



NorthWinds Environmental Services



The Trout Lake Forest Independent Forest Audit

April 1, 2015 to March 31, 2022

January 5, 2023

PREPARED BY
NorthWinds Environmental Services

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EXECUTIVE SUMMARY

The Independent Forest Audit for the Trout Lake Forest covered a seven-year period of April 1, 2015 to March 31, 2022. Domtar Inc. is the sustainable forest licence holder for the management unit, with the Ontario Ministry of Natural Resources and Forestry, Red Lake-Sioux Lookout District in the Northwest Region, and Corporate MNRF also being audited. The following forest management planning processes were subject to audit:

- 2009-2019 Forest Management Plan: implementation of years 7-10 (April 1, 2015 to March 31, 2019)
- 2019-2021 (2-year) Contingency Plan: planning and implementation
- 2021-2031 Forest Management Plan: preparation and implementation of Year 1 (April 1, 2021 to March 31, 2022)

This report contains the results of the systematic assessment of forest management and operations of the Trout Lake Forest according to the 2022 Independent Forest Audit Process and Protocol (IFAPP). The audit included opportunities for stakeholder input, field assessment and a review of documentation and records associated with management of the Trout Lake Forest during the audit term.

Management planning activities in the Trout Lake Forest were conducted in accordance with the applicable Forest Management Planning Manual and the operations were undertaken in a manner generally consistent with the approved plans. Recommendations from the last IFA (2015) were addressed appropriately. The audit resulted in ten findings, including specific issues with the quality and timing of Forest Resource Inventory, development of an indicator for a management objective, renewal assessment delays and compliance monitoring. Further, noteworthy novel practices in road building were observed being implemented in the Trout Lake Forest and recognised as a Best Practice.

These audit findings were assessed as not a significant threat to the overall sustainability of the Forest and the audit team concludes that management of the Trout Lake Forest was generally in compliance with the legislation, regulations and policies that were in effect during the term covered by the audit, and the Forest was managed in compliance with the terms and conditions of the Sustainable Forest Licence held by Domtar Inc, #542461. The forest is being- managed consistently with the principles of sustainable forest management, as assessed through the IFAPP.



A handwritten signature in black ink, appearing to read 'Jeffrey Cameron'.

Stamped and signed by: Jeffrey Cameron, RPF

Date: January 4, 2023

1 TABLE OF FINDINGS AND BEST PRACTICES

Table 1. Table of findings and best practices.

<p>Concluding statement</p> <p>The audit team concludes that management of the Trout Lake Forest was generally in compliance with the legislation, regulations and policies that were in effect during the term covered by the audit, and the Forest was managed in compliance with the terms and conditions of the Sustainable Forest Licence held by Domtar Inc, #542461. The forest is being managed consistently with the principles of sustainable forest management, as assessed through the Independent Forest Audit Process and Protocol.</p>
<p>Finding #1: Measurements against the planned herbicide target may not effectively portray the intent of 2021-2031 FMP Objective 8d.</p>
<p>Finding #2: The MNRF submission of the FRI was late (August 2016) and was one of the reasons for the delay in the development of a 10-year FMP.</p>
<p>Finding #3: Large topping in certain sawlog-only blocks has resulted in merchantable volume being left unutilized which is considered a wasteful practice under the Ontario Scaling Manual.</p>
<p>Finding #4: Delays in renewal assessments have reduced the accuracy of renewal reporting and the opportunities for timely intervention with supplementary treatments.</p>
<p>Finding #5: There are safety and overall conformance issues during times of inactivity in Forestry Aggregate Pits as well as the delayed rehabilitation of aggregate pits.</p>
<p>Best Practice #1: Noteworthy novel practices in road building, in the spirit of Ontario’s adaptive management framework, are being implemented in the Trout Lake Forest by Doug Riffel Harvesting with the intent to reduce road building impact to sensitive sites and speed up road rehabilitation after decommissioning.</p>
<p>Finding #6: District compliance targets on the Forest are not being met.</p>
<p>Finding #7: SFL compliance targets and requirements on the Forest are not being met.</p>
<p>Finding #8: There is a lack of a consistent method of reporting on winter road and trail features.</p>
<p>Finding #9: The current process for reporting and verifying road decommissioning activities is inconsistent in its application.</p>
<p>Finding #10: Since 2018, MNRF has not had an assessment program in place to validate the accuracy of the SFL’s establishment assessment results.</p>



2 INTRODUCTION

2.1 AUDIT PROCESS

Independent Forest Audits (IFAs) are a requirement of the Crown Forest Sustainability Act (S.O. 1994, c. 25) (CFSA). Every forest management unit within Ontario Managed Forest is required to be audited by an independent audit team in every ten to twelve years. The auditees usually include the Sustainable Forest License (SFL) holder, and applicable Ministry of Natural Resources and Forestry's (MNR) District, Region and Corporate institutions. The key source of direction for the IFA comes from the Independent Forest Audit Process and Protocol (IFAPP).

In the Trout Lake Forest, Domtar Inc. is the sustainable forest licence holder for the management period. The Forest is located within MNR's Red Lake-Sioux Lookout District and in MNR's Northwest Region. The Independent Forest Audit for the Trout Lake Forest covered a seven-year period of April 1, 2015 to March 31, 2022. The audit was led by NorthWinds Environmental Services, a forestry and environmental services firm based out of Thunder Bay, Ontario. The audit team members, their roles and qualifications are described in the Appendix 6.

IFAs are governed by eight guiding principles as described in the 2021 IFAPP:

1. Commitment,
2. Public consultation and First Nation and Métis involvement and consultation,
3. Forest management planning,
4. Plan assessment and implementation,
5. System support,
6. Monitoring,
7. Achievement of management objectives and forest sustainability, and
8. Licence and contractual obligations.

IFAPP includes a set of audit protocols that are designed to provide a systematic review of the forest management and operational activities in Ontario forest management units. **Findings** arise from audit team observations of material non-conformances and the identification of situations in which there is a significant lack of effectiveness in forest management activities. Similarly, the audit team may highlight **best practices** for the cases where auditees' actions go above and beyond legal requirements and result in positive outcomes for forest and communities. The IFA findings will be addressed by the auditees (Domtar Inc. and MNR) in the IFA action plans and results will be reported in the company's annual reports. The audit reports and action plans are published at the Ontario Government website:

<https://www.ontario.ca/page/independent-forest-audits>. Progress towards to the completion of actions will be reported on in annual reports available through the Natural Resources Information Portal: https://nrip.mnr.gov.on.ca/s/nrip-busline?language=en_US

The IFA for the Trout Lake Forest was initiated in July 2022. As a first step, the audit team conducted a forest management unit risk assessment to verify that the subset of audit protocols included in the IFAPP will enable thorough review of management and operations of the Trout Lake Forest. During the risk assessment, the audit team assessed applicability of optional audit protocols based on potential issues identified during the preliminary document review and interviews. Twelve additional protocols were included in the audit in consideration of the planning process that was undertaken partially under the Covid-19 restrictions, an issue resolution process during the audit period, a follow up on an issue resolution decision from the last audit term, and the sale and re-opening of the idled Sawmill in Ear Falls in 2014 to EACOM Timber Ltd.

The audit team reviewed the previous IFA report covering the period from April 1, 2009 to March 31, 2015, and associated action plans and status reports prepared by Domtar and/or MNRF. The past audit included 13 recommendations, of which eight recommendations were directed towards MNRF District and/or Domtar and five recommendations to MNRF Region or Corporate. Through the audit, it was verified that the action items were appropriately developed and implemented.

The audit solicited First Nation and Métis, stakeholder and public input through advertising in media outlets and social media, the SFLs public website, and utilising the forest management planning mailing list. A thorough review of documentation and records associated with management of the Trout Lake Forest during the audit term was undertaken. The field audit was conducted from September 12th to the 15th, 2022. The field audit included two truck days and one helicopter day. At minimum 10% of all activities taking place in the Management Unit during the audit period were visited, such as harvest related operations, different silviculture treatments, road building and maintenance, water crossings and forestry aggregate pits.

This report describes the audit team's findings in relation to the eight IFA principles listed above. Detailed findings and best practices can be found in Appendix 1. Reviews of the achievement of objectives and contractual obligations are summarized in the Appendices 2 and 3, respectively. More detailed information on the audit process, including management unit risk assessment, field audit sampling, consultation, etc. can be found in Appendix 4. A list of acronyms is presented in Appendix 5. Audit team members and their qualifications are presented in the Appendix 6.

2.2 MANAGEMENT UNIT DESCRIPTION

The Trout Lake Forest (the Forest) is located in the MNRF Red Lake-Sioux Lookout District (Figure 1). The management unit covers an area of 1,026,410 ha within the boreal forest, dominated by intolerant hardwoods, jack pine, and spruce. There are significant patent land holdings throughout the Trout Lake Forest, but predominantly around the municipalities of Red Lake and Ear Falls.

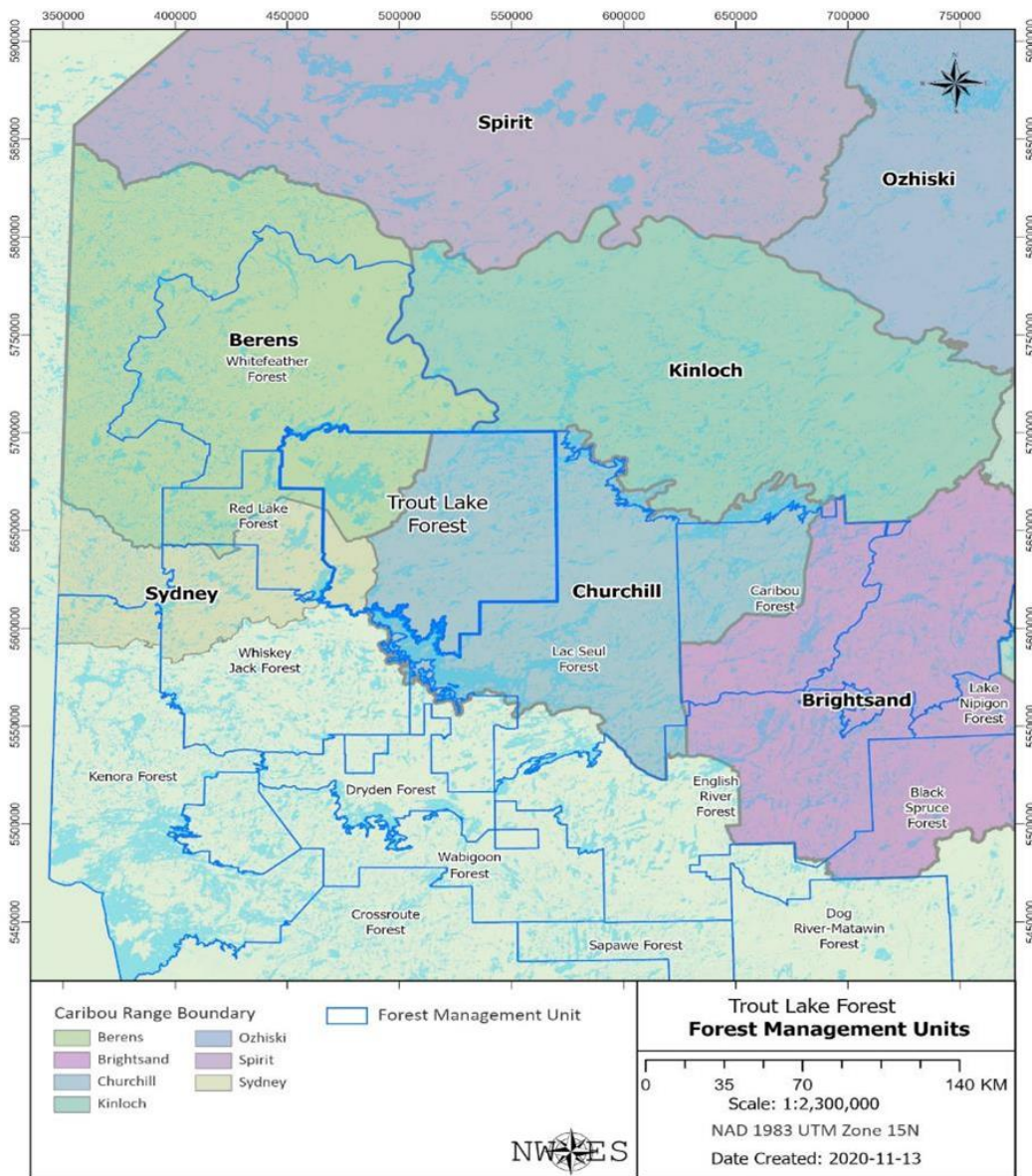


Figure 1. Location of the Trout Lake Forest.

