

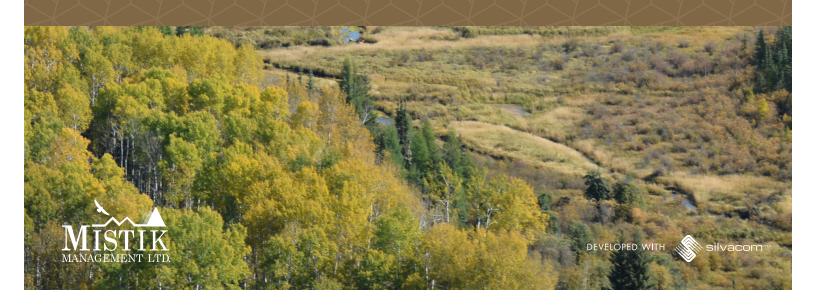
MISTIK MANAGEMENT LTD.

JULY 2023

2021/2022 ANNUAL CERTIFICATION REPORT

Meadow Lake Timber Supply Area and Glaslyn Timber Supply Area





Mistik Management Ltd. Annual Certification Report 2021/22 Operating Year

for the

Meadow Lake Timber Supply Area and Glaslyn Timber Supply Area

Prepared by
Niska Hodgson, RPF
Planning Manager, Mistik Management Ltd.
21 July 2023







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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 and 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. 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.

Mistik is required to track specific values, objectives, indicators, and targets that meet the Canadian Standards Association (CSA) Sustainable Forest Management Plan content requirements specified in the CAN/CSA-Z809 -16 Sustainable Forest Management Standard. In collaboration with our Public Advisory Group, we have established a sustainable forest management system accordingly.

Mistik is also certified to the FSC National Forest Stewardship Standard of Canada which represents the Canadian adaption of FSC International's Global Principles, Criteria, and International Generic Indicators. The national adaptation of this international framework ensures that the specific standard requirements are locally relevant, applicable, and workable, as well as quaranteeing its integrity across the broader FSC system. Standard requirements from the 10 FSC Principles are measured, tracked, and documented through management control over activities occurring in the forest.

Annual reporting is required under both provincial legislation and certification programs. This information can be found in two documents:

- Mistik Management Ltd. 2019-2039 20-year Forest Management Plan Annual Report. Note that this document includes reporting information on items that required under both the FMP and certification programs.
- 2. Mistik Management Ltd. Annual Certification Report.

Both documents can be found on Mistik's website (https://www.mistik.ca/forestmanagement/2019-fmp).



