

FINAL REPORT: Kenogami Forest 2023 Independent Forest Audit: April 1, 2015 to March 31, 2023

January 26, 2024

Prepared by

NorthWinds Environmental Services

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1. EXECUTIVE SUMMARY

In 1997, the Kenogami Forest was formed by amalgamating four separate forest management units: Longlac and Nakina Forests, the Geraldton Company Management Unit and portion of Onaman Lake Crown Management Unit. Prior to 2012, the Sustainable Forest Licence was managed by the owner of the pulp mill in Terrace Bay which changed numerous times from 1997 to 2012. In January 2012, Terrace Bay Pulp Inc. entered into creditor protection under the Companies' Creditors Arrangement Act, leading to the surrender of Kenogami Sustainable Forest Licence in August 2012 and the Forest became a Crown Management Unit. A Forest Resource Licence with enhanced commitments was issued to Ne-Daa-Kii-Me-Naan Inc. (Nedaak), followed by a Forest Resource License with a Forestry Agreement in 2016, which gave Nedaak forest management responsibilities.

In 2021, a Sustainable Forest Licence was issued to Ogwiidachiwaning Sustainable Forest Management Inc. (Ogwiid), whose members include Animbiigoo Zaagi'igan Anishinaabek, Aroland First Nation, Long Lake 58 First Nation, Ginoogaming First Nation, Red Rock Indian Band, AV Terrace Bay Inc., Columbia Forest Products Ltd. and Lecours Lumber Co. Ltd. Ogwiid has one employee who is the General Manager. Forest management services on the Kenogami Forest are provided by Ne-Daa-Kii-Me-Naan Inc. (Nedaak).

The term for this independent forest audit is April 1, 2015, to March 31, 2023. Within scope of the audit is:

- Phase I implementation of the 2011-2021 Forest Management Plan (year 5)
- Phase II implementation of the 2011-2021 Forest Management Plan (year 6 to year 10)
- Preparation of the 2011-2021 Forest Management Plan extension
- Implementation of 2011-2021 Forest Management Plan extension (April 1, 2021 to August 31, 2021)
- Preparation of the 2021-2031 Forest Management Plan
- Implementation of the 2021-2031 Forest Management Plan (year 1 and year 2).

Management planning activities in the Kenogami Forest were conducted in accordance with the applicable Forest Management Planning Manual. However, nine findings were identified in relation to the plan implementation. Specifically, six audit findings were related to the compliance programs undertaken by the Ministry of Natural Resources and Forestry, a major overlapping licensee, and forest management service provider Nedaak. The compliance issues were related to the debris management, sensitive values protection, bridges, aggregate pits, and compliance program implementation. Two findings were identified in relation to the silviculture. There is currently no program carried out by Ministry of Natural Resources and Forestry to monitor the Sustainable

Forest Licence holder's silviculture establishment results. The Forest Renewal Trust account also fell under a minimum balance in 2022/23 due to annually overestimating anticipated harvest levels that led to significantly reduced silviculture fees collected from the Overlapping Licensees. One finding was related to the delays of finalising and making publicly available the final-year Annual Report which summarises how accurately the management activities and operations in the Forest followed the 2011-2021 Forest Management Plan.

Most of the 13 recommendations from the last Independent Forest Audit (2016) were addressed appropriately with action plan items either completed or partially completed with the future monitoring requirement. There is still one outstanding action item regarding Free to Grow assessments backlog on which progress was made during the audit period.

The audit team concludes that, with the critical exceptions noted below, management of the Kenogami 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 Ogwiidachiwaning Sustainable Forest Management Inc., No. 554576. The forest is being managed consistently with the principles of sustainable forest management, as assessed through the Independent Forest Audit Process and Protocol. The critical exceptions are as follows:

- Non-timber forest values on the Kenogami forest are at greater risk of adverse effects from forest operations due to current approaches for communicating the presences of and for protecting sensitive values on the Kenogami Forest.
- The Forest Renewal Trust account fell below the minimum balance at the end of the 2023 fiscal year.

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Date: January 26, 2024

2. TABLE OF FINDINGS

Concluding statement

The audit team concludes that, with the critical exceptions noted below, management of the Kenogami 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 Ogwiidachiwaning Sustainable Forest Management Inc., No. 554576. The forest is being managed consistently with the principles of sustainable forest management, as assessed through the Independent Forest Audit Process and Protocol. The critical exceptions are as follows:

- Non-timber forest values on the Kenogami forest are at greater risk of adverse effects from forest operations due to current approaches for communicating the presences of and for protecting sensitive values on the Kenogami Forest.
- The Forest Renewal Trust account fell below the minimum balance at the end of the 2023 fiscal year.
- There is a record of past and ongoing compliance and compliance reporting issues in the Forest.
- There is significant backlog of areas requiring slash treatments.

Findings

Finding #1: Processes to ensure implementation of Area of Concern prescriptions for sensitive values on the Kenogami Forest are inadequate and putting these values at risk.

Finding #2: The SFL holder was not managing logging debris in accordance with the Forest Management Plans in effect during the audit period.

Finding #3: Forestry Aggregate Pits on the Kenogami Forest are not meeting standards outlined in the approved Forest Management Plan.

Finding #4: The Sustainable Forest Licence is not maintaining water crossings to minimize environmental impacts and provide for public safety and operator safety.

Finding #5: The Ministry of Natural Resources and Forestry District is not implementing an effective compliance monitoring

Finding #6: The Overlapping Licensees are not meeting their responsibilities as outlined in Section 4.7.1.6 Roles and Responsibilities in the current Forest Management Plan

Finding #7: Ministry of Natural Resources and Forestry District does not have a program in place to monitor the Sustainable Forest Licence establishment assessments results.

Finding #8: The 2020-2021 Final-Year Annual Report is still in draft and is not yet available to the public.

Finding #9: The Kenogami Forest Renewal Trust account fell below the minimum balance for the 2022-2023 fiscal year.

3. Introduction

3.1 AUDIT PROCESS

Independent Forest Audits (IFA) are a requirement of the *Crown Forest Sustainability Act* (S.O. 1994, c. 25) (CFSA). Audits assess both licence holder and Ministry of Natural Resources and Forestry (MNRF) compliance with the Forest Management Planning Manual (FMPM) and the CFSA in conducting forest management planning, operations, monitoring and reporting activities. The audits also assess the effectiveness of forest management activities in meeting the objectives set out in the forest management plan (FMP). The CFSA requires every forest management unit in Ontario to be evaluated every ten to twelve years by an independent audit team. The key source of direction for IFAs comes from the province's Independent Forest Audit Process and Protocol (IFAPP)¹.

IFAs are governed by eight guiding principles as described in the 2022 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.

The 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 in cases where an auditees' actions go above and beyond legal requirements and result in positive outcomes for forest and communities. The audit reports and action plans to address the findings Are published at the Ontario Government website: https://www.ontario.ca/page/independent-forest-audits. Progress toward completion of IFA action plans will be documented in annual reports available

¹ Ontario Ministry of Natural Resources and Forestry Independent Forest Audit Process and Protocol Copyright (c) Queens Printer, 2022.

through the Natural Resources Information Portal: https://nrip.mnr.gov.on.ca/s/nrip-busline?language=en US.

On the Kenogami Forest, the auditees include the Sustainable Forest Licence (SFL) holder known as Ogwiidachiwaning Sustainable Forest Management Inc. (Ogwiid), Nipigon Geraldton District, Northwest Region MNRF, and Corporate MNRF. The 2023 IFA for the Kenogami Forest covered the eight-year period from April 1, 2015, to March 31, 2023. The audit was led by NorthWinds Environmental Services (NWES.), a forestry and environmental services firm based out of Thunder Bay, Ontario. The audit team members and their roles and qualifications are described in Appendix 6.

At the onset of the audit, the audit team conducted a forest management unit risk assessment to verify that the subset of optional audit protocols included in the IFAPP will enable thorough review of management and operations of the Kenogami Forest. The applicability of additional protocols based on potential issues identified during the preliminary document review and interviews was assessed, and additional protocols Are identified in

Table 1.

Table 1. Optional Protocols Requiring Inclusion in 2023 Kenogami Forest IFA.

Principle & Criteria	Proce- dure	Description	Probability	Impact	Risk	Notes
2.2	1	FMP standard public consultation process	M	M	Yes	Part of FMP consultation occurred within the pandemic restriction, creating challenges with public engagement. Interviews with the SFL holder indicate that there are ongoing problems with plan implementation that are likely a result of poor public engagement during the development of the 2021-2031 FMP.
2.3	1	Issue resolution (I.R.)	M	M	Yes	There was one I.R. request during development of the 2021-2031 FMP.
6.4	1	Assess whether programs are in place and are being implemented to provide sufficient data for all indicators identified in the FMP.	M	M	Yes	Interviews with MNRF and the SFL indicate there were some issues in measuring indicators for the year 10 enhanced A.R. The Audit team will review the process in place to ensure appropriate data is available for measurement of the FMP indicators and whether the programs, as implemented, address the objectives, indicators and their associated assessment methodologies outlined in the text and tables of the approved FMP.

2	Where surveys and field audits are used to collect and analyze information, assess whether the methodology used is relevant and appropriate to the desired data and whether it incorporates current knowledge	M	M	Yes	As above
3	and technology Assess whether the programs, as implemented, address the objectives, indicators and their associated assessment methodologies outlined in the text and tables of the approved FMP.	M	M	Yes	As above

The previous Kenogami Forest IFA was completed in 2015 and the final report submitted in February of 2016. The 2015 IFA covered the five-year period from April 1, 2010 to March 31, 2015. The 2015 IFA included 13 recommendations. An auditee action plan was prepared in response to eleven of the thirteen recommendations made by the audit team and two actions were addressed in the provincial action plan. The provincial action plan items were either completed or partially completed with the future monitoring requirement as per the 2015 Provincial Action Plan Status Report (January 2021). The Kenogami Forest 2015 Management Unit IFA Action Plan Status Report was approved on May 2, 2018. The most recent Annual Report (2021-2022) provided an update on the progress towards completion of IFA action plan. Recommendation #4 has one outstanding action where Free-to-Grow surveys are needed to address backlog silviculture from 2016. The remaining amount of area (3,349 ha) consists of mostly road rights-of-way and small areas around the edge of harvest blocks. Those areas greater than 8 ha and road rights-of-way were scheduled to be assessed in the fall of 2022.

The 2023 audit solicited First Nation, Métis, stakeholder, and public input through advertising in media outlets and social media and by issuing notices using the forest management planning mailing list. A thorough review of documentation and records associated with management of the Kenogami Forest during the audit term was undertaken. The field audit was conducted from October 2 to October 4, 2023 with ground visits by truck and one 10-hour day of aerial survey by helicopter on October 11, 2023. The audit team visited a minimum sample of at least 10% of all activities taking place on the management unit during the audit period, including harvest related operations, a range of silvicultural treatments, road building and maintenance, water crossings and forestry aggregate pits. A summary of the sample intensity is provided in Table 8-2.

This report describes the audit team's findings in relation to the eight IFA principles listed above. More details about the audit procedures, contents and team can be found in the following Appendices:

Appendix 1 - detailed audit findings,

Appendix 2 - review of the achievement of 2011-2021 FMP objectives,

Appendix 3 – review of contractual obligations in the SFL,

Appendix 4 - information on the audit process,

Appendix 5 - list of acronyms, and,

Appendix 6 - audit team members and their qualifications.