The Trout Lake Forest is bordered by the Whitefeather Forest to the north, the Lac Seul Forest to the east and south, Whiskey Jack Forest to the south and southwest, and the Red Lake



Forest to the west. The Cat Lake-Slate Falls Community Based Land Use Plan area also borders the unit on the northeastern edge.

The only silviculture system is clearcutting (100% of the harvest) with 693,956 m³ reported as harvested in 2020/2021. There is one SFL (Domtar Inc.), 1 overlapping FRL (EACOM Timber Corporation, now Interfor) and one direct license (Doug Riffel Harvesting, 1358807 Ontario Ltd.) currently operating on the Trout Lake Forest. There are a total of 18 logging contractors and 5 roads contractors operating on the Trout Lake Forest being directly contracted either by Domtar, EACOM or Doug Riffel Harvesting. EACOM Timber Ltd. Sawmill in Ear Falls was idle between 2009 and 2014 but is now operating and currently receives all the softwood roundwood. Weyerhaeuser's Trus Joist mill in Kenora and West Fraser's Barwick OSB Mill are receiving hardwood roundwood from the Forest.

The Forest falls fully within the zone of continuous woodland caribou distribution and thus employs the Dynamic Caribou Habitat Schedule. The Forest overlaps with three caribou ranges: Brightsand, Sydney and Berens (Figure 1). With the 2019 Long Term Management Direction, 2019 Contingency Plan (CP) and 2021 Forest Management Plan (FMP), a transition was undertaken from the natural disturbance pattern emulation and focal species management approach to the management direction in the Forest Management Guide for Boreal Landscapes and Forest Management Guide for Conserving Biodiversity at the Stand and Site Scales.

The following First Nation communities are within or adjacent to the Forest: Cat Lake First Nation, Lac Seul First Nation, Slate Falls Nation, Pikangikum First Nation and Wabauskang First Nation.

3 AUDIT FINDINGS

3.1 COMMITMENT

Domtar currently holds a Sustainable Forestry Initiative (SFI) certificate on the Trout Lake Forest with fiber sold under the certificate counting as 100% SFI and 100% PEFC certified forest content. Hence, the commitment principle is deemed to be met for Domtar since the Trout Lake Forest is certified until 2024 under the SFI Forest Management 2015-2019 certification standard.

The MNR's commitment to sustainability, as assessed through IFAPP, is demonstrated through the adherence to forest management guides and manuals as per Ontario's forest management policy framework, consistent with the requirements of the CFSA. These policies are

communicated to the resource users and the public through public consultation and engagement processes undertaken by MNRF. MNRF maintains a public website where these commitments are available <https://www.ontario.ca/page/forestry>.

Red Lake-Sioux Lookout MNRF District has experienced a significant staff turnover in the past decade. It currently also posted several vacancies. This trend was also highlighted in the last IFA. However, the District is actively working to fill its vacancies and invests into training its staff. It appears to be a result of the broader demographics of limited workforce that is exacerbated by the remote location of Red Lake-Sioux Lookout District office.

3.2 PUBLIC CONSULTATION, AND FIRST NATIONS AND MÉTIS COMMUNITY INVOLVEMENT AND CONSULTATION

The public consultation process for the plan and amendments were effective and met the requirements of the Forest Management Planning Manual (FMPM). Several opportunities for stakeholders to consult with the MNRF and the SFL were provided as per FMPM and the public consultation records in the 2021 FMP indicated that there was strong interest from different community groups.

There are five First Nation Communities associated with the Trout Lake Forest: Cat Lake First Nation, Lac Seul First Nation, Slate Falls First Nation, Pikangikum First Nation and Wabauskang First Nation. These communities were invited to participate in the forest management planning process for the 2019 Contingency Plan and 2021 FMP development. The Métis Nation of Ontario Region 1 was provided with planning related information in accordance with the public consultation requirements of the FMPM. The level of participation varied by communities due to resources available and competing priorities. Wabauskang First Nation was actively involved through the planning process and expressed general satisfaction with the engagement and collaboration with Domtar and MNRF. For example, there is an ongoing collaboration with Domtar on a project to identify and protect blueberry harvest sites. Lac Seul First Nation and Cat Lake First Nation were also represented at different stages of planning.

The FMP generally accommodated local issues with some remaining concerns. Utilization issues were mentioned on several occasions and were also identified as a finding by auditors (see **Appendix 1, Finding #3**). Deep ditches and water ponding were identified by stakeholders and First Nation community members as an ongoing issue in the Forest. The audit team was pleased to meet an operator in the Forest who is actively testing and implementing novel road building techniques with the intent to reduce impacts on sensitive sites (see **Appendix 1, Best Practice #1**). Interviewees, including a First Nation interviewee, also expressed concerns regarding the impacts of herbicide spraying, which was addressed by the planning team

through the development of a management objective to work towards reduced herbicide spray in the Forest. However, an issue was observed with wording of the indicator for this objective (see **Appendix 1, Finding #1**). Concerns regarding clearcutting impacts on forest and wildlife were heard. Road safety was brought out as a concern by local tourism operators.

The two final years of the 2021 FMP development were undertaken under the Covid-19 restrictions with planning team meetings, Local Citizens Committee (LCC) meetings and information centers moving to online format. Interviews with LCC members and First Nation community members and document review indicated that the online format reduced effectiveness of participation of some LCC members as well as for the members of the public. To help with communication Domtar developed a forestry website for forest management planning related information sharing while the Electronic Forest Management Plan (EFMP) website was being modified and Natural Resources Information Portal (NRIP) developed by MNRF. Interviewees generally viewed the option for the online format positively, indicating that a hybrid approach is suitable going forward with the preference that the key staff from MNRF and SFL participate in person. According to Domtar's website use statistics, the number of visitors was twice as high as normally at open houses, supporting the notion that online presence enables to reach broader audiences.

One Issue Resolution (IR) request to the District Manager (DM) was made during the audit period. The request was made during the 2021-2031 FMP planning period regarding the location of the Wenasaga primary road and the Grace Road Primary Road Corridor. The DM IR decision was elevated by the SFL to the Regional Director (RD) for further resolution consideration. The IR process resulted in a mutually defined and acceptable resolution by all parties.

3.3 FOREST MANAGEMENT PLANNING

The audit team reviewed the development of the 2019-2021 Trout Lake Forest Contingency Plan, 2021-2031 Trout Lake Forest Management Plan, Annual Work Schedules (AWS), and Annual Report (AR) within the audit term (2015 to 2022). In general, planning requirements have been met in accordance with applicable Forest Management Planning Manual and the Forest Information Manual (FIM). An exception was the Objective 8d in the 2021 FMP that was developed in consultation with Wabauskang First Nation with the intent to move towards reduced herbicide in the Forest. However, the Indicator 8d measuring the area treated with aerial herbicide was found to not have an appropriate target. During interview with Wabauskang First Nation, it was clarified that the community is looking for forest managers to decrease the use of herbicide on the Trout Lake Forest and wants to work with MNRF and Domtar in developing a meaningful and reasonable approach in achieving this goal. It was

found that some confusion exists with the actual intent of the indicator and Wabauskang's interpretation of the indicator. Hence, **Finding #1 which states: Measurements against the planned herbicide target may not effectively portray the intent of 2021-2031 FMP Objective 8d.**

The planning process started with the 10-year 2019 FMP development; however, the inventory provided by MNRF prior to stage one of the Trout Forest FMP was found to be incomplete and therefore needed to be fixed by MNRF before planning could commence. This was one of the reasons for the delay in planning resulting in the need for a 2-year Contingency plan to be prepared. **Finding #2: The MNRF submission of the FRI was late (August 2016) and was one of the reasons for the delay in the development of a 10-year FMP. It was one of the reasons for the development of 2019 CP instead.**

The CP and FMP incorporated the protection measures for Species At Risk (SAR). The Trout Lake Forest is fully within woodland caribou continuous distribution zone and as such managed according to the Dynamic Caribou Habitat Schedule (DCHS) that was developed in a collaborative process during the development of the 2021 FMP. Further, the FMP incorporated Simulated Range of Natural Variation (SRNV) targets for winter and refuge habitat as provided in the Boreal Landscape Guide¹. For other SAR, the direction of Stand and Site Guide² was included in the 2019 CP and 2021 FMP.

Both 2019 CP and the 2021 FMP included Area of Concern (AOC) prescriptions that were prepared in accordance with applicable FMPM direction. The last IFA highlighted a need for engagement of tourism outfitters in the planning process and the public comments in the 2019 CP and 2021 FMP included several concerns from the tourism outfitters. Domtar and MNRF engaged the applicable parties to develop protection measures where appropriate, including a 2018 information session on caribou habitat management targeted towards tourism operators.

The Silvicultural Ground Rules (SGRs) were developed according to the FMPM requirements and resulted in a renewal program capable of achieving its purpose of bringing back harvested areas into a productive land base according to the forest management plan objectives and the SRNV.

¹ OMNR. March 2014. Forest Management Guide for Boreal Landscapes. Toronto: Queen's Printer for Ontario. 104 pp.

² OMNR. 2010. Forest Management Guide for Conserving Biodiversity at the Stand and Site Scales. Toronto: Queen's Printer for Ontario. 211 pp.

3.4 PLAN ASSESSMENT AND IMPLEMENTATION

3.4.1 Harvest

A representative sample of harvest areas were assessed during the field audit both on the ground and from the air. Harvest levels were lower than planned throughout the term of the audit due a variety of factors, however, market conditions are consistently the prominent contributor. In general, annual harvest achievement by area is about half of that planned while annual achievement by volume increased from half during the 2009 FMP to two-thirds during the 2012 CP (Table 2). The increase is mainly attributed to improved market conditions and the restart of the sawmill in Ear Falls in 2014.

Table 2. Planned harvest vs actual harvest in the Trout Lake Forest by area and volume as per 2009 FMP and 2019 CP.

FMP Term	2009-2019 FMP	2019-2021 CP
Planned Harvest Area (Annualized)	7,833 ha	7,905 ha
Actual Harvest Area (Annualized)	3,573 ha	4,168 ha
% of Actual to Planned Harvest Area (Annualized)	46%	53%
Planned Harvest Volume (All Species - Annualized)	941,700 m3	965,900 m3
Actual Harvest Volume (All Species - Annualized)	434,300 m3	640,600 m3
% of Actual to Planned Harvest Volume (Annualized)	46%	66%

Harvest operations were implemented in locations consistent with the approved FMP and associated AWSs. While no issues were specifically identified during the field assessment, interviews with Ministry staff indicated that small incursions into unallocated forest were identified during the audit period. These instances are being managed through a combination of annual depletion reporting and operational issues management within the Forest Operations Inspection Program (FOIP). Forest Operations Prescriptions were consistent with the forest types encountered and implemented effectively.

Area of concern boundaries and prescriptions were appropriately mapped and implemented. In general, harvest operations are effective in protecting known values on the forest. Residual forest requirements are being followed including the retention of wildlife trees in clearcut harvest areas. No areas of rutting or other site disturbance were noted during the field audit.

Issues surrounding wood utilization were discussed in interviews with SFL, FRL and MNRF staff as well as members of the LCC/public. Utilization concerns were a significant portion of the operational issues identified through normal compliance inspections and reporting. Due to the risk-based approach employed in compliance plans, particularly by MNRF compliance staff,



these operational issues are most pronounced as compared with other non-conformities. The wood utilization concerns identified through interviews, during the field audit and in FOIPs centre around sawlog-only harvest areas. In these areas merchantable, yet smaller diameter portions (tops) of harvested logs are more difficult to manage where volumes are deemed insufficient to follow with an economically viable chipping operation and due to the fact that the Domtar facility is unable to otherwise process fibre in roundwood form. Assessments of full-tree chipping areas, which were the dominant portion of harvest areas during the audit period, demonstrated good overall utilization.