3 CERTIFICATION TARGET SUMMARY



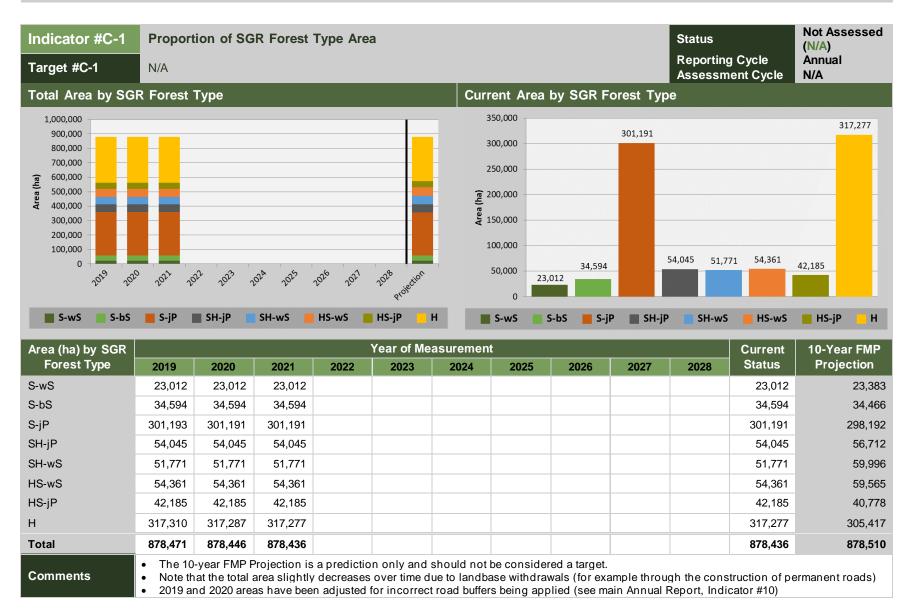
4 CERTIFICATION TARGETS

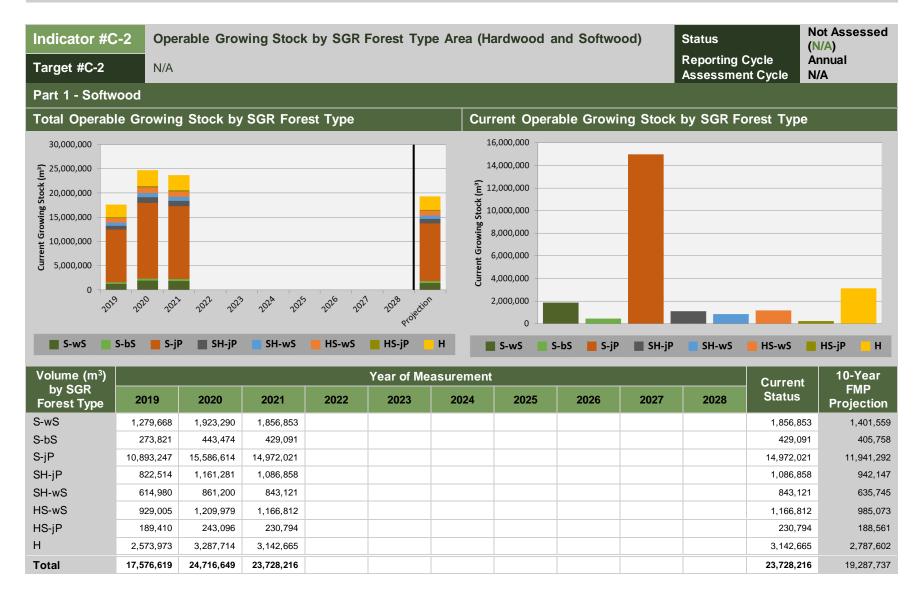
Reporting Item	Description	Status (Parts)	Reporting Cycle	Assessment Cycle	Next Assessment Year	Location
Indicator #C-1	Proportion of SGR Forest Type area	Not Assessed (N/A)	Annual	N/A	N/A	Page 6.
Indicator #C-2	Operable Growing stock by SGR Forest Type (hardwood and softwood)	Not Assessed (N/A)	Annual	N/A	N/A	Page 7.

Reporting Item	Description	Status (Parts)	Reporting Cycle	Assessment Cycle	Next Assessment Year	Location
Indicator #C-3	Harvest volume by SGR Forest Type (hardwood and softwood)	Not Assessed (N/A)	Annual	N/A	N/A	Page 11.
Indicator #C-4	Percent of vegetation restoration species and seed mixes used in erosion control that are recommended by the province	On Target	Annual	Annual	Annual	Page 13.
Indicator #C-5	Insular retention area associated with harvest disturbance events	Off Target	Annual	Annual	Annual	Page 14.
Indicator #C-6	Number of advertisements made in local newspapers	On Target	Annual	Annual	Annual	Page 17.
Indicator #C-7	% of contractors who have received environmental and sustainable forest management awareness training	Off Target	Annual	Annual	Annual	Page 18.
Indicator #C-8	Map of known Woodland Caribou sightings	On Target	Annual	Annual	Annual	Page 19.
Indicator #C-9	Annual contributions to field monitoring of Woodland Caribou	On Target	Annual	Annual	Annual	Page 20.
Indicator #C-10	Level of downed woody debris	On Target (2/2)	Annual	Annual	Annual	Page 21.
Indicator #C-11	Net carbon (C) uptake	Off Target	Annual	Annual	Annual	Page 23.
Indicator #C-12	Total area of natural disturbances (fire)	Not Assessed (N/A)	Annual	N/A	N/A	Page 26.
Indicator #C-13	Levels of employment	Not Assessed (N/A)	Annual	N/A	N/A	Page 27.
Indicator #C-14	Total person-days of work retained by persons of Aboriginal descent	On Target	Annual	Annual	Annual	Page 28.