3.2 Management Unit Description – add oLLs, identify FNs that are in the GDC

The Kenogami Forest is located approximately 300 kilometres northeast of Thunder Bay and occupies an area of 1,977,684 hectares. It is located within the MNRF Northwest Region and falls within the Nipigon Geraldton administrative District (Geraldton Work Centre). The communities of Terrace Bay, Schreiber, and the Municipality of Greenstone (comprised of the towns of Longlac, Geraldton, and Nakina, Beardmore, Caramat and Jellicoe) are located within or adjacent to the Kenogami Forest, as are several First Nation and Métis communities, including:

- Constance Lake First Nation,
- Ginoogaming First Nation,
- Long Lake #58 First Nation,
- Pays Plat First Nation,
- Aroland First Nation,
- Animbiigoo Zaagi'igan Anishinnaabek First Nation,
- Biinjitiwabik Zaaging Anishnabek (Rocky Bay First Nation),
- o Bingwi Neyaashi Anishinaabek (Sand Point First Nation),
- Biigtigong Nishnaabeg (The Ojibways of the Pic River First Nation),
- Red Sky Métis Independent Nation,
- Red Rock Indian Band,
- Métis Nation of Ontario, Region 2,
- Greenstone Métis Council,
- Superior North Métis Council,
- Thunder Bay Métis Council.

These communities have been and continue to be heavily dependent upon the forest industry for employment. Figure 1 illustrates the location of the Kenogami Forest in relation to the communities and the MNRF Nipigon District and the Northwest Region.



Figure 1. Location of Kenogami Forest in relation to communities and MNRF districts/regions.

Fifteen First Nation and Métis communities within or adjacent to the Forest, as listed above, were consulted during the preparation of the 2021-2031 Kenogami Forest Management Plan. Four of these communities, Long Lake #58 First Nation, Ginoogaming First Nation, Aroland First Nation and Pays Plat First Nation are located within the boundaries of the management unit.

The SFL is held by Ogwiidachiwaning Sustainable Forest Management Inc. (Ogwiid). Ogwiid is a non-share capital, not-for-profit company comprised of Indigenous community members and consumer members (wood receiving facilities). The membership includes five First Nations (Animbiigoo Zaagi'igan Anishinaabek, Aroland First Nation, Ginoogaming First Nation, Long Lake #58 First Nation, and Red Rock Indian Band) and three Forest Industry corporations (AV Terrace Bay, Columbia Forest Products, and Lecours Lumber Co. Limited). Ne-Daa-Kii-Me-Naan Inc. (Nedaak, an Indigenous-owned company) is currently the service provider for the Sustainable Forest License (SFL) for the Kenogami Forest. The Forest is third-party certified under the Forest Stewardship Council® certification system.

The unit is generally well-accessed by primary roads. It is comprised mainly of spruce dominated forest units. Historic wildfires and human fire suppression activities have affected the age class area distribution and to some extent the species composition.

The Forest provides habitat for a diversity of wildlife species, including some Species at Risk (SAR). It lies within the area of both continuous and discontinuous distribution of woodland caribou habitat; hence, caribou habitat management is a significant consideration affecting forest management planning and operations.

There were various items that were considered by the planning team in the decisions and development of the Long-term Management Direction (LTMD) for the Forest. Key topics in initial development of the LTMD included caribou habitat, area and regeneration of conifer-dominated forest, access roads, and shifts in markets or utilization of species due to the decline in hardwood markets. Poor economic performance of the forestry sector since 2008 and lack of markets have resulted in the underachievement of FMP harvest and related silviculture targets.

4. AUDIT FINDINGS

4.1 COMMITMENT

Ogwiid's commitment to sustainable forest management is reflected in its adherence to legislation and policies. The Kenogami Forest is also third-party certified under the Forest Stewardship Council's (FSC®) National Forest Stewardship Standard of Canada with the certificate held by the forest management service provider Nedaak.

The MNRF's commitment to sustainable forest management is demonstrated through the adherence and implementation of 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.

4.2 Public Consultation, and First Nations and Métis Community Involvement and Consultation

Generally, the consultation requirements were met and there is evidence of improvement to addressing some of the communication issues noted on the Forest. The audit team was happy to observe that the communities, stakeholders, and members of public interviewed for the audit felt that there is an easy access to the forest managers and MNRF, thanks to the strong local presence in the Forest and long-term staff by both Ogwiid's service provider Nedaak, located in Longlac, and MNRF District work centre office, located in Geraldton. However, the interviewees found that the ability to reliably know where the active forest operations will take place within any given month or year is largely restricted by the combination of the very short notice on the information on upcoming forestry operations by Overlapping Licensees and by the fact that the Annual Work Schedule (AWS) encompasses a three-year projection of planned harvest areas, of which a majority of these areas will not undergo harvesting or other forest operations in the coming year. In accordance with the 10-year compliance plan of the approved FMP, MNRF is also currently receiving only 5 days advance notice of the start of operations. To facilitate more timely delivery of information, Ogwiid has initiated the provision of weekly updates on upcoming operations.

There is a strong First Nation presence in the management of the Forest. The SFL includes the membership of five First Nations. Furthermore, Nedaak, the forest management service provider, is owned by seven First Nations. Two of them – Ginoogaming First Nation and Long Lake #58 First Nation – had representatives that actively participated in the audit.

While opportunities for active Indigenous participation in the management of Kenogami Forest are provided through the tenure model for the Kenogami Forest, communities voiced concerns regarding the 2013 provincial wood supply commitment to AV Terrace Bay (AVTB). There is significant unutilized softwood supply in the Kenogami Forest but it's marketing elsewhere was considered difficult by First Nations and member owned companies due to 2013 provincial wood supply commitment of 834,640 m3/yr of merchantable SPF to AVTB, despite the apparent existing mechanism in the Ogwiid's membership agreement to harvest unutilised "backlog". This business-to-business agreement, however, was not part of the audit and as such was not reviewed by the auditors. The utilization rates, as indicated by the Year 10 Annual Report (2020/2021), show that only 26% of the committed volume per year was utilized during the last 10-Year FMP. This limitation may also deter potential new investors from considering the Forest for future investments.

Instinct Contracting, a First Nation harvesting contractor for the Ginoogam Development Corp., also voiced concerns regarding to the information flow on harvest allocations. The communication between the Ogwiid members and harvesting companies is not always seamless, leading to uncertainties in adding and/or removing harvest allocations. Moreover, Instinct Contracting faces challenges in road operations capacity, relying heavily on AVTB contractors. Issues related to road maintenance and the accessibility of stranded wood and machines were reported.

Additional concerns were raised by various stakeholders, such as local communities expressing apprehension about losing or experiencing poor access to areas that are no longer used by the forestry industry, as well as the concerns regarding the condition of water crossings and roads. Land use considerations, the negative impact of herbicides, and the extensive harvesting of traplines were also highlighted as concerns. However, positive examples of easy access to Nedaak's forest managers and communication were cited as potential avenues for finding solutions to some of these challenges.

The Geraldton Area Natural Resources Advisory Committee (GANRAC) is the Local Citizens' Committees (LCC) for the Kenogami Forest and participates in forest management planning and implementation, as per the LCC's mandate. The Committee includes over 20 members and is led by a very active and knowledgeable Chair. The meetings are well attended with most meetings also including alternate members. The GANRAC is actively engaged in public outreach for both forestry, as well as other natural resources management activities in the area.

Although Covid-19 resulted in reduced consultation during the 2021 FMP development, the planning team, GANRAC and Nedaak, the FRL holder at the time, undertook increased efforts to ensure that information reached the public. For example, the GANRAC and Nedaak helped to distribute information through displaying maps on

business windows and organising a map viewing in a local curling club. GANRAC meetings continued regularly online.

4.3 FOREST MANAGEMENT PLANNING

The audit team reviewed the preparation of the 2011-2021 Kenogami Forest Management Plan Extension and preparation of the 2021-2031 Kenogami Forest Management Plan. The audit team also reviewed the Annual Work Schedules (AWS) and Annual Reports (AR) within the audit term. The FMPs, AWSs and ARs generally met the requirements laid out in Ontario's Forest Management Planning Manual (FMPM) and Forest Information Manual (FIM).

4.4 PLAN ASSESSMENT AND IMPLEMENTATION

4.4.1 Harvest

Harvest levels were lower than planned throughout the term of the audit for a variety of factors. Fluctuating market conditions of products such as market pulp, veneer, and lumber, the COVID pandemic and lack of markets for utilization of hardwood contributed to a consistent underharvesting of the planned allocations. In general, annual harvest achievement by area was 38% of that planned, while annual achievement by volume was 43% during the audit period. A representative sample of harvest areas were assessed during the field audit both on the ground and from the air.

Table 2: Planned harvest vs actual harvest in the Forest by area and volume during the audit period 2015 to 2022 (no data available for 2022-23 operating year).

Harvest by area and Volume	April 1, 2015 to March 31, 2022
Planned Harvest area	102,124 ha
Actual Harvest area	39,271 ha
% of Actual to Planned Harvest area	38.4%
Planned Harvest Volume (All Species)	8,451,810 m3
Actual Harvest Volume (All Species)	3,657,081 m3
% of Actual to Planned Harvest Volume	43.3%

In order to increase harvest levels in the Forest under the realities of limited hardwood market, MNRF District and Columbia Forest Products worked together to establish a

Veneer Recovery Operations strategy that included clearcutting of mature to overmature poplar stands and only extracting veneer bolts. Unutilised wood was left distributed to the clearcut. At the blocks visited, decomposition of the unutilised wood was underway, and the stands were renewing well with dense natural polar regeneration as would happen after fire or large blowdown events. Considering that mature aspen stands would start falling over in the next few decades if left unharvested, the strategy can be considered as ecologically appropriate while providing economic benefits.



Figure 2. Examples of the implementation of veneer harvest strategy.

Sensitive values discussed during the field audit on the Kenogami Forest are very important to local First Nation and Métis communities. When these values are identified and located on the Forest, an Area of Concern (AOC) prescription is developed by the planning team and in consultation with the community. The prescription is intended to prevent, minimize, or mitigate adverse effects of forest management operations on identified values. Due to sensitive nature of these values, the process applied in protecting these is outlined below:

- The prescription is included in the FMP documentation. On the approved FMP operational maps, a nondescriptive AOC identification number is displayed.
- The forest management service provider (Nedaak) has the special data for these
 values and the special data is not provided to the SFL or MNRF. Note that
 providing special data showing the value is not required.
- Operators, normally use field tablets where FMP/AWS special data is used to display approved forestry activities and other information such as AOC prescriptions. Due to special data of sensitive values not being provided, operators are expected to reference the approved FMP/AWS operational maps prior to conducting forestry operations.

During the field visit, it was clear that a communication breakdown between all parties had occurred, and the result was impact to a sensitive value by having a new

operational road constructed within the AOC. The auditor believes that the process in place for protecting sensitive values on the Kenogami Forest is putting sensitive values at risk in being impacted by forestry operations leading to **audit finding #1.** To be clear, the auditor is only referring to the sensitive values, and not other values (e.g., wildlife, water) identified in the FMP.

4.4.2 Debris Management

The FMPs in effect during the audit period require logging debris to be piled, redistributed, or otherwise treated to increase the area available for regeneration. The SFL pays for its service provider Nedaak to do the piling. The auditors observed several successful examples of debris piling and planting and/or natural regeneration between the piles which over time is expected to result in canopy closure over decomposing debris piles.





Figure 3. Example of logging debris piling as per the FMP. On the left photo, debris is untreated, while on the right photo, debris has been piled with space for regeneration created between.