Sawlog-only harvest operations are undertaken on the forest using one of two harvesting systems:

1. A conventional system where full-tree logs are brought roadside for processing into product form. Where this system was employed, utilization was more difficult to assess since the debris left roadside was piled and burned post-harvest to mitigate the loss of productive land. The audit team encountered one area where large topping was apparent in unburnt piles (see photo in **Appendix 1, Finding #3**).
2. A cut-to-length (CTL) system where logs are processed at the stump and brought roadside in product form. Where this system was employed, utilization was more effectively assessed. One site visited during the field audit was of particular concern related to utilization (see photo in **Appendix 1, Finding #3**). This site was harvested during the final winter of the audit term (late in the season) and a significant portion of the tops left behind were of merchantable size. Leaving merchantable timber behind is defined as a wasteful practice by the Provincial Scaling Manual. Beyond the general utilization concern, the remaining tops on this particular site were of volume such that they created a corduroy on the ground that will impede future renewal efforts. It should be noted, however, that there were CTL sites, viewed from the air, where tops/debris were effectively redistributed by mechanical site preparation mitigating the latter concern around inhibiting renewal. **Finding #3: Large topping in certain sawlog-only blocks has resulted in merchantable volume being left unutilized which is considered a wasteful practice under the Ontario Scaling Manual.**

In early 2020, an FMP amendment (amendment #4) was requested by the FRL and submitted by the SFL that would allow for the topping of sawlogs up to 10.0 cm rather than 9.1 cm as directed by the provincial Scaling Manual. This request was based on the challenging market for dimensional lumber products at the time and would only apply under certain strict commodity pricing thresholds. Though approved, the commodity pricing parameters required to trigger this amendment were not met due to the rapid rise in lumber prices shortly after

approval, driven by the COVID-19 outbreak. Hence, the utilization issues observed were not exempted from the Scaling Manual’s 9.1 cm topping standard due to the amendment #4.

3.4.2 Debris management

Roadside debris management was well implemented across the forest. Where logs are processed roadside, slash is piled and burnt then subsequently planted with conifer seedlings. Where full-tree chipping is implemented, chip pads were generally spread to the required 20cm depth which is a manageable depth for tree planting (figure 2). Requirements were followed and the audit team had no concerns in relation to the potential loss of productive land due to slash/debris accumulation, with the exception of certain sites where utilisation issues were identified (**Finding #3**).



Figure 2. Chipper bark chute debris pile, spread and planted with jack pine seedlings.

3.4.3 Access

A representative sample of access (road) construction, including water crossing installations and forestry aggregate pits (FAPs) were assessed during the field audit both on the ground and

from the air. Road construction activities were conducted in conformance with the requirements of the FMP and in corridors or operational road boundaries approved in the FMP and associated AWSs.

Water protection, protection of sensitive sites and decommissioning of roads in the woodland caribou zone are areas of environmental and public concern in the Trout Lake Forest. The audit team was invited to see road building practices by John Meek, RFP (Operations Forester at Doug Riffel Harvesting company). In partnership with Domtar, Weyerhaeuser and FP Innovations, Doug Riffel Harvesting is actively testing different road building methods to reduce impact on surface water movement and speed up road rehabilitation after decommissioning. Particularly, a mix of abundant corduroy placed on the surface of wet sites, pipes and avoidance of nearby aggregate extraction is used to encourage free movement of water and avoid ponding. Creation of deep ditches is avoided by reaching further out to collect road building material to encourage faster renewal and avoid water ponding. **Best Practice #1: Noteworthy novel practices in road building, in the spirit of Ontario's adaptive management framework, are being implemented in the Trout Lake Forest by Doug Riffel Harvesting with the intent to reduce road building impact to sensitive sites and speed up road rehabilitation after decommissioning.**

Eleven AOC water crossings were identified for assessment during the field audit. Prescribed harvest buffers were in place and right-of-way widths were adhered to. As a standard and best practice on the forest, where roads intersect water crossings, both sides of the right-of-way are flagged to ensure they are cleared no wider than prescribed in the FMP. Proper structure lengths and culvert sizes were installed at all locations. All the water crossings visited were functioning and no damage to streambeds or riparian areas were noted.

Compliance reports were lacking for three of the crossings visited. Erosion control at the crossings visited was generally sufficient, however, an overall review of compliance reports for crossing installations during the audit period did reveal a number of operational issues involving sediment control. These issues were subsequently remedied and operational issues closed.

Sixteen forestry aggregate pits (FAPs) were selected for the field audit and two additional pits were also looked at during the field audit. None of these FAPs were active at the time of the audit. While a few of the pits established in the early years of the audit term had been rehabilitated and even planted, the overwhelming majority of the FAPs assessed did not conform to the *Operational Standards for Forestry Aggregate Pits (FMPPM, 2020)*. The degree of non-conformance varied but a lack of sloping to the required stable angle of repose was common at most sites, as was excavation immediately adjacent to and below the travel surface

of the associated forest access road. **Finding #5: There are safety and overall conformance issues during times of inactivity in Forestry Aggregate Pits as well as the delayed rehabilitation of aggregate pits.**

3.4.4 Renewal

All forestry operations observed in the field were consistent with the locations in the approved FMP and AWSs and followed the Forest Operations Prescriptions (FOP) which was consistent with the Silvicultural Ground Rules (SGRs) in the approved plans.

AOCs were clearly marked on operational planning maps and were consistent with the FMP. The prescriptions were adhered to during operations as observed during the field audit and appear to be effective at protecting values identified in the plans.

Table 3. Annualized planned vs actual regeneration on the Trout Lake Forest

	Natural	Natural	CLAAG	CLAAG	Planting	Planting	Seeding	Seeding
FMP Term	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
2009-2019	808	525	35	0	3,487	2,306	1,566	292
2019-2021	1,907	737	25	0	4,285	3,070	1,700	136

Table 4. Annualized planned vs actual site preparation on the Trout Lake Forest

FMP Term	Mechanical Planned	Mechanical Actual	Chemical Planned	Chemical Actual	Prescribed Burn Planned	Prescribed Burn Actual
2009-2019	5,028	1,550	118	61	177	24
2019-2021	5,386	4,006	90	684	225	0

Table 5. Annualized planned vs actual tending on the Trout Lake Forest

FMP Term	Cleaning Planned	Cleaning Actual	Thinning Planned	Thinning Actual
2009-2019	1,188	535	80	0
2019-2021	1,910	474	0	0

During the field audit, the audit team visited some sites where a lag in assessments and/or supplementary renewal treatments was observed which may lead to renewal of sites that do not achieve the target SGR (i.e., silviculture success at Free-To-Grow). One example was a burnt area north of Red Lake where a recently harvested and regenerated area (2016-2018)



had been burned in 2019. The areas visited were left for natural regeneration but had very little to no conifer regeneration returning as the seed source left following harvest had been consumed in the fire (see Figure 3).



Figure 3. Poor regeneration following 2019 wildfire burn. Site had not yet received additional treatment as of 2022

No evidence of formal or informal regeneration assessments to support the decision for natural regeneration were presented nor were any specific plans for artificial renewal treatments in place. Typically, supplementary renewal activities of naturally disturbed areas may be eligible for financial support from the Forest Futures Trust fund. Delay in the prompt renewal of these naturally site prepared sites by fire (e.g., by seeding) has now created a need for more intensive and costly renewal treatments likely by mechanical site preparation and/or planting. **Finding #4: Delays in renewal assessments have reduced the accuracy of renewal reporting and the opportunities for timely intervention with supplementary treatments.**

Further, it was identified during the field audit that the viable jack pine seed bank built by the SFL and used to support artificial renewal activities on the forest was limited and reserved primarily to support planting stock production thus limiting the availability of seed for aerial seeding treatment. Difficulty recruiting adequate numbers of cone/seed collectors was presented as the root cause. A review of the most recent seed inventory did substantiate this;

however, sufficient seed is in place for numerous years of renewal programs, enough time, if acted on promptly, to remedy any future shortfall.

3.5 SYSTEM SUPPORT

Since the Trout Lake Forest has been certified to SFI Forest Management 2015-2019 standard, the system support principle was optional under the terms of the IFAPP. The audit team found that Red Lake-Sioux Lookout District MNR compliance monitoring was short staffed. Issues with staff retention were brought forward in the areas of District operations as well. Please see Section 3.6.3 for further discussion on this issue.

3.6 MONITORING

The audit team reviewed whether the monitoring program developed for the management unit, as well as associated reporting obligations met the requirements of manuals, policies, procedures and the SFL.

3.6.1 Access

Annual Reports review and field inspection resulted in the audit team developing two findings related to the roads monitoring.

The first finding relates to the inconsistent reporting of winter road and other features used to access harvest blocks. In interviews with MNR and Domtar, it was found that seasonal operational roads with no infrastructure have not been reported as constructed roads. Below is an example on an unreported feature which was visited during the field audit (Figure 4).



Figure 4. Block 1044 – unreported road (winter road) approx. 200m in length connecting two depletions

Since these features were not reported as roads, they do not have a roads management strategy associated with them and therefore, these cannot be monitored, assessed for regeneration, or become part of FRI updates. **Finding #8: There is a lack of a consistent method of reporting on winter road and trail features.**

The second finding is due to some inconsistencies in the reporting of road decommissioning. Auditors observed several instances during the field audit where road decommissioning via artificial regeneration on operational roads had occurred, however, these roads were still listed in the existing roads layer, therefore, not reported as decommissioned (Figure 5). **Finding #9: The current process for reporting and verifying road decommissioning activities is inconsistent in its application.**



Figure 5. Block ID – M31FMP09 – Example of planted road in 2019. Road not reported as decommissioned.

During the field audit, concerns related to the reporting of corduroy were raised in association of not reporting the volume of wood used in road building. The audit team confirmed that at least some corduroy has been reported and no specific examples which documented unreported corduroy could be provided.

3.6.2 Renewal

The SFL's and MNR District management unit renewal assessment program was reviewed to determine if it is sufficient and being used to provide the required silviculture effectiveness monitoring information. Domtar's program was found to be sufficient and effective, with the exception of **Finding #4**, however, MNR District's program was lacking with 2018/19 being the last year where the Red Lake-Sioux Lookout District carried out a Silvicultural Effectiveness

Monitoring (SEM) program (i.e., assessment of SFL declared FTG areas) in the Trout Lake Forest. The MNRF’s SEM program focuses on assessing areas that have recently been declared FTG by the SFL holder. This means that since 2018-2019, no silvicultural monitoring has occurred to validate the accuracy of the SFL’s establishment assessment results and therefore the district was unable to determine the effectiveness of the applied silvicultural treatments. It was communicated to the auditor that current staffing level and overall capacity at the Red Lake-Sioux Lookout District is the primary reason for this lack of silvicultural monitoring. **Finding #10: Since 2018, MNRF has not had an assessment program in place to validate the accuracy of the SFL’s establishment assessment results.**

3.6.3 District Compliance Planning and Associated Monitoring

District Annual Compliance Operations Plans (ACOPs) were prepared and in place each year as required. Plans were developed using a risk-based approach and contain targets for harvest, access roads, water crossings, forestry aggregate pits, renewal, fire prevention as well as a target to have at least one annual forestry compliance meeting with SFL staff. It was found that actual inspections and reporting are falling short as compared to the annual targets. For example, in 2017-2018 a total of 31 field inspections were targeted between all forestry activities, but only 5 were completed. The target to hold at least one annual compliance meeting between District and SFL (and OLL) staff was intermittently met with the last recorded meeting being held in January 2018. A summary of MNRF inspections as reported in approved annual reports (Table AR-6) is provided below in Table 6. **Finding #6: District compliance targets on the Forest are not being met.**

Table 6. MNRF compliance inspections by category and fiscal year.

Category / Fiscal Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22*
Access	0	3	0	1	3	1	0
Harvest	2	0	5	3	2	1	2
Renewal	0	0	0	0	1	0	0
Maintenance	0	0	0	0	0	0	0
TOTAL	2	3	5	4	6	2	2

**AR was not complete at time of audit. Based on approved inspections in FOIP at time of audit.*

During interviews with Ministry staff there was a consistent reference to the insufficient number of certified compliance staff and the challenges with recruiting, training and then retaining such staff. There are no requirements in the compliance planning process that ensure a pairing of targets to adequately trained and certified staff. Though the District did prepare the necessary compliance planning documents to meet the standards, there are



insufficient human resources to meet the set targets thus making these targets functionally unachievable. The achievement of forestry compliance targets can be affected by other District/Regional and Government priorities which may arise to affect staff schedules such as forest fires or the activities of other resource-based industries on the forest. COVID-19 related work restrictions in the latter part of the audit term would also have had some effect on achievement of the targets.