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MISTIK 2021/22 ANNUAL CERTIFICATION REPORT



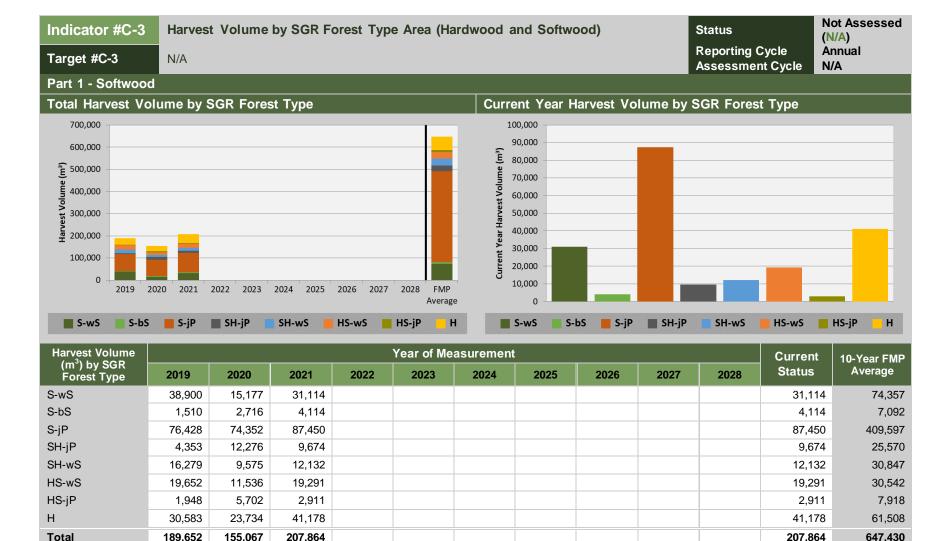


Comments

- The 10-year FMP Projection is a prediction only and should not be considered a target.
- "Operable Growing Stock" refers to the amount of timber volume available, at the current time period, within each SGR Forest Type above the minimum harvest age (100 for S-WS/S-BS, 90 for SH-WS, 80 for HS-JP/HS-WS/SH-JP, and 70 for S-JP/H stands). Some softwood growing stock can be found in hardwood stands, and vice versa, due to incidental volume present (e.g., a deciduous stand with a small conifer component).
- Large differences in growing stock between 2019 and 2020 are largely caused by the aging of stands within the landbase, 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), resulting in large amounts of area becoming operable in 2020, as well as an increase in volume for all stands (as volumes are also assigned based on 10-year age classes).
- The reduction in growing stock in 2021 is due mostly to wildfires occurring in this year