However, there is a significant backlog of harvested blocks that need logging debris management. Some blocks sampled were receiving treatment four years after harvest operations had concluded, and others were permanently left untreated due to access issues, e.g., winter blocks. Based on observations of logging debris from the field visits, the audit team believes that if current practice continue over the course of the 2021-2031 FMP period, there is a risk that the LTMD plan assumption of 1.3% of loss of productive land due to slash/debris could be inaccurate, based on the amount of area that has not been managed. Logging debris management requirements are clearly documented in the 2011-2021 and 2021-2031 Forest Management Plans. Current implementation is not meeting these requirements, leading to **audit finding #2.**

4.4.3 Access

During the field audit, the audit team assessed a representative sample of access road construction and maintenance activities, including water crossing installations and forestry aggregate pits (FAP). Road construction activities were typically well done and

where aggregate pit rehabilitation had taken place, the sloping was appropriately completed. However, several forestry aggregate pits observed consistently failed to meet the approved FMP's standards for FAP's including excavation within 15 meters of a road and below the ditch line. One FAP was observed to be planted, however, the slope was not properly rehabilitated according to the FMP standards for rehabilitated FAPs(3:1 slope angle). There were several instances where FAP standards were not met and this led to **audit finding #3.**

During the field audit, two bridges were found to have issues such as gravel on the decking, damaged railings and deteriorating wooden material on cribbing resulted in gravel to spill into water The audit team also noted that a 2019/20 replacement of a water crossing (1,800 mm culvert installation) on (Ogoki Road, km 42) was poorly done, leading to erosion. These observations let to **audit finding #4**.

4.4.4 Renewal

All renewal activities observed during the field audit 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 (SGR) in the approved plans.

Actual regenerated area during the audit term is low compared to planned levels. However, this is reflective of actual harvest levels on the Kenogami Forest during the audit term.

Table 4-2 show actual and planned levels of natural and artificial regeneration during the 2015-2022 period. When compared to planned levels, 61% was regenerated naturally, 15% planted and no areas received aerial seeding. In the 2020-21 fiscal years, 9,235 ha was declared as natural regeneration that had been previously unreported during the surrender of the SFL in the last plan (2005 FMP). This backlog inflated the actual area of natural regeneration. Mechanical site preparation levels are lower than in past FMP periods however, as observed during the field audit, areas are being planted without site preparation. This is due to areas with thin duff layers not requiring site preparation, access and economic reasons.

During site visits, the audit team observed a reduced use of chemical tending to manage competing vegetation. The low amount of actual tending can also be seen in table 4-4. Discussions with SFL and MNRF indicate two reasons for this:

- Pure conifer forest units were targeted rather than conifer mixedwoods and hardwood mixedwood stands. This resulted in less tending due to lower competition stands.
- Social pressure from First Nation communities to reduce the use of herbicide on the Forest. Manual tending as an alternative to chemical methods is starting to be used in the 2021 FMP.

Mechanical tending as an alternative to chemical treatments is not always effective in treating competing vegetation and may affect the achievement of desired future forest condition. Two sites visited by the audit team showed mixed results (Figures 4 and 5). These included a block where competing vegetation was treated with brush saws and allowed jack pine to catch up to the poplar height. However, poplar composition was still high and without further treatment, the resulting stand composition may result in a conifer-mix stand at time of establishment assessment rather than the intended conifer stand.



Figure 4. Block treated with brush saws to remove competing vegetation. Poplar survival is still high, and the resulting stand composition may result in conifer mix stand at time of stand establishment assessment.



Figure 5. Block treated with brush saws to remove competing vegetation. Treatment success was poor, with a hardwood-mix site regenerating. Hardwood composition will likely be close to 50% at time of stand establishment assessment.

Annual reports indicate that reduced level of chemical tending may affect forest diversity objectives where conifer forest composition is required to be achieved in the long term. This could have implications for long-term harvest levels. The 2021-2031 FMP reflected this reality by developing post harvest transition rules based on limiting stand conversions and limiting artificial regeneration in hardwood-mixedwood stands, and by increasing post harvest transitions to mixedwood forest units.

Table 3. Annualized planned vs actual regeneration in hectares on the Kenogami Forest

Forest	Natural	Natural	Planting	Planting	Seeding	Seeding
Plan Term	Planned	Actual	Planned	Actual	Planned	Actual
	(ha)	(ha)	(ha)	(ha)	(ha)	(ha)
April 1, 2015 -	29,164	17,886	90,621	13,317	2,691	0
March 31, 2022						

Table 4. Annualized planned versus actual site preparation in hectares on the Kenogami Forest.

Forest	Mechanical	Mechanical	Chemical	Chemical
Term	Planned	Actual	Planned	Actual
April 1, 2015 - March 31, 2022	75,803	5,736	0	394

Table 5. Annualized planned vs actual tending in hectares on the Kenogami Forest

Forest	Aerial tending (chemical)	Aerial tending (chemical)	Manual tending	Manual tending
Plan Term	Planned (ha)	Actual (ha)	Planned (ha)	Actual (ha)
April 1, 2015 - March 31, 2022	89,428	6,155	0	223

The audit team visited a thinning trial in a 1995 fire-origin jack pine stand along the Hwy 11, east of Longlac. Funded by Forestry Futures Trust, Nedaak undertook the work in 2016. Trees in the resulting stands had significantly increased height and breast height diameter compared to the dense un-thinned stands where natural mortality was ongoing due to competition. In addition to the future wood supply benefits from increased growth rates, these thinned stands contribute to reduced fire risk due to reduced fuel loads near the urban centre and along the provincial highway. Despite the significantly increased

growth rates and fire risk reduction benefits, this trial remains a single event in the Forest due to high cost and seemingly limited economic benefit of this expense in a Forest that is already being underharvested.



Figure 6. 2016 thinning trial in 1995 fire originated stands along Hwy 11 east of Longlac. Un-thinned stands on the left photo and thinned stands on the right photo.

4.5 SYSTEM SUPPORT

Since the Kenogami Forest has been certified to the national F.S.C. standard, the system support principle was optional for the SFL under the terms of the IFAPP.

The auditors found that the staff of the Ogwiid, Nedaak and MNRF were knowledgeable and maintained a good system of forest management records.

4.6 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.

4.6.1 Access

Roads and water crossings are inspected and reported through the Forest Operations Information Program, which is used by both the SFL and MNRF. An annual inspection program by the SFL is conducted to ensure roads and water crossings are maintained and to identify where emergency repairs are necessary.

4.6.2 District Compliance Planning and Monitoring

A review of the MNRF District Compliance Plans (ACOP) for the audit period found that the first five years of the audit period (2015/16 through to 2019/20) had a robust compliance program, and that the District was generally meeting their targets. This included annual meetings with the licence holder to discuss compliance priorities. However, during the height of the COVID-19 pandemic, both compliance planning and reporting were significantly reduced, and COVID-19 restrictions prevented MNRF staff from conducting site visits, although annual meetings continued between the licence holder and the District. However, forest industry activities were ongoing and the MNRF field absence resulted in a lack of oversight for this period, as well as a backlog of compliance activities and issues on the Forest, many of which got carried over to the end of the audit period. The MNRF staff on the field audit are aware of the ongoing issues on the Forest and are actively working to increase the number of compliance inspectors. These observations led to **audit finding #5.**

4.6.3 SFL Compliance Planning and Monitoring

During the audit period, the Kenogami Forest changed from a Crown Unit with an FRL/Forestry Agreement with Nedaak to an enhanced SFL with Ogwiid Sustainable Forest Management Inc. As per the 2021 FMP, 4.7.1.6. Roles and Responsibilities, Needak is responsible for developing and maintaining compliance plans and updates (FMP/AWS) and all compliance activities under their responsibility, which generally includes all renewal and maintenance operations, as well as slash piles. Overlapping Licensees on the Forest are responsible for all compliance responsibilities related to their activities, which generally includes all harvest and access operations. The Overlapping Licensees submit their compliance reports to the SFL's general manager for his approval and submission to MNRF.

The Kenogami Forest has had a history of compliance issues as documented in the Kenogami Forest 2021-31 FMP and in the last 2015 Independent Forest Audit. The high number of compliance issues was also confirmed during the field audit and in discussions with MNRF District staff. Although effort is being directed at reducing the number of compliance issues, these efforts need to continue to show effectiveness and improved results, leading to **finding #6**.

4.6.4 Renewal

The SFL and MNRF District's forest renewal assessment program was reviewed by the audit team to determine if it is sufficient in scope and being used to provide the required silviculture effectiveness monitoring information. The SFL program was found to be sufficient and effective, except for the audit team's observation noted in section 4.4.4 of the report.

The audit team found that 2018 was the last year in which MNRF Nipigon District carried out a Silvicultural Effectiveness Monitoring (SEM) program to assess areas declared FTG by the SFL on the Kenogami Forest. Overall, there was little amount of data available for review. Some surveys were done jointly between the MNRF and the SFL service provider (Needak) and the auditor found no concerns when comparing results. Since then, MNRF has not had a program in place to monitor the SFL's renewal survey results as the MNRF program has been in transition.

In the fall of 2022, the District surveyed 157 ha on the forest to build capacity and implement training on the MNRF's new FTG assessment methodology. However, the new program is not yet fully operational. Without a silvicultural monitoring program in place, there is no quality assurance for the data reported by the SFL. There is also a missed opportunity to have Ministry staff on the landscape to build knowledge about the silvicultural practices being applied on the Kenogami Forest. These observations led to **finding #7.**

4.6.5 Annual Reports

Annual Reports (AR) for the audit period were examined to determine whether they have been prepared in accordance with the FMPM. The audit team determined that the ARs were generally generally compliant with FMPM requirements and accurately reflect the activities implemented.

One exception is the 2020-2021 Final Year Annual Report for the 2011- 2021 FMP. At the time of this report preparation, 11 months had passed since the submission of the Annual Report on November 15th, 2022. Since the report has not yet been approved by the MNRF, it is not available to the public through the Natural Resource Information Portal website or in the MNRF or SFL office. The final year Annual Report provides an overview of management objective achievement and the determination of sustainability from the previous 2011-2021 FMP. This important information is still not publicly available, even though the current 2021-2031 FMP is in its 3rd year of implementation. These observations led to **finding #8**.

4.7 ACHIEVEMENT OF MANAGEMENT OBJECTIVES AND FOREST SUSTAINABILITY

The 2011-2021 FMP implementation was completed during the audit period. The audit team's assessment of management objectives achievement for that plan is provided in Appendix #2. The audit team also assessed the achievement of the 2021-2031 Kenogami FMP objectives and indicators that could be measured at the time of the audit. The 2021-2031 FMP has only been in progress for two years, therefore, objectives and indicators to be measured at the year five- and final-year Annual Report

could not be assessed at this time. The summary of objectives assessed during plan preparation are listed below.

Assessed During Plan Preparation (5 objectives and 16 indicators):

- Forest Diversity Caribou habitat (4 indicators),
- Forest Diversity Emulate Natural Disturbance Patterns (6 indicators),
- Social and Economic Long-term Harvest Levels (3 indicators),
- Social and Economic First Nation and Métis Involvement and Local Citizen,
 Committee Involvement in forest management planning. (2 indicators),
- Social and Economic: Enhanced moose habitat (1 indicator).

In total, the 2021-2031 Kenogami FMP has 32 indicators and as noted above, 16 of these were assessed during plan preparation.

- Seven indicators achieved the desirable levels.
- Five indicators partially achieved with movement towards target levels,
- Four indicators did not achieve the desirable levels,
- 16 remaining indicators will be assessed at the year five- and final-year Annual Report.

Objective achievement documented in the FMP demonstrates that most objectives and indicators are maintained within desired levels, have movement toward target levels 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, the appropriate rationale is documented in the FMP.