It is worth noting that there was a recommendation in the 2015 IFA which directed that “corporate MNRF strongly consider retaining an active role in assisting MNRF Districts and companies in training compliance inspectors”. To address this recommendation, MNRF undertook two actions. The first was to improve communications around the prerequisites for undertaking the compliance field exam. The second was to solicit feedback from the compliance community towards possible improvements of the compliance training and certification process. Based on this feedback, the MNRF developed a new approach to certifying and supporting forest compliance inspectors which is intended to better prepare new inspectors and expose them to a broader compliance perspective through mentoring. By undertaking these actions, the MNRF met the requirements of this previous recommendation. Notwithstanding the development of this new approach, there are no compliance planning requirements that set out specific capacity or staffing targets for training Ministry or licensee staff.

3.6.4 SFL Holder Compliance Planning and Monitoring

A 10-year strategic compliance plan is in place for the 2021 FMP and was similarly in place for the 2009 FMP as per the requirements of the FMPM and Forest Compliance Handbook. Annual compliance monitoring plans were also included in each approved AWS.

The 10-year strategic compliance plans have contained 5 broad objectives. These objectives and highlights of progress are as follows:

- a) Resource protection
- b) Staff educational training, knowledge, skills and communication
- c) Maximizing efficiency of compliance activities
- d) Increasing compliance with legislation, plans and policies
- e) Continuous improvement

Generally, progress towards these objectives is being made. Similar to Red Lake-Sioux Lookout District, the SFL and OLL staff highlighted the challenges in recruiting, training and then retaining staff who are certified to conduct compliance inspections. SFL and OLL representatives made efforts throughout the audit term to assess and report on forest

operations compliance conducting an average of 32 inspections per year, however, inspections for numerous sites visited during the field audit were missing reports, including three water crossing installations which are considered as a ‘high-risk’ activity in compliance plans. A summary of licensee inspections as reported in approved annual reports (Table AR-6) is provided below. **Finding #7: SFL compliance targets and requirements on the Forest are not being met.**

Table 7. Licensee compliance inspections by category and fiscal year.

Category / Fiscal Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22*
Access	7	9	10	0	6	14	29
Harvest	17	11	23	21	5	19	18
Renewal	5	3	0	3	6	9	0
Maintenance	0	1	0	1	1	1	0
TOTAL	29	24	33	25	18	43	47

*AR not complete at time of audit. Based on approved inspections in FOIP at time of audit.

3.7 ACHIEVEMENT OF MANAGEMENT OBJECTIVES AND FOREST SUSTAINABILITY

The audit team’s assessment of the achievement of the 2009 FMP objectives and indicators is provided in the Appendix 2. The 2009 FMP had 14 objectives and 28 indicators. The assessments identified that 16 indicators out of 28 were achieved, five indicators were not achieved, and seven indicators are not applicable due to them being assessed during the 2009-2019 plan development. The objectives/indicators achieved included emulation of natural disturbances and landscape patterns, a natural range of forest composition and age classes, and levels of wildlife habitat. The objectives/indicators not achieved included three indicators related to actual harvest levels being much lower than planned levels and two indicators related to compliance.

The audit team examined factors such as the achievement of plan objectives, progress towards the desired future forest condition, and the level of benefits derived from the implementation of the Forest Management Plan in our assessment of forest sustainability. Field site visits, document and record reviews and interviews also informed the sustainability conclusion. The audit team can conclude that the achievement of long-term forest sustainability as assessed through the IFAPP, is not at risk. This conclusion is premised on the following:

- FMP objectives are largely met or there is movement towards FMP desirable levels.
- Plan assumptions and projections are generally consistent with operations.

- The underachievement of plan targets for silviculture activities and economic benefits is due to the lower than planned harvest levels as per market conditions. Market conditions have resulted in conifer utilization being significantly higher than hardwood utilization
- Although improvements needed (**Finding#4**), a renewal program continues to be implemented
- There is no significant backlog with respect to the area requiring FTG survey.

The audit team assessed the achievement of the 2021-2031 FMP objectives and indicator that could be measured at the time of the audit. The 2021-2031 FMP has only been implemented for a one-year period therefore objectives and indicators to be measured at the year five- and final-year Annual Report could not be assessed at the time of the audit. Summary of objectives assessed during plan preparation are listed below.

Assessed During Plan Preparation (17 indicators):

- Caribou Habitat (4 indicators);
- Forest Composition (5 indicators);
- Landscape Pattern (2 indicators);
- Wood Supply (3 indicators).
- First Nation and Métis Engagement in Planning Process (2 indicators);
- Local Citizens' Committee Engagement in Plan Development (1 indicator).

Objective achievement documented in the Forest Management Plan demonstrated that most objectives and indicators are maintained within desired levels, have movement towards or are overachieved (above the desired level). Assessments made by the planning team are consistent with assessments made by the audit team. For management objectives that are not achieving the desired levels, appropriate rationale is documented in the FMP.

3.8 CONTRACTUAL OBLIGATIONS

The evidence collected by the audit team shows that Domtar is generally meeting its contractual obligations. One inconsistency was noted where an invoice for tree planting on the adjacent Wabigoon forest was incorrectly attributed to the Trout Lake forest FRT account. Both the SFL and MNRF confirmed arrangements for a transfer between accounts to remedy this inconsistency. There were also findings related to the utilisation in the sawlog-only harvest areas and the SFL compliance monitoring program. Domtar generally completed the required surveys and provides data consistent with FIM. However, the two exceptions identified included a lack of a consistent method of reporting on winter road and trail features (**Finding #8**), and inconsistency in the current process for reporting and verifying road decommissioning

activities (**Finding #9**). Appendix 3 provides a break down and an assessment of each obligation.

3.9 CONCLUDING STATEMENT

The audit team concludes that management of the Trout Lake Forest was **generally in compliance** with the legislation, regulations and policies that were in effect during the term covered by the audit, and the Forest was managed in compliance with the terms and conditions of the Sustainable Forest Licence held by Domtar Inc, #542461. The forest is being-managed consistently with the principles of sustainable forest management, as assessed through the Independent Forest Audit Process and Protocol.



APPENDIX 1

Findings and Best Practices

Independent Forest Audit – Record of finding
Finding #1
<p>Principle: 3. Forest Management Planning</p>
<p>Audit Criterion: 3.4.4 Support for Management Objectives</p>
<p>Procedure(s): 2. Reasonable objectives, indicators (including desirable levels) and appropriate targets were developed by the planning team with the assistance of the LCC;</p>
<p>Discussion:</p> <p>Herbicide Objective 8d: Interview with Wabauskang First Nation, Domtar Inc. and MNRF indicated that the objective was developed by the planning team because of Wabauskang First Nation’s request to have a management objective to reduce the use of herbicide on the MU during the 2021 FMP plan term. FMP documentation (FMP-10, text and AP text) show that the assessment will be done by comparing the actual aerial application with the planned aerial application (FMP-17). Desired level and target are the same (5% reduction in chemical application).</p> <p>During interview with Wabauskang First Nation, it was clarified that the community is looking for forest managers to decrease the use of herbicide on the unit and wants to work with MNRF and the SFL in developing a meaningful and reasonable approach in achieving this goal. Interviews with Wabauskang First Nation indicated some confusion in what they believe the objective will do in terms of herbicide reduction and what the measurement is based on.</p> <ul style="list-style-type: none"> • Actual levels of aerial herbicide application are directly influenced by the actual harvest levels on the MU and the type of FU harvested • Actual harvest levels are almost always below FMP planned harvest levels and in the instance of the Trout Forest, this has been the case as shown in the final year AR for the 2009 FMP period. • Planned aerial herbicide (chemical cleaning and SIP) are estimated based on a variety of factors such as historical use, planned harvest levels in the 10-year term, FU planned for harvest and LTMD projections (i.e., silviculture pathways) <p>When developing an objective with the planning team, objectives and indicators (including desired levels and targets) should be appropriate and meaningful. Based on review of 10-year AR (page 29 of the 2020-2021 AR), the 2004 FMP tending achieved 25% of planned levels, 2009 FMP (including CP) reached 45% of planned levels. This is primarily due to</p>



lower actual harvest levels when compared to planned levels. The past AR results and the likelihood of actual harvest being much lower than planned harvest levels (subsequently resulting in lower actual aerial chemical cleaning/SIP) was not clearly communicated to Wabauskang First Nation during the planning process and during the development of the Herbicide objective.

Finding #1: Measurements against the planned herbicide target may not effectively portray the intent of 2021-2031 FMP Objective 8d.

Independent Forest Audit – Record of finding Finding #2
<p>Principle: 3. Forest Management Planning</p> <p>Audit Criterion: 3.3.2 Forest Resource Inventory (FRI) for the FMP (Planning Inventory/Planning Composite Inventory)</p> <p>Procedure(s): Assess whether MNRF provided inventory base feature data and FRI for managed Crown and non-licensed Crown areas to the SFL (plan author)</p>
<p>Background information and summary of evidence:</p> <p>Both the 2017 and 2020 FMPM state that preparation, review, and approval of a 10-year Forest Management Plan (FMP) normally takes 36 months. Document review (Analysis Package) and interviews show that the enhanced Forest Resource Inventory (eFRI) was provided to the company on April 5, 2016. The company inspected the original inventory and found some deficiencies associated with the interpreters’ calls based on supplemental information and consistency in interpreter classifications of some attributes. The errors were identified, and the inventory was sent back to be corrected. The corrected eFRI was delivered to the SFL on August 16, 2016. The company reviewed the eFRI and accepted it in November of 2016. With the delivery of the eFRI in August, this is only 33 months from when an April 1st, 2019, implementation is required. This leaves the company in a very difficult position to make up lost time in order have an approval FMP before April 1, 2019. 10-year FMP’s are normally contentious and it is not reasonable to have an FMP be developed in less than 36 months.</p> <p>Summary of errors in inventory:</p> <ul style="list-style-type: none"> • Interpreter bias most noted with horizontal stand structure (canopy structure of the forest polygon as a whole when viewed from above) • There were a lot of issues related to overstory and understory • There were issues with height and age • There were errors with the UCL codes • Issues with SFL data supplied to update the eFRI not being used • FTG data not used to update the eFRI • Many issues with stocking <p>The forest information manual indicates that the most recent inventory could have been used for planning if the new FRI is not provided, however, this would have been inappropriate considering a new inventory was being prepared and available by 2016. The old inventory was prepared in 1998 and would not have been considered the most up to date information available for the FMP.</p>



Finding #2: The MNRF submission of the FRI was late (august 2016) and was one of the reasons for the delay in the development of a 10-year FMP



Independent Forest Audit – Record of finding Finding #3
<p>Principle: 4. Plan Implementation Audit Criterion: 4.3 Harvest Procedure(s): 4.3.1: Review and assess in the field the implementation of approved harvest operations.</p>
<p>Background information and summary of evidence:</p> <ul style="list-style-type: none"> • Compliance reports during the audit period identified utilization issues • Of the 68 operational issues identified during the audit period, 26 were directly related to utilization • Utilization concerns were brought forth by the interviewed LCC members • Utilization as defined by the Provincial Scaling Manual • Utilization in full-tree chipping blocks is generally good <p>Utilization concerns centre around sawlog-only blocks where merchantable tops are being left behind in slash piles (roadside processing) and in the cutovers (CTL at the stump)</p>
<p>Discussion:</p> <p>To promote the optimum utilization of Crown forest resources, the Ontario Scaling Manual requires utilization of all fibre of merchantable size. The minimum merchantable size for conifer (except white/red pine and hemlock) is the 10-centimeter diameter class (9.1 to 11cm) measured at the smaller end of the log. Leaving logs in excess of these diameters which are greater than 2.5m in length is considered a wasteful practice under the Scaling Manual.</p> <p>A review of compliance reports and operational issues (both resolved and outstanding) identifies utilization as a recurring issue. During interviews with members of the public as well as forest industry and Ministry employees, concerns around overall utilization on the forest were brought forth.</p> <p>During the audit many full-tree chipping sites were visited, and on these sites, utilization issues were not observed. In most blocks, wasteful practices were minimal, however, where harvest operations specifically targeted sawlogs and no subsequent pulp operation followed, unburnt slash piles were observed to contain significant amounts of merchantable SPF pieces. One CTL site was visited during the field day (Block 2333) which was harvested winter 2021/2022. Heavy topping was apparent from the air and further investigation determined top sizes exceeding the Scaling Manual minimum. In this instance, the size and distribution of residual tops were such that they created a corduroy throughout the harvest block reducing the availability of productive growing space and potentially restricting future renewal establishment, natural or artificial. CTL areas where mechanical site preparation followed the harvest did not share the same loss of productive growing space.</p>

Of the pieces measured, some were in the 10cm diameter class, however, the 12-14cm classes were the most prevalent in the area traversed. Logs reaching the 16cm class were identified in many instances as well.