- "Operable Growing Stock" refers to the amount of timber volume available, at the current time period, within each SGR Forest Type above the minimum harvest
 age (100 for S-WS/S-BS, 90 for SH-WS, 80 for HS-JP/HS-WS/SH-JP, and 70 for S-JP/H stands). Some softwood growing stock can be found in hardwood
 stands, and vice versa, due to incidental volume present (e.g., a deciduous stand with a small conifer component).
- Large differences in growing stock between 2019 and 2020 are largely caused by the aging of stands within the landbase, 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), resulting in large amounts of area becoming operable in 2020, as well as an increase in volume for all stands (as volumes are also assigned based on 10-year age classes).
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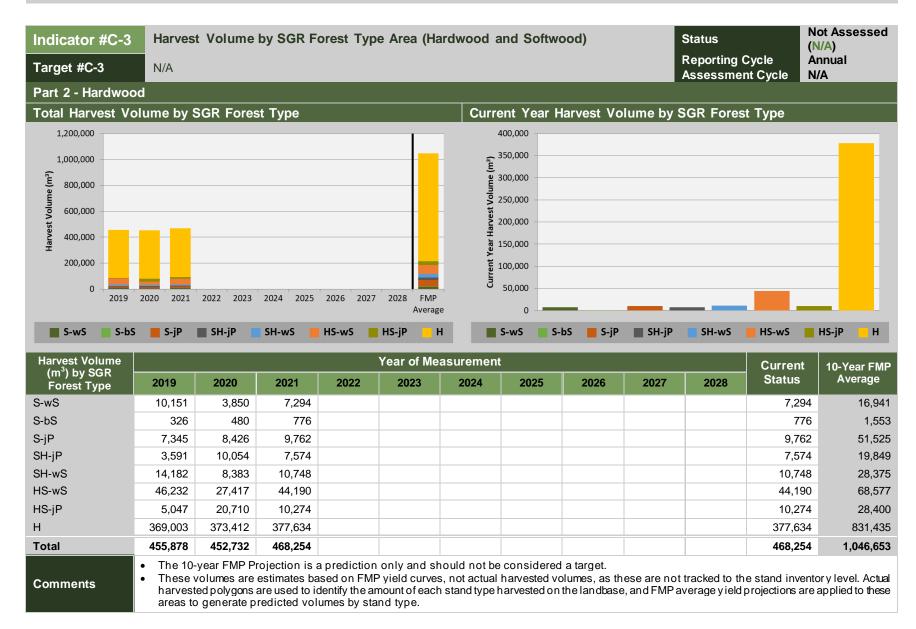
These volumes are estimates based on FMP yield curves, not actual harvested volumes, as these are not tracked to the stand inventory level. Actual

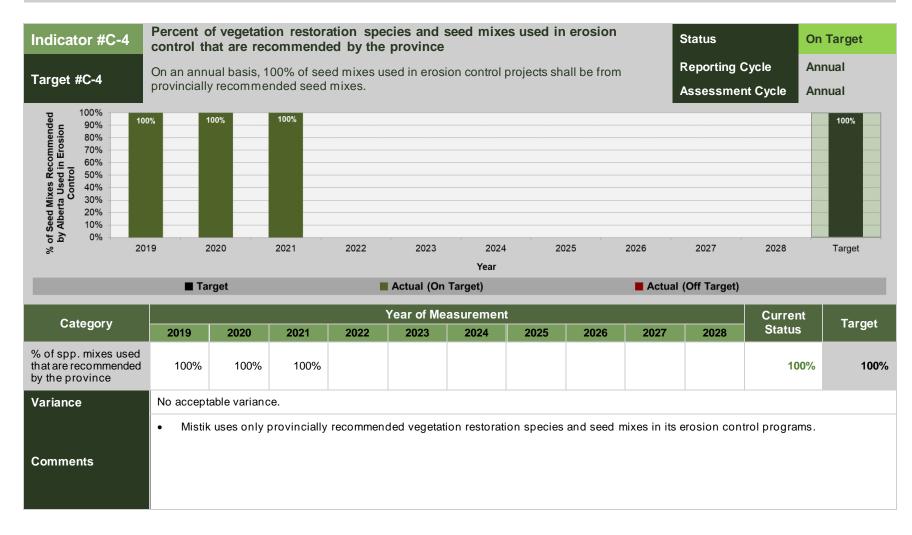
harvested polygons are used to identify the amount of each stand type harvested on the landbase, and FMP average yield projections are applied to these

areas to generate predicted volumes by stand type.

Comments

The 10-year FMP Average is a prediction only and should not be considered a target.





Indicator #C-5

Target #C-5

Insular retention area associated with harvest blocks

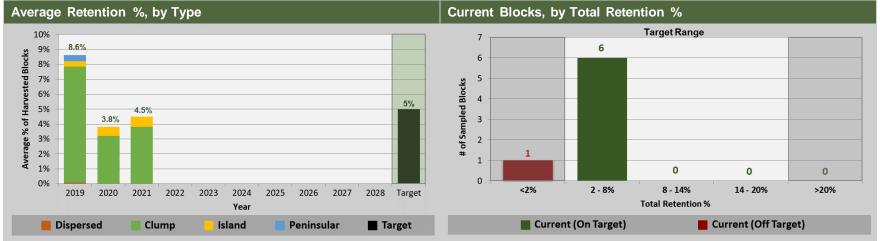
For the Mistik FMA and L&M areas, based on an annual minimum sample of 10% of the number of harvested blocks (typically one block per management unit): a.) The total area of merchantable timber left as retention (including islands, clumps, and dispersed residuals) will be greater than or equal to 5% of the harvested area on average, with a target range of 2-20% for individual blocks. b.) An average of 2 trees per hectare in merchantable dispersed residuals will be maintained.