4.8 CONTRACTUAL OBLIGATIONS

The SFL agreement lays out contractual obligations (licence conditions) that must be met by the licence holder over the course of each audit period. The audit team concluded that Ogwiid is generally in compliance with the terms and conditions of the SFL, with the exception of maintaining the Forest Renewal Trust account minimum balance for the 2022-2033 planning period. The forest renewal charge analysis is prepared annually to determine the renewal rate. The audit team determined that harvest volume was overestimated and resulted in a reduced renewal rate for Spruce/Pine/Fir (SPF). In the last four years (2019 to 2023), the renewal rate on the Kenogami Forest has dropped from \$5.50 per/m3 to as low as \$3.50 per/m3 for SPF volume. Lower harvest levels then resulted in the depletion of the renewal account to below the required minimum balance. These observations resulted in **finding #9.**

The IFAPP also requires auditors to assess the effectiveness of the actions developed to address the recommendations of the previous audit. The 2015 IFA produced 13 recommendations. The required Action Plan and Action Plan Status Report were completed within the required timelines. Our assessment is that most recommendations were appropriately actioned, or that work is on-going to resolve the identified issues. As required by the FMPM, the audit results were considered in the development of the 2021-2031 FMP and other forest management functions.

4.9 CONCLUDING STATEMENT

The audit team concludes that, with the critical exceptions noted below, management of the Kenogami 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 No. 554576 held by Ogwiidachiwaning Sustainable Forest Management Inc. The Forest is being managed consistently with the principles of sustainable forest management, as assessed through the Independent Forest Audit Process and Protocol. The critical exceptions noted are as follows:

- Non-timber forest values on the Kenogami forest are at greater risk of adverse
 effects from forest operations due to current approaches for communicating the
 presences of and for protecting sensitive values on the Kenogami Forest.
- The Forest Renewal Trust account fell below the minimum balance at the end of the 2023 fiscal year.
- There is a record of past and ongoing compliance and compliance reporting issues in the Forest.
- There is significant backlog of areas requiring slash treatments.

APPENDIX 1. FINDINGS

Independent Forest Audit – Record of finding Finding #1

Principle: 4 Plan Assessment and Implementation

Audit Criterion: 4.2 areas of Concern

Procedure(s): Review and assess in the field the implementation of approved A.O.C. operational prescriptions. Include the following:

- an examination of aerial photographs, FOIP reports, annual report information and maps, for these operations,
- determine whether the prescriptions that were implemented and results of the operations were consistent with the location and operational prescription for the A.O.C. in the FMP, AWS and the actual site conditions,
- an assessment of the effectiveness of the A.O.C. prescription in protecting the identified value(s).

Background information and summary of evidence:

The audit team assessed forestry operations where an operational road was constructed by an Overlapping Licensee within a sensitive value identified in the 2021 FMP. The value had an area of Concern (AOC) prescription. This prescription did not permit new road construction within the AOC. In addition to the field visit, the audit team also had the chance to discuss the issue with MNRF staff, the SFL General Manager, Nedaak and with the community members who identified the value.

Below is the relevant information to note:

- The value had an AOC prescription where new roads (Primary, Branch and Operational) were not permitted.
- There was an existing operational road within the value prior to development of the AOC prescription.
- Use of the existing road for forestry operations was permitted (e.g., upgrades to bring surface up to standards, regular maintenance). However, some conditions related to the right of way clearing were outlined in the AOC prescription.
- There were trails in the area and within the AOC as shown on the operational map, however, constructing the road on the trail was not permitted within the AOC.
- In the Kenogami Forest, sensitive values are identified on the FMP and AWS operational maps, however, special data is not provided to the Overlapping Licensees, SFL or the MNRF.
- special data showing sensitive values are provided to Nedaak, the forest management service provider.
- The overlapping licensee uses the approved special data that they are allowed to see on the Field Maps application.
- Field Maps allows operators to have approved special data viewable on an offline device (i.e. phone or tablet) in the machine while conducting forestry operations.

 Because the special data licensees receive do not include sensitive values, the overlapping licensees need to ensure that operators also have the approved AWS maps with them.

The image below shows the operational map (left) and the location where the operational road was constructed (right). The value under discussion is shown as a large red circle on the left map. As shown on the right map as red dotted line, the Overlapping Licensee constructed a new road within the AOC, which is not permitted as per the AOC prescription in the 2021 FMP. The AOC is not shown in the right image as the special data is not provided to the Overlapping Licensee operator.

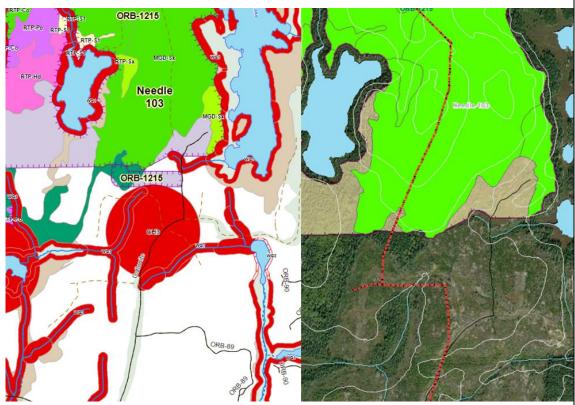


Figure 7. Operational map from AWS (left) and a map with the new road location (right) shown as a red dashed line. On the left map, red color represents AOCs where no harvesting and road building is permitted. Black lines are for existing roads, the light purple is for Operational Road Boundary (ORB) and other various colors within ORB are for approved harvest area.

The above information is only one example of sensitive values on the Kenogami Forest. As confirmed in interviews with Nedaak, the SFL and MNRF, there are several other sensitive values on the Forest which have specific AOC prescriptions. The

process applied in protecting other sensitive values on the Kenogami Forest is the same as noted above:

- The value is shown on the approved AOC/FMP operational maps.
- Nedaak has the special data for these values and this data is not provided to the SFL or MNRF (note: providing special data showing the value is not required).
- Operators are expected to reference the operational maps prior to conducting forestry operations.

During the field visit, it was clear that a communication breakdown between all parties had occurred, and the result was that a sensitive value was impacted by having a new operational road within the AOC.

Discussion and Conclusion:

Sensitive values discussed during the field audit on the Kenogami Forest are very important to local First Nation and Métis communities. When these values are identified and located on the forest, an AOC prescription is developed by the planning team and in consultation with the community. The prescription is intended to prevent, minimize, or mitigate adverse effects of forest management operations on identified values and due to the current process implemented on the forest, the sensitive value visited on the third field audit day was negatively impacted by forestry operations.

The audit team believes that current approaches for communicating the presences of and for protecting sensitive values on the Kenogami Forest are putting sensitive values at risk of being impacted by forestry operations. To be clear, the audit team is only referring to the sensitive values provided by Nedaak, and not other values (e.g., wildlife, water) identified in the FMP.

Although it is expected that both shapefile and operational maps are referenced prior to operations, having two products to reference is overcomplicating the process. During the filed visit, all parties agreed that there was a communication breakdown which contributed to the issue. It is evident that this process is putting sensitive values on the Kenogami Forest at greater risk of adverse effects from forest operations.

Finding #1: Processes to ensure implementation of Area of Concern prescriptions for sensitive values on the Kenogami Forest are inadequate and putting these values at risk.

Independent Forest Audit – Record of finding Finding #2

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.

• assess whether site preparation and regeneration treatments were consistent with the FOP; the FOP was consistent with the SGRs; the FOP certified by an R.P.F. or other qualified individual, and actual operations were appropriate and effective for the actual site conditions encountered including: • the effectiveness of operations to reduce the areas of slash piles and chipping debris and treatments to regenerate these areas.

Background information and summary of evidence:

In the Kenogami Forest, logging debris management is generally done by piling of slash at roadside. Slash piling was initially to be done by the Overlapping Licensee as a condition to their harvest licence (issued by MNRF). However, in a method that ensures sufficient space for regeneration between slash piles. Instead of being piled by overlapping licensees' harvesting contractors as part of their harvest operations, the SFL pays a service provider (Nedaak) to do the piling with an excavator with a grab (see image below).



Figure 8. Excavator used to pile slash debris on the Kenogami Forest.

During the field audit, it was observed that not all harvest blocks have completed debris management in accordance with the approved FMP. There is a significant backlog of harvested blocks which required logging debris management. In addition,

all slash piles on the Kenogami Forest are not burned. There has not been a slash pile burn program on the Kenogami forest during the term on the audit period.

The 2021 FMP indicated the following:

- Unutilized woody material, which accumulates at roadside and is expected to remain unutilized, will be piled, redistributed, or otherwise treated to increase the area available for regeneration.
- During development of the long-term management direction, it was assumed that over time there would be a loss of 1.3% of productive land due to slash/debris accumulation.
- Plans will be developed annually by the forest manger (Nedaak) to treat the slash/chip/hog fuel debris at roadside, including landings. This will ensure that the treatment(s) will be completed no later than two years following the completion of the harvest operations in any given section of a block.
- Blocks will be scheduled in conjunction with the haul (or other active time period) to ensure that access is maintained for those areas that will have a seasonal or other access issues.
- Areas not previously treated (the current outstanding area) will be scheduled to coincide with the current blocks:
 - Where there are no current operations, blocks will be placed in the schedule and completed in logical sequence.
 - Existing slash/chip debris/landings (created within the 2011 FMP) will be treated and regenerated as noted above within two years of the completion of harvest operations.

During the field audit and via interview with SFL, MNRF and Nedaak, the following was evident:

- There is a significant backlog of harvest blocks that require slash to be piled on the Kenogami Forest. Although work is being done, some blocks were receiving treatment 4 years after harvest.
- Several blocks still needing treatment had already been planted. Silviculture forester explained once slash has been piled, planters will return to the block to plant trees between the piles and along the roadside.
- Some blocks are not receiving treatment due to access issues and lack of coordination with winter haul. The Renewal Trust fund, which pays for the piling, is not used by the SFL to pay for road plowing or another road repair that might be needed to access the block.
- Current slash management method is only through piling. Even though the FMP identified pile burning as an option to reduce loss of productive land, there was no pile burning program on the Kenogami Forest during the audit period.



Figure 2. A 2019 harvest block with un-managed slash debris as of October 2023.



Figure 3. 2021 winter harvest. View from helicopter of un-managed slash. The un-managed slash at this block will not be managed due to only winter access and operations being completed.



Figure 4. Example of slash management to minimize loss of productive land. This block was treated after it had been planted. The block was harvested in 2016.

Discussion and Conclusion:

Logging debris management requirements are clearly documented in the 2011 and 2021 Forest Management Plan, and current implementation is not meeting these requirements.

There is significant backlog of areas requiring slash treatments and piling is occurring in some instances 3-4 years after harvest. There are also many blocks that will never receive treatment due to access issues, e.g., winter blocks. The audit team also believes that if current practice is continued over the course of the 2021-2031 FMP implementation, the long-term management direction assumption that loss of productive land due to slash/debris would be 1.3% can be challenged based on the amount of area that is not being piled.

Finding #2: The SFL holder was not managing logging debris in accordance with the Forest Management Plans in effect during the audit period.

Independent Forest Audit – Record of finding Finding #3

Principle: 4 Forest Management Plan Implementation

Audit Criterion: 4.7 Access

Procedure(s): Review and assess in the field the implementation of approved access activities. Include the following:

- select a representative sample from those areas where operations have been conducted during the audit period, from each of the years being audited, and for each type of access activity (road construction and/or decommissioning, various types of water crossings - winter, culverts, bridges, road maintenance, construction and/or removal) from primary, branch and operational roads constructed, including forestry aggregate pits for new roads and existing roads,
- an examination of aerial photographs, FOIP reports, annual report information, including maps, for these operations,
- determine whether the operations implemented were consistent with locations in the approved FMP, the AWS, approved standards or conditions on construction and removal, including the approved water crossings structure, Fisheries Act review, and conditions on crossings of other AOCs, use management (maintenance, access control, any removal and decommissioning provisions),
- assess whether roads have been constructed, maintained, decommissioned and reclaimed to minimize environmental impacts and provide for public and operator safety,
- determine whether identified conditions on roads, landings and forestry aggregate pits have been conducted in accordance with the approved FMP for important ecological features, and
- assess whether the planned monitoring program for roads and water crossings was implemented as planned and whether it was effective in determining any environmental or public safety concerns.