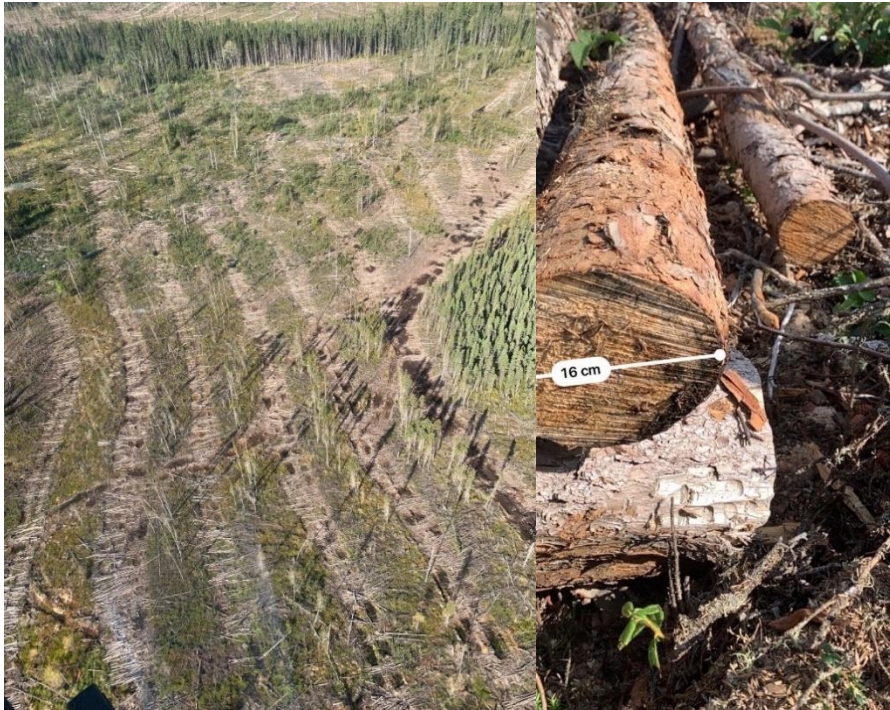


Figure 6. Photo on the left: A CTL site showing ‘corduroy’ of large tops. Photo on the right: Large diameter tops remaining (note larger end shown in picture).



Figure 7. Photo on the left: CTL site showing large topping. Photo on the right: Large diameter tops remaining (note larger end shown in picture).



Figure 8. Large topping in roadside debris pile.

Finding #3: Large topping in certain sawlog-only blocks has resulted in merchantable volume being left unutilized which is considered a wasteful practice under the Ontario Scaling Manual.

Independent Forest Audit – Record of finding

Finding #4

Principle: 4. Forest Management Plan Implementation

Audit Criterion: 4.4 Renewal

Procedure(s): Review and assess in the field the implementation of approved renewal operations.

Background information and summary of evidence:

Overall, the renewal sites visited were regenerating well. In some instances, planted areas have been taken over by significant natural regeneration which will have some effect on renewal/silvicultural success ratios. Often, sites were found to be of a more conifer-dominated forest unit than had been expected by the reported SGR.

The 2019 burn area contained 7 stops in which renewal was very sparse. Most of the area visited had been harvested between 2015 and 2017 with certain areas being planted while some areas had been left for natural regeneration pre-fire. Post-fire, the areas visited were left for natural regeneration. These sites in the burn had very little to no conifer regeneration returning. No evidence of renewal assessments to support the decision for natural regeneration was presented nor were any plans for artificial renewal treatments in place. Seed supply issues and availability of seed for aerial seeding were referenced as one of the constraints for taking advantage of natural site preparation by fire and application of this comparatively cost-effective renewal method.

Although the above referenced burn was the most distinct example, other instances were observed throughout the Forest of sites with lags in assessments and/or renewal treatments which may lead to renewal sites that do not achieve the target SGR.





Figure 9. Single pine seedling growing amongst non-target shrubs and herbaceous plants in 2019 burn area.

Finding #4: Delays in renewal assessments have reduced the accuracy of renewal reporting and the opportunities for timely intervention with supplementary treatments.

Independent Forest Audit – Record of finding
Finding #5
<p>Principle: 4. Plan Implementation</p> <p>Audit Criterion: 4.7 Forestry Aggregate Pits</p> <p>Procedure(s): Review the FMPM for Forestry Aggregate Pits, related legislation, operational standards, extraction areas, and conditions and report requirements.</p>
<p>Background information and summary of evidence:</p> <ul style="list-style-type: none">• 16 forestry aggregate pits (FAPs) were selected to be looked at over the two on-ground field days and one helicopter day. Numerous others were encountered as well during the travel. FAPs viewed during the helicopter day (sites H01-H15, T61, T65-68) were generally in good, safe condition. Some had been fully rehabilitated and renewed. During the two on-ground field days, however, many inactive FAPs were encountered that had been left in varying states of non-conformance.• Conformance was assessed against Operational Standards for Forestry Aggregate Pits (Appendix IV, FMPM 2020).
<p>Discussion:</p> <ul style="list-style-type: none">• No FAPs were active at the time of inspection.• Majority of FAPs assessed were not sloped to a stable angle of repose.• Many of the FAPs assessed contained mature trees <5m from what were the active extraction faces.• Of the unsloped FAPs, many were excavated below and immediately beside drivable roads. In these instances, medium-large boulders were placed on the edge of the road surface in an effort to better identify the hazard boundary and to reduce the likelihood of traffic accidentally going over the edge.





Figure 10. Inactive forestry aggregate pit adjacent an operational road. Large boulders rim the roadside face and the extraction face remains unrehabilitated.

Conclusion:

There is no functional system in place to ensure FAPs are stabilized and made safe prior to the departure of equipment and active operations in harvest areas. FAPs are being left in a state of non-conformance long after they are actively used. Inconsistent monitoring of Forestry Aggregate Pits has resulted in safety and overall conformance issues during times of inactivity as well as the delayed rehabilitation of aggregate pits.

Finding #5: There are safety and overall conformance issues during times of inactivity in Forestry Aggregate Pits as well as the delayed rehabilitation of aggregate pits.

Independent Forest Audit – Record of finding Best Practice #1
<p>Principle: 4. Plan Implementation</p> <p>Audit Criterion: 4.7. Access</p> <p>Procedure(s): Review and assess in the field the implementation of approved access activities.</p>
<p>Background information and summary of evidence:</p> <p>Water protection, protection of sensitive sites and decommissioning of roads in the woodland caribou zone are areas of environmental and public concern in the Trout Lake Forest.</p> <p>The audit team was invited to see road building practices by John Meek, Operations Forester at Doug Riffel Harvesting, that with careful planning of road location and ground extraction, are aimed to reduce road impact on surface water movement and speed up road rehabilitation after decommissioning.</p> <p>Particularly, the following practices were demonstrated:</p> <ol style="list-style-type: none">1. Use of mix of abundant corduroy placed on the surface of wet sites, pipes, and avoidance of nearby aggregate extraction to encourage free movement of water and avoid ponding.2. Avoidance of creating deep ditches by reaching further out to collect road building material. This practice is intended to encourage faster renewal and avoid water ponding. <p>These practices have been implemented in the Forest within the past 3 years and, as such, it is early to determine the economic implications, durability of roads and suitability to a variety of topographic and soil conditions. These roads are being monitored and improvements to the practices already incorporated. This kind of active learning through implementation, monitoring, evaluation and modification of practices to incorporate lessons learned is a core essence of adaptive management framework, embraced by Ontario’s forest management policy framework.</p>



Figure 11. Examples of road building techniques implemented by Doug Riffel Harvesting.

Best Practice #1: Noteworthy novel practices in road building, in the spirit of Ontario’s adaptive management framework, are being implemented in the Trout Lake Forest by Doug Riffel Harvesting with the intent to reduce road building impact to sensitive sites and speed up road rehabilitation after decommissioning.

Independent Forest Audit – Record of finding Finding #6
<p>Principle: 6. Monitoring</p> <p>Audit Criterion: 6.1. District compliance planning and associated monitoring</p> <p>Procedure(s): 7. Review the MNRF District Compliance Plans in place during the audit period to determine how forest management activities were to be monitored for compliance by MNRF and assess whether the actual level of the overall monitoring program was in accordance with the FMP/plans and whether it was appropriate based on evidence gathered through analysis of related audit criteria, including field audits. Consider Principle 4 which includes an examination of MNRFs compliance information system.</p>
<p>Background information and summary of evidence:</p> <ul style="list-style-type: none"> • Forest Compliance Handbook • FMPM 2020 Section 4.7 Monitoring and Assessment • FMP Section 4.7.1. Forest Operations Compliance • District Annual Compliance Operations Plans • Compliance inspections approved in the Forest Operations Inspection Program • Interviews with management staff and workers
<p>Discussion:</p> <p>District Annual Compliance Operations Plans were developed and in place annually as required. Overall, effort is being made to conduct and report inspections and to do so using a loosely risk-based approach. Despite efforts, inspections and reporting falls short of the requirements. Discussion with staff involved in the compliance monitoring program consistently centred around the challenges with recruiting and training sufficient labour to fulfill compliance monitoring and reporting obligations. Even with time and effort spent developing compliance plans which contain the required numeric targets and risk-based approaches, compliance planning and target setting does not consider nor set out a pathway to ensure adequate and trained/certified staff. Notwithstanding development of the new compliance training methodology, which is intended to better prepare new inspectors and expose them to a broader compliance perspective through mentoring, there are currently no requirements that set out specific compliance training, staffing and capacity targets for the District.</p>
<p>Conclusion:</p> <p>Compliance plans and targets on the forest are not being fully met due to an insufficient number of certified inspectors. Annual Compliance Operations Plans do not</p>

require commitments to ensure sufficient, trained and certified capacity and thereby lack realistic and achievable targets related to forest operations compliance.

Finding #6: District compliance targets on the Forest are not being met.



