: E-206
Map File: ..\maps\HarvestEventMap.mxd

1:24,000

0 245 490 980
Metres



Features of Interest
- Harvest Events
- Havested Blocks
- Insular Retention
- Proximal Retention

Tactical Plan
- T1
- T2

Roads
- Paved Road
- Gravel Road
- Class 1 (FRR)
- Class 2 (IBR)
- Class 3 (Bush Road)
- Class 4 (Bush Road)
- Non-Mistik
- Oil / Gas
- 3rd Party
- Trail

Water
- Lake / River
- River
- Perennial
- Intermittent
- Indefinite
- Flooded Land
- Aquatic Regime

THIS MAP WAS DEVELOPED USING AVAILABLE INFORMATION AND MAY NOT ACCURATELY REPRESENT THE LOCATION, DEFINITION OR DISTRIBUTION OF LAND BASE FEATURES.