Background information and summary of evidence:

The following finding is based on the observation during the field audit and the review of the approved FMPs, AWSs and ARs, as well as FOIP reports regarding the access activities, including road construction, water crossing installation, and forestry aggregate pits.

Several forestry aggregate pits in the Kenogami Forest consistently failed to meet Forest Aggregate Pit (FAP) standards such as excavation within 15 meters of a road and below the ditch line. One FAP was observed to be planted, however, the slope was left at the angle of repose and not rehabilitated to the required 3:1 slope. Where rehabilitation had taken place, the sloping met the approved standards. In addition, reporting of FAP locations and tonnage to the MNRF has been inconsistent throughout the audit period.

Discussion and Conclusion:

Operational Standards for Forestry Aggregate Pits our outlined in the approved Forest Management Plan. During the field audit, it was found that pits were not meeting the standards outlined in the 2011 and 2021 FMPs.

Finding #3: Forestry Aggregate Pits on the Kenogami Forest are not meeting standards outlined in the approved Forest Management Plan.

Independent Forest Audit – Record of finding Findings #4

Principle: 4 Forest Management Plan Implementation

Audit Criterion: 4.7 Access

Procedure(s): Review and assess in the field the implementation of approved access activities. Include the following:

- select a representative sample from those areas where operations have been conducted during the audit period, from each of the years being audited, and for each type of access activity (road construction and/or decommissioning, various types of water crossings - winter, culverts, bridges, road maintenance, construction and/or removal) from primary, branch and operational roads constructed, including forestry aggregate pits for new roads and existing roads,
- an examination of aerial photographs, FOIP reports, annual report information, including maps, for these operations,
- determine whether the operations implemented were consistent with locations in the approved FMP, the AWS, approved standards or conditions on construction and removal, including the approved water crossings structure, Fisheries Act review, and conditions on crossings of other AOCs, use management (maintenance, access control, any removal and decommissioning provisions),
- assess whether roads have been constructed, maintained, decommissioned and reclaimed to minimize environmental impacts and provide for public and operator safety,
- determine whether identified conditions on roads, landings and forestry aggregate pits have been conducted in accordance with the approved FMP for important ecological features, and
- assess whether the planned monitoring program for roads and water crossings was implemented as planned and whether it was effective in determining any environmental or public safety concerns.

Background information and summary of evidence:

During the field audit, Kowkash Bridge and Kenwell Bridge were observed as being older in nature and in need of maintenance. Gravel on the decking, damaged railings

and deteriorating wooden material on cribbing resulted in gravel to spill into the river at these specific locations.



Figure 9. Photo of bridge with gravel on deck on Greta Road.

A 2019/20 replacement the water crossing on the Ogoki Road km 42 was poorly done where an 1,800 mm culvert was installed. The following non-compliance issues were observed:

- There is a lack of erosion control material on the slopes.
- There is currently gravel in the outflow caused by the lack of proper armouring and poor grader practices.
- The auditor could not find a completed FOIP report on this crossing.



Figure 10. Photo of culvert with erosion into the stream (Ogoki Rd).

Discussion and Conclusion:

During the field audit, auditors found issues with some bridges such as gravel on the decking, damaged railings and deteriorating wooden material on cribbing resulted in gravel to spill into water The audit team also noted issues with culvert in particular lack of erosion control. Poorly installed or maintained water crossings pose a safety risk and negatively impact the environment (i.e. Fish habitat).

Finding #4: The Sustainable Forest Licence is not maintaining water crossings to minimize environmental impacts and provide for public safety and operator safety.

Independent Forest Audit – Record of finding Finding #5

Principle: 6 Monitoring

Audit Criterion: 6.1 District compliance planning and associated monitoring **Procedure(s):** Review the MNRF District Compliance Plans in place during the audit period (consider the audit criteria 3.5.11 and 3.9.9) 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 FMPs 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.

Determine whether the MNRF District electronically submitted in MNRFs compliance information system to the MNRF database and whether they supplied digital FOIR information to the auditee in accordance with requirements including timelines specified in MNRF procedures and the FIM.

Background information and summary of evidence:

The MNRF Annual Compliance Operations Plan (ACOP) and the FOIP reports submitted were reviewed in relation to the standards.

A review of the MNRF District Compliance Plans during the audit period found that during the first 5 years of the audit period (2015/16 through to 2019/20), MNRF District had a robust compliance program: the District was generally meeting their targets and met annually with the forest industry to discuss compliance priorities. The exception was 2018/19, when the target was to inspect 55 FAPs slated for closure but no inspections were carried out during that period. In addition, in the 2019/20 ACOP, the Results column, which measures targets against actual monitoring results, was not completed despite the District completing 32 FOIP inspections at that year. There was no ACOP created for the year 2020/21 and only one harvest inspection was carried out. This was during the height of the COVID-19 pandemic while the forest industry continued to fully implement planned operations.

In the 2021/22 ACOP, several compliance targets were not determined, and no results were recorded. There were only two harvest and one renewal FOIP inspections completed. There was an ACOP completed for 2022/23, however, there were no Results recorded. During this period, 14 FOIP inspections were carried out during this period.

A review of the "Pending" status during the audit period revealed 18 Operational Issues that require MNRF activity that are "Overdue" ranging from "Determine

Remedy", "Compliance Decision" and "MNRF Verification". The overdue status currently ranges from approximately 1,100 days to 156 days.

Discussion and Conclusion:

MNRF District staff are aware of the ongoing issues on the Forest and efforts to increase the number of compliance inspectors are ongoing. Compliance planning and monitoring became a low priority during the COVID-19 pandemic which caused incomplete ACOPs and a lack of monitoring of industry operations, even though the forest industry was very active. A concern is the large number of "Pending" inspections waiting for MNRF action.

Finding #5: The Ministry of Natural Resources and Forestry District is not implementing an effective compliance monitoring

Independent Forest Audit – Record of finding Finding #6

Principle: 6 Monitoring

Audit Criterion: 6.2.2. Compliance responsibilities delivered by qualified overlapping licensees.

Procedure(s):

- 1. Review and analyze the performance, efficiency and effectiveness of specified 'delegation' to qualified Overlapping Licensees and overall performance of the Overlapping Licensee in delivering their responsibilities. This will include:
 - an examination of the qualified Overlapping Licensees compliance with roles and responsibility provisions in the SFL Compliance Plan, and
 - an assessment of the respective compliance of SFL and qualified Overlapping Licensee with Functions and Responsibilities Table 1 of the Guideline/Handbook and with any additional conditions outlined in the MNRF's approval letter (assessment is linked to procedure #4 in audit criterion 6.2.1).
- 2. Determine whether the MNRF District examined the SFL and Overlapping Licensee responsibilities prior to approval of the compliance plan. Examine whether the MNRF District has been actively monitoring the quality of the inspection reports and ensuring that the SFL compliance plan is being adhered to.

Background information and summary of evidence:

On the Kenogami Forest, Overlapping Licensees are responsible for all compliance responsibilities on their activities, which generally includes all harvest and access operations, including aggregate pits, water crossings and other related activities.

The Kenogami Forest compliance issues are well documented in the Kenogami Forest 2021-31 FMP, Section 4.17 Monitoring and Assessment. The Forest Operation Information Program (FOIP) reports for the main Overlapping Licensee AV Terrace Bay Inc. during the audit period can be summarised as:

- 37 Not in Compliance,
- 75 Corrective Actions,
- 17 Written Warnings,
- 1 Repair Order,
- 3 Administrative Penalties.

During the field audit the audit team visited a known trespass area and unreported Forestry Aggregate Pits. Providing 'Start-up' notifications in a timely manner had been an issue during majority of the audit period. Without a 'Start-up' notification it is difficult to determine if compliance inspections are being completed for each operation and monitoring by the MNRF is not possible.

In addition, Overlapping Licence staff turn-over and the shortage of approved Compliance Inspectors has created difficulties in keeping up with compliance reporting.

Discussion and Conclusion:

The Kenogami Forest has had a history of compliance issues as documented in the Kenogami Forest 2021-31 FMP, Section 4.17 Monitoring and Assessment. Although effort is being directed at reducing the number of compliance issues, these efforts need to continue to show effectiveness and improved results.

Finding #6: The Overlapping Licensees are not meeting their responsibilities as outlined in Section 4.7.1.6 Roles and Responsibilities in the current Forest Management Plan

Independent Forest Audit – Record of finding Finding #7

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:

2018/19 was the last year when Silvicultural Effectiveness Monitoring (SEM) was carried out on the Kenogami Forest by the MNRF Nipigon District office. Since then, MNRF has not had a program in place to monitor the SFL's establishment assessment results (Free-to-Grow).

According to the information shared by the MNRF Regional Forest Ecosystems Science Specialist, MNRF has been in a transitioning period from the SEM program since 2019. MNRF did survey 157 ha on the forest in the fall of 2022 to build capacity and implement training on the new assessment methodology. However, the new program is not yet operational.

During this transition, MNRF district offices 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.

With the exception of the 157-ha survey in the fall of 2022, Interviews with the Nipigon District staff indicate the last time silvicultural monitoring program occurred on the Kenogami forest was 2018.

The SFL primarily conducts its establishment assessment (free to grow) surveys through helicopter assessment with some ground calibrations.

During the IFA field audit, the area assessed for establishment during the audit period were visited by the audit team primarily by helicopter. Based on what was viewed, the SFL Free-to-Grow program appears to be done appropriately. However, some discrepancies were observed in species composition, specifically with the larch composition being underestimated.

Discussion and Conclusion:

Although the SFL has an assessment program in place, MNRF monitoring is critical for the following reasons.

- Quality control of the SFL establishment assessment results provide confidence in the accuracy and precision of the data reported.
- Enabling meaningful discussion which will help to ensure the inputs into the future FMP (i.e., post-harvest silviculture pathways) are accurate.

 Provides an opportunity for MNRF Foresters to get to know their land base and gain experience and knowledge with silviculture practices implemented within the management unit in which they work.

Without a monitoring program in place by MNRF, there is no assurance in the quality of the data reported. In addition, there is a missed opportunity to have Ministry staff on the landscape and learn about the silvicultural practices being applied on the Kenogami Forest.

Finding #7: Ministry of Natural Resources and Forestry District does not have a program in place to monitor the Sustainable Forest Licence establishment assessments results.

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:

The 2020-2021 Final Year Annual Report has not been approved and therefore is not available for public review on the Natural Resource Information Portal website or in the MNRF or SFL offices.

In section 4.2 (additional Requirements for the Year Five- and Final-Year Annual Report) of the Forest Management Planning Manual, it is indicated that the annual report will be "normally" approved by March 1. At the time of developing this report, over 1 year has passed since the submission of the Annual Report November 15^{th,} 2022, and over 2 years have past since the completion of the 2011-2021 Kenogami Forest FMP. Note that a six-month plan extension was in place from April 1, 2021, to August 31, 2021.

Discussion with the SFL and MNRF staff, the final-year annual report was submitted on time (November 15th) and MNRF provided a list of required modifications within 30 days. The Annual Report was re-submitted 60 days later. All these dates are consistent with the Forest Management Planning Manual requirements. However, the annual report is not yet approved due to multiple re-submissions and reviews being

needed. As of October 19^{th,} 2023, the 2021 FMP is in its 3rd year of implementation and the Annual Report has not been approved and, therefore, is not available to the public.