Independent Forest Audit – Record of finding Finding #7
<p>Principle: 6. Monitoring</p> <p>Audit Criterion: 6.2. SFL holder compliance planning and monitoring</p> <p>Procedure(s): 9. Review the Ten-Year Compliance Strategy and the Annual Plans of Action. Determine whether the actual level of the implemented overall monitoring program is appropriate and effective, and whether it is in accordance with the approved FMP and AWS.</p>
<p>Background information and summary of evidence:</p> <ul style="list-style-type: none"> • Forest Compliance Handbook • FMPM 2020 Section 4.7 Monitoring and Assessment • FMP Section 4.7.1. Forest Operations Compliance • 10-year compliance strategy • Annual compliance action plans • Compliance inspections approved in the Forest Operations Inspection Program • Interviews with management staff and workers
<p>Discussion:</p> <p>A 10-year strategic compliance plan is in place for the 2021 FMP and was similarly in place for the 2009 FMP as per the requirements of the FMPM and Forest Compliance Handbook. Annual compliance monitoring plans were also included in each approved AWS.</p> <p>The 10-year strategic compliance plans have contained 5 broad objectives. These objectives and highlights of progress are as follows:</p> <ol style="list-style-type: none"> 1. Resource protection <ul style="list-style-type: none"> • AOCs, other values and sensitive areas are well protected • The SFL has a comprehensive EMS system which, beyond the FMP and other requirements, promotes the use of best management practices 2. Staff educational training, knowledge, skills and communication <ul style="list-style-type: none"> • In recent years, the SFL conducts a spring meeting with OLLs to review annual plans, including compliance issues and priorities • Capacity to keep fully up-to-date with compliance reporting requirements is lacking 3. Maximizing efficiency of compliance activities <ul style="list-style-type: none"> • Multiple Compliance Reporting Areas are sometimes aggregated into a single FOIP submission

- There are early conversations between the SFL and District regarding risk-based compliance inspections which may alleviate the need for full inspections of very low risk activities
- 4. Increasing compliance with legislation, plans and policies
 - Operations are generally in compliance with the requirements
 - Interviews and review of FOIP inspections indicate that utilization and water crossings are the biggest source of operational issues
 - Required inspections are not always completed or completed in the required timeframes
- 5. Continuous improvement
 - Interviews with MNRF compliance staff indicated that the SFL generally takes a positive approach in mitigating identified issues and repeat instances are very rare

Generally, progress towards these objectives is being made. As similarly identified in Finding #7, despite efforts, inspections and reporting are falling short of the requirements in both timing and number. Discussion with staff involved in the compliance monitoring program also reference the challenges with recruiting and training sufficient labour to fully fulfill compliance monitoring and reporting obligations. Despite time and effort spent developing compliance plans which contain the required targets, compliance planning and target setting does not consider nor set out a pathway to ensure trained/certified staff. Notwithstanding development of the new compliance training methodology, which is intended to better prepare new inspectors and expose them to a broader compliance perspective through mentoring, there are currently no requirements that set out specific compliance training, staffing and capacity targets for the SFL.

Conclusion:

Compliance plans and targets on the forest are not being fully met due to an insufficient number of certified inspectors. SFL compliance plans do not require commitments to ensure sufficient, trained and certified capacity and thereby lack realistic and achievable targets related to forest operations compliance.

Finding #7: SFL compliance targets and requirements on the Forest are not being met.

Independent Forest Audit – Record of finding

Finding #8

Principle: 6. Monitoring

Audit Criterion: 6.5 Annual reports

Procedure(s): Examine the annual reports for the audit period and assess whether the tables, text, maps and digital information are accurate, complete and in accordance with the applicable information product requirements, including the associated deadlines.

Background information and summary of evidence:

As a result of the review of Final Year Annual report documentation, interviews with MNRF and Domtar, it was found that some operational roads have not been reported as constructed roads. Domtar indicates that these are access trails and should not be reported since they are for winter use only and not built for hauling wood or for year-round vehicle access. Below is an example on an unreported feature which was visited during the field audit.





Figure 12. Photo 1, 2 and 3 – BlockID 1044. unreported feature (winter road) approx. 200m in length connecting two depletions.

These features are

- Always within operational road boundary
- No evidence of aggregate being used on road surface
- No evidence of water crossings (i.e., culverts, bridges) being used
- Not used during summer months
- Outside of approved harvest area and not reported as depleted

Since these features are not reported as roads, they don't have a roads management strategy associated with them. Features within reported depletions do have an SGR associated to them and will be regenerated. However, features outside of the approved harvest area (depletions) do not have an SGR associated to them. Therefore, these are unreported features which cannot be monitored or assessed for regeneration or be part of FRI updates.

Conclusion:

The lack of a consistent method of reporting on winter road and trail features prevents development and implementation of road use strategies and monitoring.

Road reporting of winter road and trail features is inconsistent with current requirement during the audit term and prevents development and implementation of road use strategies and monitoring.

Finding #8: There is a lack of a consistent method of reporting on winter road and trail features.

Independent Forest Audit – Record of finding

Finding #9

Principle: 6. Monitoring

Audit Criterion: 6.5 Annual reports

Procedure(s): Examine the annual reports for the audit period and assess whether the tables, text, maps and digital information are accurate, complete and in accordance with the applicable information product requirements, including the associated deadlines.

Background information and summary of evidence:

The auditors observed several instances of road decommissioning via artificial regeneration on operational roads. These roads are still listed in the current FMP roads layer as existing roads, indicating that road decommissioning activities are inconsistently tracked.

The follow up interviews indicated that the process and application for the decommissioning is inconsistent and that this is due to the onerous process for the reporting and verification of road decommissioning activities.



Figure 13. Photo – BlockID: M31FMP09 - Example of Planted Road 2019(decommissioned?) but still shown as existing road in roads data.

Finding #9: The current process for reporting and verifying road decommissioning activities is inconsistent in its application.

Independent Forest Audit – Record of finding

Finding #10

Principle: 6 Monitoring

Audit Criterion: 6.3 Silvicultural Monitoring and assessment program

Procedure(s): Assess whether the management unit assessment program (SFL and MNRF District) is sufficient and is being used to provide the required silviculture effectiveness monitoring information

Background information and summary of evidence:

2018-2019 was the last year where Silvicultural Effectiveness Monitoring (SEM) was done on the Trout Forest by the Red Lake-Sioux Lookout District office. Since then, the Ministry SEM program has been in a transition period.

Through interview and information shared by Regional Forested Ecosystems Science Specialist the following was discussed.

- MNRF has been transitioning to a different program when compared with the SEM.
- MNRF has been in a transitioning period which began in 2019 to allow more time for the development and implementation of Silvicultural Enhancement Initiative (SEI)
- The direction that pertains to MNRF District SEM (which will become “SM” or simply “Silviculture Monitoring”) programs is still in a draft format and has at this time not been approved. **However, some training occurred in the fall of 2022 and test on the implementation is planned next summer (2023)**
- The intent of the direction is to continue with a Regional Operation Division lead SEM program model, implemented out of the District offices. The District office would be tasked with the validation of the SFL holder’s accuracy of establishment (FTG) assessment information.

During this transition period (2019 to present), MNRF district office have been instructed to:

- Subject to current resourcing levels and the priority of field activities, continue to assess the Forest Manager’s renewal results with the objective of identifying the accuracy of the submission
- Apply the concept of risk when selecting appropriate assessment methodologies (more to less intensive) for survey blocks by reviewing the complexity of the attribute information to be validated.

Interview with Red Lake-Sioux Lookout District staff indicate that since the last SEM program on the unit in 2018, no silvicultural monitoring has occurred by the MNRF to validate the accuracy of the SFL’s establishment assessment results. It was communicated

to the auditor that current staffing level and overall capacity at the Red Lake-Sioux Lookout District is the primary reason for this lack of silvicultural monitoring.

During the field audit, over 3000ha of area surveyed as FTG was visited by the audit team. During these visits, the FTG assessments appeared to be accurate and in line with what was reported in the annual reports. There is no evidence to suggest that the lack of silvicultural monitoring by the MNRF is resulting in deficiencies in the SFL's FTG program.

Finding #10: Since 2018, MNRF has not had an assessment program in place to validate the accuracy of the SFL's establishment assessment results.



APPENDIX 2

Management Objectives Table

Management Objectives Table - 2009-2019 FMP and 2019-2021 CP for the Trout Lake Forest.

2009-2019 FMP Objectives	Indicator	Assessment of Objective Achievement	Comment
Objective 1: To emulate natural disturbance and landscape patterns characteristic of the Trout Lake Forest	Landscape Pattern	Partially Achieved	There was movement towards the desired levels and although not all size classes move towards, progress is acceptable.
Objective 2: To maintain towards a natural range of forest composition and age classes which includes mature/overmature age classes and rare forest types while staying within the socially acceptable range.	Area by forest type and age	Achieved	Some differences/changes are associated with the new inventory being used; however, most forest units have Plan End area grouping within the desirable range. Progress is acceptable.
Objective 2: To maintain towards a natural range of forest composition and age classes which	Area of rare forest types	Achieved	Rare Forest Types are Cedar, Black Ash, White spruce and White pine. All have increased except Cedar (267ha = Plan Start and 248=Plan End) with the use of the new inventory as being the primary reason. Progress is acceptable.



2009-2019 FMP Objectives	Indicator	Assessment of Objective Achievement	Comment
includes mature/overmature age classes and rare forest types while staying within the socially acceptable range.			
Objective 2: To maintain towards a natural range of forest composition and age classes which includes mature/overmature age classes and rare forest types while staying within the socially acceptable range.	Amount and distribution of old growth forest	Achieved	Amount and distribution of old growth forest have increased due to under-harvesting and lack of natural disturbances. All forest units exceeded Old Growth desired and target levels at plan end.
Objective 3: To maintain forest function for wildlife habitat in the Trout Lake Forest	Habitat for forest dependent species at risk	Achieved	Desired levels achieved at plan end. Under-harvesting likely the main reason. For the new 2021 FMP, only species at risk are measured.
Objective 3: To maintain forest function for wildlife habitat in the Trout Lake Forest	Area of habitat for forest-dependent provincially	Achieved	All desired levels were exceeded at plan end. Under-harvesting likely the main reason. For the new 2021 FMP, only species at risk are measured.

2009-2019 FMP Objectives	Indicator	Assessment of Objective Achievement	Comment																
	featured species																		
Objective 3: To maintain forest function for wildlife habitat in the Trout Lake Forest	Compliance with prescriptions developed for the protection of forest habitat related to forest-dependent species-at-risk and locally rare species.	Partially Achieved	Over a 12-year period (2009-2021) there was one instance where Caribou Calving Area of Concern was not followed due to operations taking place within the modified timing restriction (during calving and nursery period). For a short period of time, forestry operation took place during the first month of the calving and nursery period. This occurrence took place during the 2019-2021 CP period. Desired level and target required 100% compliance with Species at Risk and locally rare species habitat area of concerns prescription annually, therefore the once instance means the target was not achieved. 99.8% was reported as the actual indicator achievement at plan end. Due to this only occurring once, no finding was warranted.																
Objective 3: To maintain forest function for wildlife habitat in the Trout Lake Forest	Area of habitat for provincially selected species (indicators of old growth forest conditions)	Achieved	<p>Wildlife species habitat measured were Black Bear foraging (BBF), Lynx denning (LD) and Black-backed woodpecker (BW). Plan end levels exceed the desired levels.</p> <table border="1" data-bbox="1066 1172 1818 1341"> <thead> <tr> <th>Species Habitat</th> <th>Desired</th> <th>Target</th> <th>Plan End</th> </tr> </thead> <tbody> <tr> <td>BBF</td> <td>132,635</td> <td>214,804</td> <td>207,266</td> </tr> <tr> <td>LD</td> <td>117,037</td> <td>198,008</td> <td>206,463</td> </tr> <tr> <td>BW</td> <td>149,570</td> <td>222,099</td> <td>224,467</td> </tr> </tbody> </table>	Species Habitat	Desired	Target	Plan End	BBF	132,635	214,804	207,266	LD	117,037	198,008	206,463	BW	149,570	222,099	224,467
Species Habitat	Desired	Target	Plan End																
BBF	132,635	214,804	207,266																
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2009-2019 FMP Objectives	Indicator	Assessment of Objective Achievement	Comment
			Areas of specific habitat are no longer measured provincially except for species at risk. These species are not specifically measured in the 2021 FMP.
Objective 3: To maintain forest function for wildlife habitat in the Trout Lake Forest	Landscape pattern-interior, Caribou Habitat	Achieved	Desired and target levels is 40% of the caribou zone in suitable habitat condition. At plan end, levels were measured to be 52%. This exceeds the desired and target levels.
Objective 3: To maintain forest function for wildlife habitat in the Trout Lake Forest	Landscape pattern-interior, Marten Core Habitat	Achieved	This indicator proved difficult to measure at plan end due not being able to run the analysis. It was estimated that desired levels were achieved. New 2021 FMP now measured texture of mature and old forest (not marten habitat). Implementation of DCHS will also address this indicator.
Objective 4: To provide road-based access, land use and recreational opportunities through road maintenance and development of access to areas planned for harvest within the plan period.	Kilometres of road per square kilometre of Crown forest (km/km ²)	Achieved	Desired levels and target were to maintain primary and branch drivable roads below 0.40km/km ² (crown productive land). In 2009, the levels were at 0.20km/km ² and at plan end (2021) levels remained at 0.20km/km ² . Construction and decommissioning activities were similar, there no changes occurred.