Status Off Target

Reporting Cycle Annual

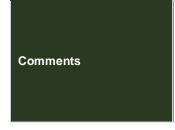
Assessment Cycle Annual

Part 1 - Total Retention (All types)



Harvested Block Area, by	Year of Measurement										Current	Target
Category	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Status	Target
Dispersed Residuals (Avg. %)	0.1%	0.0%	0.0%								0.0%	N/A
Clumps (Avg. %)	7.8%	3.2%	3.8%								3.8%	N/A
Islands (Avg. %)	0.4%	0.6%	0.7%								0.7%	N/A
Peninsular Retention (Avg. %)	0.4%	0.0%	0.0%								0.0%	N/A
Total (Avg. %)	8.6%	3.8%	4.5%								4.5%	≥ 5%
Total (% Range)	3.3 - 14.0%	1.8 – 6.8%	1.7 – 6.3%								1.7- 6.3%	2 - 20%

Variance No acceptable variance.



- Assessments are completed using a combination of satellite imagery delineation and onsite field verification of each block.
- 7 blocks from MUs 01, 02, 03, 04, 07, 08, and 85 were sampled from the 2021-22 timber year, with a combined area of 823 ha.
- Types of retention are defined as follows:
 - "Dispersed Residual" = Groups of up to 4 trees of merchantable size (alive or dead)
 - o "Clump" = Groups of 5 or more trees, less than 1 ha in size
 - o "Island" = 1 ha or greater in size
- "Peninsular Retention" = riparian area within blocks (i.e., not along boundary) associated with ephemeral watercourses.
- 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 #C-5

Target #C-5

Insular retention area associated with harvest blocks

For the Mistik FMA and L&M areas, based on an annual minimum sample of 10% of the number of harvested blocks (typically one block per management unit): a.) The total area of merchantable timber left as retention (including islands, clumps, and dispersed residuals) will be greater than or equal to 5% of the harvested area on average, with a target range of 2 – 20% for individual blocks. b.) An average of 2 trees per hectare in merchantable dispersed residuals will be maintained.

Status Off Target

Reporting Cycle Annual

Assessment Cycle Annual

Part 2 - Dispersed Residuals

Average Density of Dispersed Residuals Current Blocks, by Trees/Ha of Dispersed Residuals Average teees/ha of Dispersed Residuals **Target Range** 2 2.0 of Sampled Blocks 3 1.5 1.5 1.0 1 0.5 0 0 3-4 0-1 1-2 2-3 2028 Target 2020 2021 2022 2023 2024 2025 2026 2027 Trees/ha of Dispersed Residuals Year Actual (On Target) Actual (Off Target) ■ Target Current (On Target) Current (Off Target)

Category	Year of Measurement											Target
Category	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Status	rarget
Average trees/ha of dispersed residuals (Live)	0.8	0.7	0.5								0.5	N/A
Average trees/ha of dispersed residuals (Dead)	0.7	0.2	0.1								0.1	N/A
Average trees/ha of dispersed residuals (Total)	1.5	0.9	0.6								0.6	2.0