Discussion and Conclusion:

The final year Annual Report provides an overview of the objective achievement and determination of sustainability from the previous 2011-2021 FMP. This important information is still not available for the public to view, even though the current 2021 FMP is in its 3rd year of implementation.

Finding #8: The 2020-2021 Final-Year Annual Report is still in draft and is not yet available to the public.

Independent Forest Audit – Record of finding Finding #9

Principle: 8 Licence and Contractual Obligations

Audit Criterion: 8.1.13 FRT account minimum balance and 8.2.5 – Forest renewal

charge analysis **Procedure(s)**:

8.1.13 - Review the SFL Appendix D (Agreement Section 8.6) to determine the minimum balance requirement and assess whether the minimum balance was maintained in the FRT account each March 31 for the audit period.

8.2.5 - Review the required analysis and assess whether it is appropriate based on the FMP and consideration of the following:

- · past reimbursements for eligible silviculture work,
- the forecast of eligible silviculture work to be undertaken,
- · forecast of volume and species to be harvested,
- any transitional funding, and
- existing value of the account at the time the analysis is undertaken to ensure the account will have sufficient value to fund eligible silviculture work.

Background information and summary of evidence:

The table below shows the renewal trust account balance at year end (March 31) for every year of the audit period and the required minimum balance of \$4,630,900. There is a gradual reduction in the renewal account balance over the audit period with the balance being \$525,489 below the required minimum balance by March 31, 2023.

End of Fiscal Year	Renewal	Revised	Minimum
	Account	Minimum	Balance
	Balance at	Balance	
	Year End (Bank	(adjustments	
	Statement)	for in-transit)	
March 31 2023	4,001,793.23	4,105,410.66	4,630,900
March 31 2022	4,709,131.31	4,860,517.94	4,630,900
March 31 2021	5,927,106.81	5,999,135.98	4,630,900
March 31 2020	5,919,558.28	5,976,423.16	4,630,900
March 31 2019	5,273,055.82	5,527,459.75	4,630,900
March 31 2018	5,419,584.90	5,419,584.90	4,630,900
March 31 2017	6,938,476.26	6,938,476.26	4,630,900
March 31 2016	5,658,562.44	5,658,562.44	4,630,900
March 31 2015	7,435,224.00	7,435,224.00	4,630,900

The table below shows the Renewal Rates (\$/m³) on the Kenogami Forest by species groups from 2016 to 2023.

Year	Spruce Pine Fir	Poplar and Birch
	(\$/m³)	(\$/m³)
2016-2017	5.50	1.00
2017-2018	5.50	1.00
2018-2019	5.50	1.00
2019-2020	4.25	1.25
2020-2021	4.25	1.00
2021-2022	3.50	0.50
April 2022 Nov 2022	3.50	0.50
Nov 2022 March 2023	8.25	3.00

Document review demonstrates that a renewal charge analysis is performed annually for the Kenogami Forest to determine the appropriate renewal rate on the Forest. While reviewing the renewal charge analysis, the auditor considered the following information.

- Past reimbursements for eligible silviculture work;
- The forecast of eligible silviculture work to be undertaken, including the Eligible Silviculture Work to be undertaken on areas which have failed to meet silvicultural standards and retreatment is therefore necessary;
- Forecast of volume and species to be harvested;
- Any transitional funding; and
- Existing value of the account at the time of the analysis is undertaken to ensure the account will have sufficient value to fund eligible silviculture work.

The renewal charge analysis is performed prior to forest operations occurring; therefore, harvest volumes and silviculture expenditure are forecasted.

When compared to the actual Annual Report information, a consistent discrepancy was noticed between the actual volumes in the annual reports and forecast volumes in the renewal charge analysis. Forecast volumes have been overestimated from 2019 to 2022. The over estimation is for both Spruce-Pine-Fir (SPF) and Poplar/Birch, with the overall impact being more significant for SPF due to the higher renewal rate for SPF volumes.

Annual Reports show that actual harvest volumes on the Kenogami Forest in the last 3 years have averaged 332,733 m³.

Year	Harvest - Spruce Pine	Harvest - Spruce Pine
	Fir volume (m³)	Fir volume (m3)
	Actual - Annual Report	Forecast - Renewal
		Charge Analysis
2015-2016	607,158	600,000
2016-2017	495,662	440,000
2017-2018	609,325	420,000
2018-2019	455,619	420,000
2019-2020	373,168	625,000
2020-2021	417,501	523,000
2021-2022 (2 AR's)	207,529	599,167
Average (last 3 years only)	332,733	582,389

Year	Harvest - Poplar/Birch	Harvest - Poplar/Birch
	volume (m³)	volume (m3)
	Actual- Annual Report	Forecast - Renewal
		Charge Analysis
2015-2016	32,378	9,000
2016-2017	20,292	30000
2017-2018	51,630	45,000
2018-2019	20,401	45,000
2019-2020	24,702	83,333
2020-2021	29,563	80,000
2021-2022 (2 AR's)	7,851	110,500
Average (last 3 years only)	20,705	91,278

In addition to information noted above:

- There was a letter (Feb 2021) sent from Nedaak, the Forest Resource Licence holder with Forest Agreement at the time, to the Regional Director requesting the renewal rate to be lowered to \$3.50 for the m³ of the SPF volume. Rationale provided was that the renewal account was anticipated to be \$6,006,903 by the year end which would take it to 1,376,003 above minimum balance. Forecast volumes in the renewal analysis for 2021 were going exceed the 523,000m³ for SPF and 80,000m³ for hardwood and future deliveries were anticipated to be 700,000 m³ of SPF in 2022 and 1,000,000 m³ of SPF in 2023.
- MNRF sent letters to the SFL holder in the fall of 2022 indicating concerns with the status of the renewal trust account. At that time, it was below the minimum balance

- of \$4,630,900 and at risk of being below by the year end (March 2023). MNRF highlighted the need for appropriate actions to be taken.
- The SFL did raise the renewal rate in November of 2022 (to \$8.50/m³ for SPF and \$3.00/m³ for Poplar/Birch)
- However, even with the increased rates, lower volume deliveries resulted in the minimum balance not being achieved by March 31, 2023.

Discussion and Conclusion:

Volumes in the renewal analysis are forecasted and some level of discrepancy is expected when compared to the actual volumes once the forest operations have been completed. However, evidence shows that the Kenogami Forest forecast volumes during the last three years have been consistently much higher than the actual harvest levels.

Over-estimating harvest volumes has resulted in the renewal rate being lowered for SPF last four years from \$5.50/m³ to as low as \$3.50/m³. Lower harvest levels then resulted in the depletion of the renewal account to below minimum balance.

Finding #9: The Kenogami Forest Renewal Trust account fell below the minimum balance for the 2022-2023 fiscal year.

APPENDIX 2. MANAGEMENT OBJECTIVES TABLE

Appendix 2 presents the auditor's assessment of objectives for the 2011-2021 Kenogami Forest Management Plan. All activities to meet the FMP objectives are considered regardless of if they fall outside of the scope period (April 1, 2015 to March 31, 2023) of the Kenogami Forest 2023 IFA.

The assessment of objectives achievement of the 2021-2031 Kenogami Forest Management Plan where progress is being made towards meeting objectives is provided in a summary text located in section 4.7 of the report.

Objective and Indicators	Auditor Assessment	Auditor Comments
Objective 1. To provide forest diversity in a manner that emulates a natural landscape pattern & frequency distribution. Indicator 1.1 Percent frequency distribution of forest disturbances by size class.	Achieved	Target is to move towards the natural median frequency distribution of forest disturbances by size class over the short term. Lack of market created lower actual harvest levels when compared to planned levels, which impacted (slowed the progress) the achievement of frequency distribution of forest disturbances by size class. Overall, there is movement towards target levels especially in the larger size classes (due to closure of Dynamic Caribou Habitat Schedule (DCHS) A blocks).
Objective 1. To provide forest diversity in a manner that emulates a natural landscape pattern & frequency distribution. Indicator 1.2 Percentage of online caribou habitat in the continuous population range.	Achieved	Target is to achieve above 40% of caribou habitat in the continuous population range on the forest at Plan end (2021). Harvest levels and the closure of the DCHS 'A' blocks, the target was achieved by maintaining the percentage of online habitat over

		40%. Actual Plan end levels are 47%.
Objective 1. To provide forest diversity in a manner that emulates a natural landscape pattern & frequency distribution. Indicator 1.3 Percentage of suitable marten habitat arranged in core areas.	Achieved	The target intends for achievement in year 2031 (end of next plan). To date, much of the area outside the continuous population range was harvested as planned. During planning for the 2021 FMP, large landscape patches areas were designated and with these in place, the suitable marten habitat is projected to meet the targets over time.
Objective 2. To provide for a forest structure, composition & abundance that is representative of the forest condition under a natural disturbance regime & similar to the historic, natural forest condition. Indicator 2.1 Area of Young Crown productive forest by forest unit.	Partially achieved	Desired level and target were to decrease young mixewood and hardwood forest over time like natural forest condition. This was not achieved as levels have increased at plan end (2021). Desired level and target were to increase young Jack Pine forest like natural forest condition, this was accomplished, although not at levels projected (did not increase as much as desired levels). Desired level and target were to maintain other young conifer forest within the levels of natural forest condition, and this was achieved.
Objective 2. To provide for a forest structure, composition & abundance that is representative of the forest condition under a natural disturbance regime & similar to the historic, natural forest condition.	Achieved	Desired level and target were to decrease mature mixedwood and hardwood forest over time like the natural forest condition. This was achieved. Desired level and target were to maintain mature conifer upland and lowland forest within natural

Indicator 2.2 area of Mature Crown productive forest by forest unit		forest condition. This was achieved.
Objective 2. To provide for a forest structure, composition & abundance that is representative of the forest condition under a natural disturbance regime & similar to the historic, natural forest condition. Indicator 2.3 area of Late (Old) Crown productive forest by forest unit.	Achieved	Desired level and target were to maintain all late (old) forest above natural forest condition. Plan end levels indicate this was achieved for all forest units.
Objective 2. To provide for a forest structure, composition & abundance that is representative of the forest condition under a natural disturbance regime & similar to the historic, natural forest condition. Indicator 2.4 Total area of Crown productive forest by forest unit.	Partially Achieved	Desired level and target were to decrease total mixedwood and hardwood forest over time like natural forest condition. Levels did not decrease as they increased by 2.3% at plan end from plan start levels. Desired level and target were to increase upland conifer forest area over time like natural forest condition, this was not realized as levels decreased by plan end. Desired level and target were to maintain lowland forest within the natural forest condition, and this was achieved.
Objective 2. To provide for a forest structure, composition & abundance that is representative of the forest condition under a natural disturbance regime & similar to the historic, natural forest condition. Indicator 2.5 area of Crown productive forest by forest landscape class.	Achieved	Desired level and target is to maintain levels for landscape class that are within natural forest condition, and this was achieved. For landscape class outside levels that are natural forest condition, the desired level and target were to move towards these levels. This was achieved.