2009-2019 FMP Objectives	Indicator	Assessment of Objective Achievement	Comment
Objective 5: To implement forestry operations in a manner that minimizes negative impacts on all identified resource users, protects all identified values.	Non-compliance in forest operations inspections (% of inspections in noncompliance, by category (minor, moderate and significant, as determined by MNR))	Not Achieved	MNRs FOIP database does not report any operational issues with a category of Minor, Moderate or Significant. Actual required reporting is falling short of targets and for this reason, the auditor cannot assess this as achieved. Finding #6 - District compliance targets on the forest are not being met. Finding #7 - SFL compliance targets and requirements on the forest are not being met.
Objective 6: To effectively regenerate harvest areas to Free Growing status in a manner that is consistent with the regeneration standards outlined in the Silvicultural Ground Rules for the Trout Lake Forest.	Percent of harvested forest area assessed as free-growing	Assessed as achieved by Auditor	Cannot be measured within plan period due to more time needed for regeneration to reach Free to Grow standards. However, the annual report indicates 98% success for the 1999 and 2012 period. In addition, Free to Grow sites visited during field audit were found to be successful in meeting regeneration standards.



2009-2019 FMP Objectives	Indicator	Assessment of Objective Achievement	Comment
Objective 7: To implement forestry operations in a manner that minimizes impacts on non-timber resource users, such as trappers and berry pickers, and protects non-timber values.	Compliance with prescriptions for the protection of natural resource features, land uses or value dependent on forest cover (% of inspections in compliance)	Achieved	Out of 711 inspections, total of 5 issues related to AOC non-compliance were identified. Target is to achieve 98% compliance annually. Actual achievement is 99%.
Objective 8: To recognize and respect the legitimacy and presence of all resource-based commercial businesses, and to contribute to the economic viability of resource based businesses in or adjacent to the Trout Lake Forest through the protection of associated values.	Compliance with prescriptions for the protection of resource-based tourism values (% of inspections in compliance)	Achieved	Out of 711 inspections, total of 1 issues related to tourism were identified. Target is to achieve 98% compliance annually. Actual achievement is 99.9%.



2009-2019 FMP Objectives	Indicator	Assessment of Objective Achievement	Comment
Objective 9: To provide a predictable and continuous supply of wood products to the forest products industry from the Trout Lake Forest	Short-term projected available harvest Spruce-Pine-Fir volume	Not applicable - assessed during FMP development	The objective achievement was assessed during the development of the 2009-2019 FMP. They are not measured at Plan End
Objective 9: To provide a predictable and continuous supply of wood products to the forest products industry from the Trout Lake Forest	Long-term projected available harvest area and volume, by species group	Not applicable - assessed during FMP development	The objective achievement was assessed during the development of the 2009-2019 FMP. They are not measured at Plan End
Objective 9: To provide a predictable and continuous supply of wood products to the forest products industry from the Trout Lake Forest	Opportunities for volumes of incidental timber for personal (non-commercial) uses	Not applicable - assessed during FMP development	The objective achievement was assessed during the development of the 2009-2019 FMP. They are not measured at Plan End
Objective 9: To provide a predictable and continuous supply of wood products to the	Available, Forecast and actual harvest	Not Achieved	Limited demand of fiber and the closure/re-opening of the Ear Falls sawmill have impacted harvest levels on the Trout Forest. Actual harvest area and volumes levels are much lower than planned levels for the 2009-2021 period.



2009-2019 FMP Objectives	Indicator	Assessment of Objective Achievement	Comment
forest products industry from the Trout Lake Forest	area by Forest unit		
Objective 9: To provide a predictable and continuous supply of wood products to the forest products industry from the Trout Lake Forest	Available, Forecast and actual harvest volume, by species groups	Not Achieved	Limited demand of fiber and the closure/re-opening of the Ear Falls sawmill have impacted harvest levels on the Trout Forest. Actual harvest area and volumes levels are much lower than planned levels for the 2009-2021 period.
Objective 9: To provide a predictable and continuous supply of wood products to the forest products industry from the Trout Lake Forest	Percent of forecast volume utilized, by mill	Not Achieved	Limited demand of fiber and the closure/re-opening of the Ear Falls sawmill have impacted harvest levels on the Trout Forest. Actual harvest area and volumes levels are much lower than planned levels for the 2009-2021 period.
Objective 10: To maintain productivity of soil function, and to protect water quality and fisheries habitat where forest management activities occur in the Trout Lake Forest	Compliance with management practices that prevent, minimize or mitigate site damage	Achieved	Field audit did not observe any instances of site damage. Available compliance inspection reports do not identify a history of related noncompliance.



2009-2019 FMP Objectives	Indicator	Assessment of Objective Achievement	Comment
Objective 10: To maintain productivity of soil function, and to protect water quality and fisheries habitat where forest management activities occur in the Trout Lake Forest	Compliance with prescriptions developed for the protection of water quality and fish habitat	Achieved	Field audit did not note any issues with water quality AOCs. Available compliance inspection reports do not identify a history of related noncompliance.
Objective 11: To provide continuous social benefits resulting from the managed Crown forest available for timber production on the Trout Lake Forest.	Managed Crown forest available for timber production	Achieved	Desired Level is achieved at plan end.
Objective 12: To work with local Aboriginal peoples, whose communities are situated in or adjacent to the Trout Lake Forest, to identify and implement ways to enhance social and economic benefits to Aboriginal peoples.	Opportunities for involvement provided to, and involvement of Aboriginal communities in plan development	Not applicable - assessed during FMP development	The objective achievement was assessed during the development of the 2009-2019 FMP. They are not measured at Plan End.



2009-2019 FMP Objectives	Indicator	Assessment of Objective Achievement	Comment
Objective 12: To work with local Aboriginal peoples, whose communities are situated in or adjacent to the Trout Lake Forest, to identify and implement ways to enhance social and economic benefits to Aboriginal peoples.	Opportunities for Aboriginal communities to provide input on the protection of Aboriginal Forest Values	Not applicable - assessed during FMP development	The objective achievement was assessed during the development of the 2009-2019 FMP. They are not measured at Plan End
Objective 13: To plan and implement forest management activities in a manner that protects all known Aboriginal values.	Compliance with Prescriptions for the Protection of Aboriginal and Cultural Heritage Values	Partially achieved	The Annual Report mention two instances of non-compliance related to archaeological potential areas. Inspection revealed that impacts were low risk.
Objective 14: To have the Local Citizens Committee effectively participate in the development of the management plan.	Local Citizens Committee’s self-evaluation of its effectiveness in plan development	Not applicable - assessed during FMP development	The objective achievement was assessed during the development of the 2009-2019 FMP. They are not measured at Plan End



APPENDIX 3

Compliance with Contractual Obligations

Licence condition	Licence holder performance
Payment of Forestry Futures and Ontario Crown charges	All Forestry Futures charges and Ontario Crown charges have been paid.
Wood supply commitments, MOAs, sharing arrangements, special conditions	Domtar contains wood supply commitments to the Norbord Inc. (now West-Fraser) facility in Barwick, ON and the Weyerhaeuser Company Limited facility in Kenora, ON. Discussions with representatives from both facilities indicated that these commitments were being satisfactorily met.
Preparation of FMP, AWS and reports; abiding by the FMP and all other requirements of the FMPM and CFSA	Domtar completed all required plans and reports to the required standards.
Conduct inventories, surveys, tests and studies; provision and collection of information in accordance with the FIM	Domtar completes the required surveys and provides data consistent with FIM. The two exceptions identified included a lack of a consistent method of reporting on winter road and trail features (Finding #8), and inconsistency in the current process for reporting and verifying road decommissioning activities (Finding #9).
Wasteful practices not to be committed	Some wasteful practices were observed in relation to large topping in sawlog-only blocks. Finding #3. In most blocks, wasteful practices were minimal.
Natural disturbance and salvage SFL conditions must be followed	Not audited following risk assessment that found no salvage operations during the audit period.
Protection of the licence area from pest damage, participation in pest control programs	Not audited following risk assessment. Risk was considered low as this is Crown led initiative. No issues were brought forward regarding SFL participation.
Withdrawals from licence area	Not audited following risk assessment
Action plan and progress towards the completion of actions as reported in annual reports or status reports	Action plan and status reports were prepared by Domtar and MNRF in accordance with contractual obligations and action items were observed to be effectively implemented by the audit team

Licence condition	Licence holder performance
prepared under previous versions of the IFAPP	
Payment of forest renewal charges to the FRT	All Forest Renewal Charges have been paid.
FRT eligible silviculture work	Domtar completed FRT eligible work in accordance with planned specifications and funding eligibility requirements.
FRT forest renewal charge analysis	A forest renewal trust charge analysis was completed each year and applicable rates were approved by the district. A review of these analyses was conducted, and annual renewal rates set were appropriate to support planned renewal projects. The third-party FRT specified procedure audit was conducted for the 2020-2021 fiscal year. One significant inconsistency was noted where an invoice for tree planting on the adjacent Red Lake Forest was incorrectly attributed to the Trout Lake forest FRT account. Both the SFL and MNRF confirmed arrangements for a transfer between accounts to remedy this inconsistency.
FRT account minimum balance	The requirements for meeting Forest Renewal Trust account minimum balances were met each year as were the process requirements to set forest renewal trust account charges.
Silviculture standards and assessment program	Domtar complies with standards and assessment programs required by the SFL.
First Nations and Métis opportunities	Domtar provides opportunities through active engagement, agreements, and collaboration on various projects. For example, Domtar collaborates with Wabauskang First Nation on blueberry habitat mapping. Financial support is provided to Grand Council Treaty 3 forestry engagement project and others.
Preparation of compliance plan	Domtar prepared its 10-year strategic and annual compliance planning documents.
Internal compliance prevention/education program	In recent years, Domtar has conducted spring meetings with MNRF and OLLs to review operational plans and compliance for upcoming year.

Licence condition	Licence holder performance
	Trout Lake Forest is SFI certified which places an emphasis and sets targets on continued education of all workers in the Forest.
Compliance inspections and reporting; compliance with compliance plan	Domtar completes compliance inspections in accordance with the compliance plans but reporting requirements were not consistently met. Finding #7 SFL compliance targets and requirements on the forest are not being met.
SFL forestry operations on mining claims	Field observations found mining claim posts were protected during harvest operations.

APPENDIX 4

Audit Process

IFAs are legally required under Ontario Regulation 319/20, made under the Crown Forest Sustainability Act (CFSA). This regulation states that IFAs must be completed at least once every 10 years. The key source of direction for the IFA comes from the Independent Forest Audit Process and Protocol (IFAPP). IFAs are governed by eight guiding principles as described in the 2021 IFAPP:

1. Commitment,
2. Public consultation and First Nation and Métis involvement and consultation,
3. Forest management planning,
4. Plan assessment and implementation,
5. System support,
6. Monitoring,
7. Achievement of management objectives and forest sustainability, and
8. Licence and contractual obligations.

Recommendations arise from audit team observations of material non-conformances and the identification of situations in which there is a significant lack of effectiveness in forest management activities. Similarly, the audit team may highlight best practices for the cases where auditees' actions go above and beyond legal requirements and result in positive outcomes for forest and communities. The IFA findings are addressed by the auditees (District and Region MNRF) in the IFA action plans and results will be reported in the IFA status reports.

The sections below provide a description of how the evidence was collected and reviewed.

The 2022 Trout Lake Forest IFA covered a seven-year period of April 1, 2015 to March 31, 2022. The following forest management planning processes were subject to audit:

- 2021-2031 Forest Management Plan: preparation and implementation of Year 1 (April 1, 2021 to March 31, 2022).
- 2019-2021 Contingency Plan: planning and implementation
- 2009-2019 Forest Management Plan: implementation of years 7-10 (April 1, 2015 to March 31, 2019)

Risk Assessment

The IFA for the Trout Lake Forest was started in July of 2022 with the risk assessment to determine which optional IFAPP protocols are relevant for the Trout Lake Forest considering



management unit specific issues. All optional protocols selected can be found in Table 6. As per the IFAPP, the risk assessment will require the audit team to assess optional procedures for probability of occurrence, recognizing that severity has already been assessed as low in assigning the procedure to the optional category. Protocols subject of review in this Risk Assessment are outlined in the Appendix A of the IFAPP and marked as “Optional”. There were 80 associated optional protocols in the IFAPP. 25 of those were considered as not applicable for this audit, 43 were deemed as low risk and 12 were identified posing sufficient risk to be included in the audit.