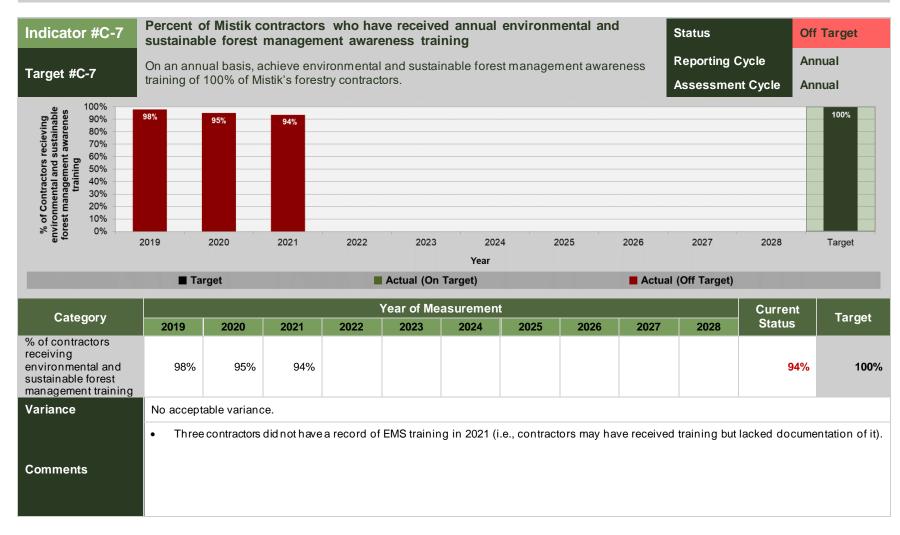
Variance

No acceptable variance.

Comments

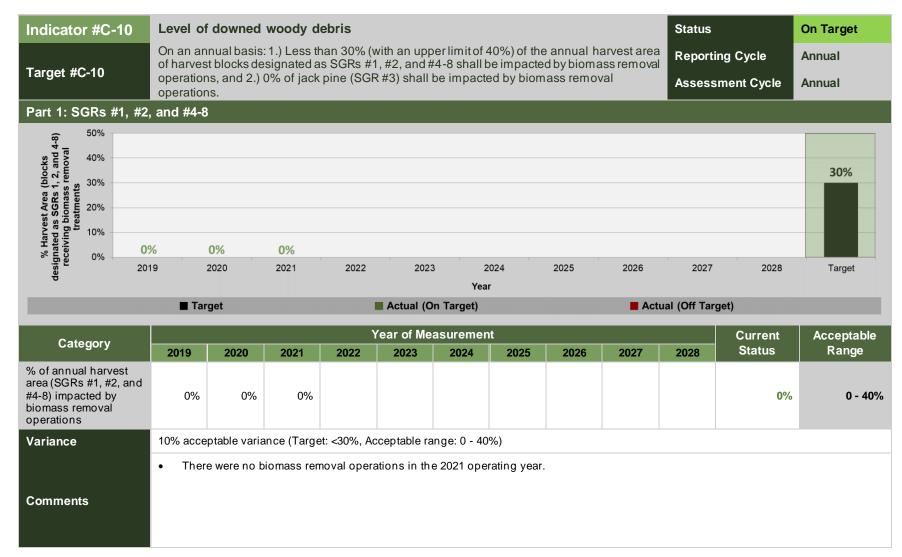
- Assessments are completed using a combination of satellite imagery delineation and onsite field verification of each block.
- 7 blocks from MUs 01, 02, 03, 04, 07, 08, and 85 were sampled from the 2021-22 timber year, with a combined area of 823 ha.
- "Dispersed Residual" = Groups of up to 4 trees of merchantable size (alive or dead).
- Mistik recognizes that these numbers are lower than the targets and we will work with contractors and supervisors to ensure a dequate retention is being left in harvest blocks and events.