Objective 3. To provide forest diversity that meets the habitat needs for animal life & values dependent on Crown Forest cover. Indicator 3.1 area & distribution of preferred habitat for forest dependent provincially & locallyfeatured species & species at risk.	Achieved	Desired level and target were to maintain levels of preferred habitat for forest dependent provincially & locally featured species & species at risk within the bounds of natural variation and this was achieved.
Objective 3. To provide forest diversity that meets the habitat needs for animal life & values dependent on Crown Forest cover. Indicator 3.2 area of refuge habitat for woodland caribou in the continuous population range.	Achieved	Desired level and target were to maintain caribou refuge and winter habitat area in the continuous population range within the bounds of natural variation and this was achieved.
Objective 3. To provide forest diversity that meets the habitat needs for animal life & values dependent on Crown Forest cover. Indicator 3.3 area of winter habitat for woodland caribou in the continuous population range.	Achieved	Desired level and target were to maintain caribou refuge and winter habitat area in the continuous population range within the bounds of natural variation and this was achieved.
Objective 3. To provide forest diversity that meets the habitat needs for animal life & values dependent on Crown Forest cover. Indicator 3.4 Percentage of available Crown productive, conifer dominated forest unit area in the caribou continuous population range.	Achieved	Desired level and target were to maintain percentage of total available Crown productive, conifer dominated forest unit area in the caribou continuous population range, at or above the 2011 level (74.6%) and this was achieved at plan end (75.3%).
Objective 3. To provide forest diversity that meets the habitat needs for animal life & values dependent on Crown Forest cover	Not achieved	Desired level and target were to have no net decrease in the weighted average percent conifer composition of available

Indicator 3.5 Percent conifer composition of available Crown productive, conifer dominated forest in the caribou continuous population range.		Crown productive, conifer dominated forest in the caribou continuous population range. Levels were not achieved as a decrease had occurred at plan end. Pure jack pine and jack pine mix saw a decrease of approximately 0.5%, spruce pure saw a decrease of 3% and spruce lowland saw a decrease just over 10%.
Objective 3. To provide forest diversity that meets the habitat needs for animal life & values dependent on Crown Forest cover. Indicator 3.6 area & distribution of capable marten habitat in suitable condition across the entire Forest	Achieved	Desired level and target is to maintain 10-20% of the capable marten habitat in suitable condition arrangement within cores areas across the entire Forest south of the Caribou mosaic and within the caribou mosaic (i.e., DCHS). During FMP planning for the 2021 FMP, marten cores were not utilized, being 'replaced' with large landscape patches in the area outside of the DCHS. Implementation of DCHS will also address marten habitat. These indicators are achieved.
Objective 3. To provide forest diversity that meets the habitat needs for animal life & values dependent on Crown Forest cover. Indicator 3.7 area & distribution of capable marten habitat in suitable condition south of the caribou mosaic.	Achieved	As above
Objective 3. To provide forest diversity that meets the habitat	Achieved	As above

needs for animal life & values dependent on Crown Forest cover. Indicator 3.8 area & distribution of capable marten habitat in suitable condition in the caribou mosaic.		
Objective 4. To contribute to social & economic well-being by providing a sustained level of harvest Indicator 4.4 Forecast & actual harvest area by forest unit.	Not achieved	Desired level and target were to maximize actual harvest area by forest units. Harvest levels planned for the 2011 FMP were not realized and the actual area harvested was below planned levels. The overall harvest level was 38% of planned with upland conifer being the closed to planned levels. Local sawmills have opened, in addition to the pulp mill operating, but the associated level of harvest has not been achieved and was not realized during this FMP.
Objective 4. To contribute to social & economic well-being by providing a sustained level of harvest Indicator 4.5 Percentage of lowland forest harvest operations.	Achieved	A positive implication for a low level of lowland harvest is achievement of the target to maintain a harvest level of lowland forest to less than 40% over the 5 short-term (2011-2021). This target was met with 18% of the lowland forest units 6 harvested and the Target achievement at 2021 being 22%.
Objective 4. To contribute to social & economic well-being by providing a sustained level of harvest Indicator 4.7 Forecast & actual harvest volume by species.	Not achieved	Desired level and target is to maximize the actual harvest of the forecasted volume by species. Volumes realized are lower than the planned amount as the overall harvest was lower than planned. Jack pine has almost reached the planned

Objective 4. To contribute to social & economic well-being by providing a sustained level of harvest Indicator 4.8 Percent of forecast volume utilized by mill(s).	Not achieved	level with 91% of the volume realized, with 80% of the forest unit allocated harvested. The Spruce forest unit is close with 45% of the volume realized over 30% of the area (Spruce upland and lowland combined). The Balsam fir species was higher than realized due to increase harvest in Conifer Mix Forest with a Balsam fir component as well, and more Balsam fir is present in the species composition than what the inventory suggests. Desired level is to have 100% utilization by mills and target is to have 90% utilization by mill destination. Keeping with the overall harvest level, the 42% of the volume utilized by mills is reflective of the actual harvest level and percent completion of
Objective 5. To contribute to community well-being while providing forest cover for values dependent on forest cover. Indicator 5.1 Kilometres of SFL responsible forest access roads per square kilometre of Crown Forest in the caribou continuous population range.	Achieved	the FMP planned harvest. The desired level is to minimize, and the target is to limit the increase of SFL responsible roads in the caribou continuous population range to 10%. This objective has been met due to the reduction in harvest level, and the associated lack of road construction. The kilometer of road per square kilometer of Crown Forest was 0.11km/km2 at plan start and has remained at that level at plan end. The desired level is to minimize, and the target is to limit the increase of primary and branch

		road density to 10% within the caribou continuous population range. Target was achieved with plan end levels remaining the same as plan start (0.11km/km2). There has been limited road construction on the forest mainly due reduced harvest levels.
Objective 5. To contribute to community well-being while providing forest cover for values dependent on forest cover. Indicator 5.2 Kilometres of SFL responsible forest access roads per square kilometre of Crown Forest outside of the caribou continuous population range.	Achieved	The desired level is to minimize, and the target is to limit fluctuation of primary and branch road density to +/-15% outside of the caribou continuous population range. Target was achieved with a 0.003 increase in drivable primary and branch roads per square kilometres.
Objective 5. To contribute to community well-being while providing forest cover for values dependent on forest cover. Indicator 5.3 area of managed Crown forest available for timber production.	Not achieved	Desired level is to minimize, and target is to limit at 1% the conversion of Crown productive forest to nonproductive land. During 2021 FMP production, areas were analyzed, and the level of long-term loss was determined to be 2.4% for roads and landings and 1.3% for slash piles of current harvest areas. Therefore, the target of 1% is not achieved. The SFL holder's limited logging debris management on the forest has also resulted in Finding #2 for the 2023 IFA.
Objective 7. To contribute to a healthy forest ecosystem by minimizing the potential for	Partially achieved	Desired level is to have 100% of inspections indicating compliance and target is to have

adverse effects of forest management practices on values dependent on forest cover. Indicator 7.1 Percentage of forest operation compliance inspection reports indicating		at least 95% of inspections indicating compliance. There were 545 compliance inspections submitted with 489 in compliance, 20 not in compliance. 36 inspections are
compliance with prescriptions for the protection of water quality, fish habitat, natural resource features, land		still pending. Due to the large number of "pending" reports, the auditor concludes this indicator is partially achieved.
uses or values dependent on forest cover; & for the prevention, minimization or mitigation of site damage		
Objective 7. To contribute to a healthy forest ecosystem by minimizing the potential for adverse effects of forest management practices on values dependent on forest cover. Indicator 7.2 Percentage of forest operation compliance inspection reports indicating compliance with prescriptions developed for the protection of resource-based tourism values.	Achieved	Desired level and target is for 100% of inspections indicating compliance. There are no noncompliant reports regarding the protection of resource-based tourism values. This indicator is achieved.
Objective 7. To contribute to a healthy forest ecosystem by minimizing the potential for adverse effects of forest management practices on values dependent on forest cover. Indicator 7.3 Percentage of forest operation compliance inspection reports indicating noncompliance.	Partially achieved	Desired level is 0% of inspections non-compliant and target is to not exceed 5%. Based on Annual Report Data, the number of non-compliant inspections is under the 5% target, but due to the large number of pending reports, this indicator is partially achieved.
Objective 8. To maintain & enhance forest ecosystem	Partially achieved	A regeneration success is defined as when a forest stand is

condition & productivity through silvicultural practices.

Indicator 8.1 Percentage

Indicator 8.1 Percentage of harvested forest area assessed as regeneration success.

successfully regenerated to any free-growing standard of a silviculture ground rule (SGR). The final year Annual Report show that regeneration success was achieved on 81% of area assessed. With the changing standards in forest unit definitions and SGR standards, it is difficult to meet the more stringent standards that are in place in the current FMP than were in place during the timing of regeneration activities (in a previous FMP).

Objective 8. To maintain & enhance forest ecosystem condition & productivity through silvicultural practices.

Indicator 8.2 Percentage of harvested forest area assessed as silvicultural success.

Partially achieved

A silvicultural success is defined as when a forest stand is regenerated to the free-growing standard of the prescribed SGR for the development of the desired future forest unit and silvicultural intensity. All silviculture successes are regeneration successes; but not all regeneration successes are silvicultural successes.

Of the area assessed, 60% was a silvicultural success where the desired site was returned to the desired forest unit. Annual Report notes that this could have been higher if the forest unit definitions did not change from one FMP to the next. The new forest unit definitions required higher conifer species composition, which is different from the species composition at time of harvest (e.g. SpPur

allowed 30% hardwood, current definition is only 20% hardwood allowed).
Field audit showed good results in the FTG program.

APPENDIX 3. COMPLIANCE WITH CONTRACTUAL OBLIGATIONS

Licence condition	Licence holder performance
Payment of Forestry Futures and Ontario	All Forestry Futures charges and
Crown charges	Ontario Crown charges have been paid.
Wood supply commitments, MOAs, sharing arrangements, special conditions	Discussions with representatives of OLLs indicated that these commitments were being met. Concerns were raised about the low harvest levels and AVTB wood supply commitment of 834,640 m3/yr. Despite the apparent existing mechanism in the Ogwiid's membership agreement to harvest unutilised fibre, The utilization rates, as indicated by the Year 10 Annual Report (2020/2021), show that only 26% of the committed volume per year was utilized during the last 10-Year FMP.
Preparation of FMP, AWS and reports; abiding by the FMP and all other requirements of the FMPM and CFSA.	All required plans and reports were prepared to the required standards.
Conduct inventories, surveys, tests and studies; provision and collection of information in accordance with the FIM.	All required surveys are completed and the data is consistent with the FIM. Nedaak also applied Forestry Futures Trust funds and undertook a thinning trial in 2016.
Wasteful practices not to be committed	No wasteful practices were identified during the audit.
Natural disturbance and salvage SFL conditions must be followed	Not audited following risk assessment.
Protection of the licence area from pest damage, participation in pest control programs	Not audited following risk assessment.
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 prepared under previous versions of the IFAPP	Action plan and status reports were prepared in accordance with contractual obligations and action items were observed to be effectively implemented by the audit team.
Payment of forest renewal charges to the FRT.	All forest renewal charges have been paid.
FRT eligible silviculture work	The SFL 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 MNRF However, the annual renewal rates set were inappropriate to support planned renewal projects leading to the FRT account falling below the minimum balance at the end of the 2023 fiscal year (finding #9). The third-party F.R.T. specified procedure audit was conducted for the 2021-2022 fiscal year.
FRT account minimum balance	The requirements for meeting FRT account minimum balances were met each year, except for 2023 when the FRT account fell under the minimum balance (finding #9).
Silviculture standards and assessment program	SFL complies with required standards and assessment programs.