The decision to include the procedures in the audit sample was based on the following information:

- Part of the consultation took place under the Covid conditions with no in-person meetings.
- There was one issue resolution processes within the audit term.
- Based on the interviews and the CP Proposal, reasoning around the decision to develop the CP instead of the 10-year FMP was made after the FMP development process had started. These included: the quality of FRI, delay in LTMD preparation and need for summer ground.
- There is a high staff turn-over in the Red Lake-Sioux Lookout District that may have an impact on the performance of staff and document control.
- The ability to assess FMP effectiveness in terms of meeting its strategic objectives depends on the quality of data collected and appropriateness of data collection methods. Interviews and document review indicated no issues, however, the risk to the sustainability was considered medium.
- 12-year AR was approved late because of the disagreement of the plan author with MNRF. The issue concerns road reporting procedures and there is a concern regarding under reporting/lack of reportion for “winter roads”.

Table 6. Procedures audited, by risk category.

Principle	Optional Applicable (#)	Optional Selected (#)	% Optional Audited	Mandatory Audited (#) (100% Audited)	Comments
1. Commitment	0	0	0%	0	
2. Public consultation and First Nations and	5	2	40%	2	2.2 procedure 1 2.3 procedure 1

Métis involvement					
3. Forest management planning	29	4	14%	43	3.3.2 procedure 4 3.11 procedures 3-5
4. Plan assessment and implementation	1	0	0%	9	
5. System support	2	2	100%	0	5.1 procedure 1 5.2 procedure 1
6. Monitoring	10	4	40%	9	6.4 procedures 1-3 6.5 procedure 4
7. Achievement of management objectives and forest sustainability	0	0	0%	14	
8. Contractual obligations	6	0	0%	28	
Totals	50	12		105	

Audit Plan and site selection

The audit plan was developed and presented in August 2022. It outlined the protocols selected with the rationale, key contacts, and audit schedule. During the pre-audit meeting (August 19, 2022), this information, along with the independent site selection was also presented to the auditees.

Field sample sites were selected by the audit team in August-September 2022 following a 3-step approach that was designed to maintain the independence of the site selection but enable logistical efficiency of the field audit by soliciting input from forest managers:

- 1st selection: Independent auditor sample included a minimum 20% off all harvest and silviculture operation types. The overlapping and/or nearby road construction, bridges and culvers were then selected to help with field logistics.
- 2nd selection: netting down to a minimum of 10% using access/logistics considerations in the field audit, in collaboration with Domtar and MNRF.
- 3rd selection: additional sites brought forward by stakeholders, First Nation and Métis communities and public.

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Sites were selected in accordance with the guidance provided in the IFAPP (e.g., operating year, contractor, geography, forest management activity, species treated or renewed, and access) using GIS shapefiles provided by Domtar. The field sample sites achieved a minimum 10% sample of the forest management activities that occurred during the audit period. Table 7 includes the detailed description of the audit sample. The audit team also inspected the application of Areas of Concern prescriptions, aggregate pit management, and rehabilitation and water crossing.

The audit team randomly samples 10% of the area representative of FRT funded activities reported as carried out in the year of the FRT specified procedures report, for the 2020-2021 year (see table 4). The sample for the 2020-2021 period did not reach the required 10% for all activities, therefore, the audit team used sites from the original 20% to add additional sites as needed.

The field audit was conducted from September 12 to the 15th, 2022, and included 2 days with 2 trucks, and one helicopter day. The field inspection included site-specific (intensive) and landscape-scale (extensive helicopter) examinations. The Closing Meeting was held on September 22nd, 2022. At this meeting the draft findings were presented to the auditees. Draft Appendix 1 with more detailed description of audit findings was shared a week later. The comments on audit findings received from Domtar and MNRF were taken into consideration when developing the draft and final audit reports.



Table 7. Field audit site selection.

Activity or Feature	Stratum size	Proposed sample size	Actual sample size	Actual sampling intensity (%)
Water Crossings	101 crossings	10	13	12.9
Slash piles	664.65 km	65 km	66.5 km	10
Forest Aggregate Pits	254 pits	25	25	10
Tending	2269.75 ha	227 ha	845 ha	37
Site Preparation	17057.34 ha	1706 ha	1752 ha	10.3
Harvest	32973.31 ha	3297 ha	3399 ha	10.3
Regeneration	15691.53 ha	1569 ha	2199 ha	14
Roads	793.4 km	79 km	79.4	10
Free-to-Grow	38141.84 ha	3814 ha	3986 ha	10.4
Slash piles (FRT funded activities)	75 km	7.5 km	7.5 km	10
Tending (FRT funded activities)	815.6 ha	81.6 ha	244.7 ha	30
Site Preparation (FRT funded activities)	3249 ha	324.9 ha	331.4 ha	10.2
Regeneration (FRT funded activities)	3832.1 ha	383.2 ha	427.3 ha	11.2
Free-to-Grow (FRT funded activities)	3777.9 ha	377.8 ha	412.97382 ha	10.9

Public consultation

An open invitation to participate was publicly advertised in the following locations: tbnewswatch.com, the Chronicle Journal (Saturday editions, weekly for 6 weeks), on Domtar Dryden’s website as a splash page, on social media accounts and website of NorthWinds Environmental Services, and through LCC members’ sharing. An open survey was published online. One survey response was collected via the survey and highlighted utilisation as the main concern. In addition, the audit notice was distributed via email using the FMP mailing list. One response was received from a tourism outfitter regarding dissatisfaction over a planned

road location. This concern had been communicated also to the SFL holder and had been addressed during the planning process.

First Nation and Métis consultation

Email invitations to participate in the audit and follow up calls were made to all five First Nation communities deemed to be within or adjacent of the Trout Lake Forest (as per 2021 FMP). Before conducting any interviews, the lead auditor met with the Red Lake-Sioux Lookout District manager to obtain information on the level of participation in the forest management planning process and sought for advice for more effective ways to reach out. Wabauskang First Nation was interviewed.

The Wabauskang First Nation interviewee expressed satisfaction with the ongoing communication and engagement with Domtar and MNRF. For example, there is an ongoing collaboration on a project to identify and protect blueberry harvest sites. However, the community had concerns related to the technical language used in the planning team meetings that prevented full understanding of the implications of certain management decisions. As an example, when auditor discussed the management objective 8d of the 2021 FMP regarding herbicide reduction with the community, it appeared that the language used in the indicator of this objective did not reflect the intent of the community. This was not clear to the community when developing this Objective with SFL and MNRF (Finding #1).

The community also commented on the cumbersome nature of the forestry consultation regarding AWS revisions that is concerning due to the limited time and resources available in communities for consultation. The community has a consultation process in place in which AWSs and their revisions are verified spatially in relation to the community values and follow-up with affected members done if planned operations are deemed to have an impact on specific values. It was pointed out that as of early September 2022, the community had received already four revisions despite being finished reviewing 2022/23 AWS only few months ago.

The last IFA (2015) included a recommendation that Corporate MNRF shall consult with Métis Nation of Ontario regarding the asserted Métis rights on the Trout Lake Forest and attempt to reach a common understanding regarding those issues. According to the 2015 Independent Forest Audit Provincial Action Plan Status Report, this consultation took place and MNO was identified as a community to be consulted through public consultation process. In interview with MNO staff, the auditor was made aware of a traditional knowledge and land use report that was submitted to MNRF to re-start the conversations at MNO rights in the Red Lake-Sioux

Lookout District. However, this took place past the current IFA term ending March 31, 2022, and hence is outside of this IFA scope.

Local Citizens Committee (LCC)

Letters were emailed to all LCC members to notify about the upcoming audit and invite input. The audit team also offered to meet with the LCC and the Lead Auditor was invited to provide a presentation at the September 6, 2022 LCC meeting.

The audit team conducted interviews with and received communications from a total of four members of the LCC (out of 16). One of the members also attended the helicopter day.

The members highlighted the following concerns that they had brought up at the LCC meetings, some repeatedly, and some felt that some concerns have not received a proper response:

- Utilisation, especially in the cut-to-length systems. The members pointed out some specific sites that have been brought to the SFL attention. Audit team had a finding regards to the utilization in sawlog-only harvest areas (Finding #3).
- Water pooling and deep ditches. During the field audit, some water ponding was observed but it was not found to be out of compliance. The audit team was pleased to see Doug Riffel Harvesting testing innovative techniques in road building to reduce impacts on sensitive sites where ponding could take place and encourage renewal of ditches on operational roads (Best Practice #1).
- Road safety due to high speeds of forestry trucks and poor signage. Poor signage was not observed as an issue during the field audit. However, this issue may be local in nature and LCC members and public should be encouraged to highlight specific cases of poor signage to the SFL holder. Truck speeding issue was found to be outside the IFA scope and the audit team is hopeful that the SFL holder and MNRF will find ways to improve this situation through helping to highlight these concerns to applicable authorities.
- Online meetings: whilst the hybrid approach and opportunity to call in was welcomed by some members, it was noted that an option to use more advanced meeting platforms such as Teams or Zoom would be preferable over the current Adobe/conference call system for better audio and video quality and more diverse set of meeting tools to enable more active participation of those attending virtually. It was noted that the in-person attendance of key MNRF and SFL staff is necessary to help with clarifications, one to one conversation and follow up.

- There was a satisfaction with the Domtar’s information sharing website created to share planning relevant information and now with the MNRF’s NRIP site. It was communicated that MNRF should take any opportunity to advertise how to use this site, e.g., at open houses and other information forums.

Overlapping Licensees, Contractors and Commitment Holders

Representatives of Licence holders Doug Riffel Harvesting and EACOM Timber Corporation attended the field audit fully or partially and were interviewed.

Ministry of Natural Resources and Forestry

MNRF District, Region and Integration Branch staff participated in all aspects of the audit, including the field audit and interviews. Several follow up meetings were held with applicable MNRF staff to clarify draft audit findings.

Forestry Futures Trust Committee

Two members of the Forestry Futures Trust Committee participated in the field audit and two or more members attended the pre-audit, opening and closing meetings.

APPENDIX 5

List of Acronyms Used

AOC – Area of Concern
AR – Annual Report
AWS – Annual Work Schedule
CFSA – Crown Forest Sustainability Act
CP – Contingency Plan
DCHS – Dynamic Caribou Habitat Schedule
FIM – Forest Information Manual
FMP – Forest Management Plan
FMPM – Forest Management Planning Manual
FOIP – Forest Operation Inspection Program
FRI – Forest Resources Inventory
FRL – Forest Resource Licence
FRT – Forest Renewal Trust
FTG – Free to grow
IFA – Independent Forest Audit
IFAPP – Independent Forest Audit Process and Protocol
LCC – Local Citizens’ Committee
LTMD – Long-Term Management Direction
MNRF – Ontario Ministry of Natural Resources and Forestry
NRIP – Natural Resources Information Portal
NWES – NorthWinds Environmental Services
OLL – Over Lapping Licence
PEFC – Programme for the Endorsement of Forest Certification
RPF – Registered Professional Forester
SAR - Species At Risk
SFI – Sustainable Forestry Initiative
SFL – Sustainable Forest Licence

APPENDIX 6

Audit Team Members and Qualifications

Name	Role	Responsibilities	Credentials
Triin Hart Principal, NorthWinds Environmental Services	Lead Auditor	Lead Auditor, Public, First Nation and Métis consultation, management of ecological values	PhD Forest Sciences (2009), MSc Forest Management (2006), HBSc Natural Resource Management (2003)
Jeffrey Cameron RPF Senior Forester, NorthWinds Environmental Services	Auditor	Forest management planning and silviculture	HBSc Forestry (2007), RPF
Ryan Murphy RPF	Auditor	Compliance	HBSc Forestry (2001) RPF, Certified Forest Compliance Inspector
Alex Campbell Environmental Specialist, NorthWinds Environmental Services	Audit Secretariat	Gathering documents, organizing data, scheduling meetings	HBSc Environmental Sciences (2021)
Laird Van Damme RPF	Advisor	Review of audit reports	HBSc Forestry, RPF MSc Forest Management