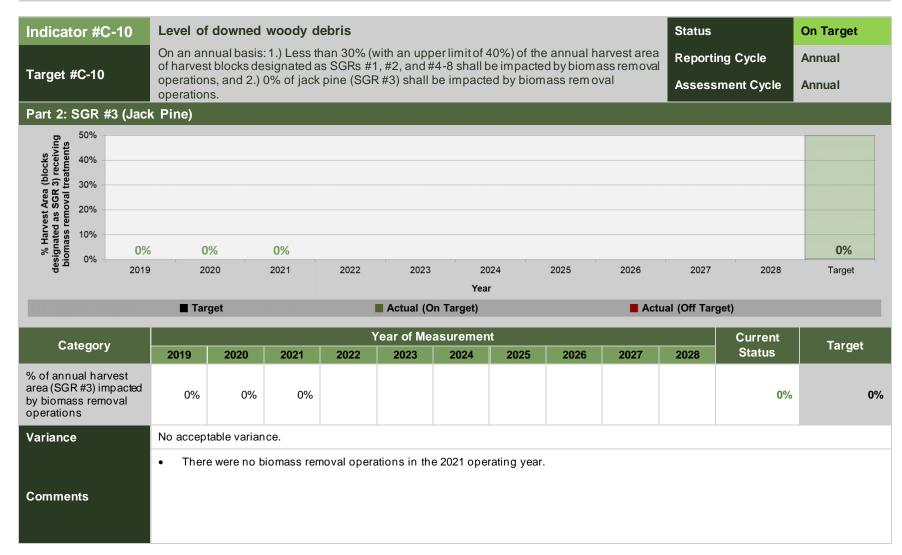




Indicator #C-8	Map of kn	own Woodla	nd Caribou	sightings				Status		On	Target			
Target #C-8		On an annual basis, maintain a GIS map product of all known sightings of Woodland Caribou within the Mistik FMA area. Reporting Cycle Annual Assessment Cycle Annual												
Catamani		Year of Measurement												
Category	2019	2020	2021	2022	2023	2024	2025	2026	2027		2028			
Number of New Additions	2	3	3											
Map Produced?	V		\checkmark											
Variance	No acceptab	le variance.												
Comments	See atta	ached Caribou S	Sightings Map	•										

Indicator #C-9	Annual co	Annual contributions to field monitoring of Woodland Caribou Status On Target												
Target #C-9	On an annual basis, contribute funding to aid in field monitoring caribou populations within the Mistik FMA area or implement a limited Mistik field monitoring program. Reporting Cycle Annual Assessment Cycle													
Category	Year of Measurement													
Category	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028				
Contribution (\$/recipient)	\$0	\$773.54	\$10,000											
Contributions Met?	X	V	\checkmark											
Variance	No acceptab	ole variance.			ı	I								
Comments	study s _l are che	study species). The cameras are set up at key seasonal locations in an attempt to record species numbers, condition, and direction of travel. Cameras are checked on a semi-regular basis (2-3 months) to limit potential disturbance.												







the 2018 Annual Report.

- Values for emissions from forest operations are estimated based on a baseline estimate of 20,048 tonnes, weighted by total volume harvested each year.
- The large amount of emissions in 2021 is due to 21,873 ha of contributing landbase area that was burned in wildfires in this year.

Indicator #C-11

Net carbon (C) uptake

Of the net productive landbase of the Mistik FMA area, net carbon uptake shall be ≥0 tonnes on an annual basis.

Status
Reporting Cycle
Assessment Cycle

Annual Annual

Off Target

Part 2: Wetland

Target #C-11



■ Total C (Wetlands)

Category				Year	Year of Measurement							Target
Category	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Status	raryet
Total Wetland Area (All Types (ha)	890,982	890,982	890,982								890,982	N/A
% Wetland Area (All Types)	50%	50%	50%								50%	N/A
Estimated wetland soil carbon (tonnes)	823,410,833	823,410,833	823,410,833								823,410,833	N/A

Variance

Comments

N/A

- In June 2019, Mistik Management Ltd and Ducks Unlimited Canada (DUC) renewed a Memorandum of Understanding (MOU) committing to partner on various projects to advance wetlandand waterfowl stewardship. Part of this commitment includes an inventory and assessment of Mistik's FMA and Controlled Wood Supply areas for wetland habitat and carbon storage estimates. These estimates represent the most recent estimations of wetland soil carbon on the FMA, using estimated mean soil organic carbon densities for 19 detail wetland classes.
- Note that these estimates were generated using different methodology from those in Part 1 and may not be directly comparable.
- While these estimates are not updated annually, future updates to this assessment of wetlands in Mistik's FMA may be completed as part of this partnership, in which case the estimates above will be updated.

¹ Mistik Management Ltd. and Ducks Unlimited Canada. (2020). Boreal Wetlands and Waterfowl: A Commitment to Stewardship Activities in Saskatchewan: Comprehensive Review. Unpublished report.