First Nations and Métis opportunities	The SFL holder provides opportunities through engagement, and agreements. Five First Nation communities are part of the SFL company Ogwiid and seven First Nation communities own Nedaak – the forest management service provider for the Kenogami Forest.
	Concerns were raised about the low harvest levels and AVTB wood supply commitment of 834,640 m3/yr. Despite the apparent existing mechanism in the Ogwiid's membership agreement to harvest unutilised fibre, The utilization rates, as indicated by the Year 10 Annual Report (2020/2021), show that only 26% of the committed volume per year was utilized during the last 10-Year FMP.
Preparation of compliance plan	The approved FMP has a 10-year strategic compliance plan. Annual compliance plans are prepared for the AWS.
Internal compliance prevention/education program	The Licensee's compliance prevention/education program has not prevented several compliance issues in the Forest (findings #3, #4, and #5).
Compliance inspections and reporting; compliance with compliance plan	The SFL compliance inspections and reporting requirements are often not met due to the Overlapping Licensees not meeting their responsibilities as outlined in applicable guidelines and approvals (finding #6).
SFL forestry operations on mining claims	No evidence of forest operation impacts on mining claims.

APPENDIX 4. AUDIT PROCESS

IFAs are legally required under Ontario Regulation 319/20, made under the *Crown Forest Sustainability Act* (CFSA). 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.

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 are addressed by the auditees (SFL holder, District, Region and Corporate MNRF) in the IFA action plans and results will be reported in annual reports.

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

The 2023 Kenogami Forest IFA covered an eight-year period from April 1, 2015 to March 31, 2023. Within scope of the audit was:

- Phase I implementation of the 2011-2021 Forest Management Plan (year 5)
- Phase II implementation of the 2011-2021 Forest Management Plan (year 6 to year 10)
- Preparation of the 2011-2021 Forest Management Plan extension
- Implementation of 2011-2021 Forest Management Plan extension (April 1st, 2021 to August 31st 2021)
- Preparation of the 2021-2031 Forest Management Plan
- Implementation of the 2021-2031 Forest Management Plan (year 1 and year 2).

Risk Assessment

The IFA for the Kenogami Forest was started in May of 2023 with the risk assessment to determine which IFAPP protocols are relevant for the Kenogami Forest specific

issues. All protocols selected can be found in the Table 6. As per the IFAPP, the risk assessment required 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 Appendix A of the IFAPP and marked as "Optional".

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

Table 2. Procedures audited, by risk category.

Principle &	Proce-	Description	Probability	Impact	Risk	Notes
Criteria	dure					
2.2	1	FMP standard public consultation process	M	M	Yes	Part of FMP consultation occurred within the pandemic restriction which created some challenges with public engagement. Interviews with the SFL indicate that there are ongoing problems with plan implementation that are likely a result of poor public engagement during the development of the 2021-2031 FMP.
2.3	1	Issue resolution	M	M	Yes	One IR during development of

						the 2021-2031
						FMP.
6.4	1	Assess whether programs are in place and are being implemented to provide sufficient data for all indicators identified in the FMP	M	M	Yes	Interviews with MNRF and the SFL indicate there were some issues in measuring indicators for the year 10 enhanced AR. The Audit team will review the process in place to ensure appropriate data is available for measurement of the FMP indicators and whether the programs, as implemented, address the objectives, indicators and their associated assessment methodologies outlined in the text and tables of the approved FMP. There was one finding associated with this criteria: finding #8.

2	Where surveys and field audits are used to collect and analyze information, assess whether the methodology used is relevant and appropriate to the desired data and whether it incorporates current knowledge and technology	M	M	Yes	As above
3	Assess whether the programs, as implemented, address the objectives, indicators and their associated assessment methodologies outlined in the text and tables of the approved FMP	M	M	Yes	As above

Audit plan and site selection

The audit plan outlined the protocols selected with the rationale, key contacts, and audit schedule. During the pre-audit meeting (August 23, 2023), this information, along with the independent site selection was also presented to the auditees.

Field sample sites were selected by the audit team 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 Nedaak and MNRF.
- 3rd selection: additional sites brought forward by stakeholders, First Nation, and Métis communities, and public.

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 MNRF 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, forestry aggregate pit management and rehabilitation and water crossing.

Table 3. Field audit site selection

Activity	Total area/number within the audit period	Actual audited (10% minimum)
Harvest	35,219 ha	3,522 ha
Regen – Plant, Seed, Natural, Claag	17,674 ha	3,608 ha
Site Preparation – Mechanical and Chemical	5,871 ha	587 ha
Tending	5,092 ha	509 ha
Free-to-Grow	33,715 ha	3,371 ha
Water Crossings	168	17
Aggregate Pits	49	5
Roads (constructed and Decommissioned)	1,232 km	All areas visited
Slash and Chip treatment	481 km	All areas visited

Wood Storage Yard	9	1

The audit team randomly sampled 10% of the area representative of F.R.T. funded activities reported as carried out in the year of the F.R.T. specified procedures report, for the 2021-2022 year (see Table 8). The sample for the 2021-2022 period reached the required 10% for all activities.

Table 4. 10% Sample of F.R.T.-funded activities, 2021/22.

Activity	10% audited*
Regeneration – Plant, Seed, C.L.A.A.G.	241 ha
Site Preparation – Mechanical and Chemical	37 ha
Tending	122 ha
Free-to-Grow	788 ha

^{*}Includes 10% sample from the specified procedures report.

The field audit was conducted from October 2 to October 4, 2023 with ground visits by truck and one 10-hour day of aerial survey by helicopter on October 11, 2023. The field inspection included site-specific (intensive) and landscape-scale (extensive helicopter) examinations. The closing meeting was held on October 19 2023. At this meeting the draft findings were presented to the auditees and the draft Appendix 1 with more detailed description of audit findings was shared shortly after. The comments on audit findings received from the SFLand MNRF were taken into consideration when developing the audit report.

Public Consultation

NorthWinds Environmental Services issued several notices advising the public that an Independent Forest Audit will be conducted on the Kenogami Forest and inviting comments regarding matters relevant to the audit period. The public notice included the purpose of the audit, identification of the management unit being audited, the period of the audit, how the public may provide input and a notice (provided by MNRF) informing the collection and use of personal information for audit purposes. Notices were published in the Geraldton Times Star local newspaper, as well as shared via the Municipality of Greenstone Facebook, Greenstone Economic Development Corp Facebook page, Terrace Bay- Schreiber News, the local O.F.A.H. group, and circulated by the SFL holder and MNRF for the region. A survey was created and posted on the NWES website, and the link advertised with all public notices and social media posts

(https://www.northwindsenv.ca/). The lead auditor also used the FMP/A.W.S. email lists to advertise the audit and solicit input. Four responses were received from general public.

First Nation and Métis consultation

There are fifteen (15) First Nation and Métis communities within or adjacent to the Forest that were consulted during the preparation of the 2021-2031 Kenogami Forest Management Plan:

- Constance Lake First Nation
- Ginoogaming First Nation
- Long Lake #58 First Nation
- Pays Plat First Nation
- Aroland First Nation
- Animbiigoo Zaagi'igan Anishinnaabek First Nation
- Biinjitiwabik Zaaging Anishnabek (Rocky Bay First Nation);
- o Bingwi Neyaashi Anishinaabek (Sand Point First Nation);
- Biigtigong Nishnaabeg (The Ojibways of the Pic River First Nation)
- Red Sky Métis Independent Nation
- Red Rock Indian Band
- Métis Nation of Ontario, Region 2
- o Greenstone Métis Council
- Superior North Métis Council
- Thunder Bay Métis Council

Email invitations to participate in the audit and follow up calls were made to all First Nation and Métis communities deemed to be within or adjacent to the Kenogami Forest (as per the 2021 FMP). Representatives from Ginogaming First Nation and Long Lake #58 First Nation actively participated in the audit, including in the field audit.

Geraldton area Natural Resources Advisory Committee (GANRAC)

The audit team interviewed four members from the GANRAC. The members interviewed were knowledgeable and actively participated in forest management planning and implementation though attendance in meetings and relaying information to their communities where applicable. The GANRAC Chair was also an active participant in the audit, attending most of the audit meetings.

Overlapping Licensees, Contractors and Commitment Holders

AVTB is a major Overlapping Licensee in the Forest. Their representatives actively participated in the audit, including audit meetings, field audit and interviews. Ginoogam Development LP representatives were also interviewed. One of Ginoogam

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Development Corporation contractors, Instinct Harvesting, an indigenous owned harvesting company representatives attended part of the field audit and were interviewed.

Ministry of Natural Resources and Forestry

MNRF District, Region and Partnership Services Section 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 attended the pre-audit, opening and closing meetings.

APPENDIX 5. LIST OF ACRONYMS USED

ACOP Annual Compliance Operations Plan

ACP Annual Compliance Plan

AOC Area of Concern AR Annual Report

AVTB Aditya Birla Group, AV Terrace Bay Pulp Mill

AWS Annual Work Schedule

CLAAG Clearcut Logging around Advanced Growth

CFSA Crown Forest Sustainability Act

CP Contingency Plan

DFO Department of Fisheries and Oceans
DCHS Dynamic Caribou Habitat Schedule

FAP Forest Aggregate Pit

FIM Forest Information Manual FMP Forest Management Plan

FMPM Forest Management Planning Manual

FN First Nation

FOP Forest Operations Prescriptions

FOIP Forest Operation Information Program

FRI Forest Resources Inventory
FRL Forest Resource Licence
FRT Forest Renewal Trust

FSC Forest Stewardship Council

FTG Free-to-Grow FU Forest Unit

GANRAC Geraldton area Natural Resources Advisory Committee

IFA Independent Forest Audit

IFAPP Independent Forest Audit Process and Protocol

LCC Local Citizens' Committee
LIO Land Information Ontario

LTMD Long-Term Management Direction

MNRF Ontario Ministry of Natural Resources and Forestry

MOA Memorandum of Agreement

NRIP Natural Resources Information Portal NWES NorthWinds Environmental Services

OLL Overlapping Licence

ORB Operational Road Boundary
RPF Registered Professional Forester

SAR Species at Risk

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SFL Sustainable Forest Licence SGR Silviculture Ground Rule

SRNV Simulated Range of Natural Variation

SFI Sustainable Forestry Initiative

APPENDIX 6. AUDIT TEAM MEMBERS AND QUALIFICATIONS

Name	Role	Responsibilities	Credentials
Triin Hart, Ph.D.	Lead Auditor	Key point of contact. Review of the following audit procedures: Local Citizens' Committee First Nation and Metis consultation Public consultation Ecological values management planning and implementation Contractual obligations Socioeconomic impacts	Triin has 15 years' experience in natural resource management and forestry. Her areas of expertise include natural resource policy analysis, landscape ecology, Species at Risk, emulating natural disturbances, development of natural landscape condition templates and analyses of ecological implications of planned management activities.
Jeffrey Cameron, R.P.F.	Auditor	Review of the following audit procedures: o forest management planning, monitoring and reporting (FMP, C.P., A.W.S., ar) o silviculture planning and implementation monitoring, contractual obligations o determination of sustainability	Jeffrey Cameron is a Registered Professional Forester in Ontario. He has 15 years of experience in the forest industry in forest operations, silviculture, forest management planning, forest tenure, provincial government relations and Indigenous partnerships/capacity building.
Jack Harrison, R.P.F.	Auditor	Review of the following audit procedures: o compliance o harvest operations planning, monitoring, and reporting, o access planning, monitoring and reporting o contractual obligations	Jack Harrison is a Registered Professional Forester in Ontario. He has over 25 years of experience in the forest industry. Jack is a Certified Forest Compliance Inspector

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Rike	Auditor	○ Coordination of audit	Rike Burkhardt is a
Burkhardt,		activities,	Registered Professional
R.P.F.,		○ Report writing, review and	Forester in Ontario. She
M.Sc.		quality control	has over 20 years of
			experience in land use
			planning, policy analysis,
			project management,
			stakeholder and
			Indigenous engagement,
			forest auditing and
			program review.