

KENORA FOREST

**Independent Forest Audit
April 1, 2013–March 31, 2018**

Final Report

**ArborVitae Environmental
Services Ltd.**

September 25, 2018

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1.0 EXECUTIVE SUMMARY

This Independent Forest Audit (IFA) assessed the management of the Kenora Forest during the period April 1, 2013 to March 31, 2018, which encompasses years two through six of operations under the 2012-2022 FMP as well as the development of a Phase II operational plan that came into effect April 1, 2017. This audit reviewed the performance of the SFL-holder, Miitigoog LP, and the Kenora District of the Ministry of Natural Resources and Forestry (MNR). Miitigoog has contracted out the delivery of management of the Kenora Forest to Miisun Integrated Resource Management Co. and thus the assessment of Miitigoog hinges on Miisun's performance. This audit report is referring to both Miitigoog and Miisun when it references "the Company". The audit was carried out by a team of four professionals, each with extensive experience in forest management.

The auditing process incorporates aspects of risk management, using the widely-recognized concept that risk is a function of both the probability of an event occurring and the impact of the event should it occur. Those procedures for which non-compliance would result in a medium to high negative impact on sustainability were identified by the MNR as mandatory, while the procedures associated with a low impact were identified as optional. Early in the audit process, the auditor team drew on its experience to review evidence related to the optional procedures and evaluate the risk of non-conformance or negative outcomes associated with each procedure. Using this process, it was identified that 11 of the 76 optional procedures should be audited. The assessment of risk was reviewed and accepted by the Forestry Futures Committee.

The audit team viewed a sample of between 28-41% of the area treated by each type of operation undertaken during the audit period. As part of this assessment, the auditors examined 45% of the area of operations funded through the Forest Renewal Trust (FRT) during 2016-17, the year of the specified procedures report. Site inspections were undertaken by truck and helicopter; the truck tour portion included representation from the District and Regional MNR, the Company, Forestry Futures, and the Local Citizens Committee. In addition to the operational review, the scope of the audit included the development of the Phase II Planned Operations, the preparation of Annual Work Schedules and Annual Reports, and the various monitoring programs in place.

The results of the audit are very favourable. Operations were conducted very well and the audit team found that the activities on the ground matched what was reported to FRT in both 2016-17 and the audit period in general. The main concern encountered was the inability of the Company to undertake a tending program. A key goal of the 2012 FMP was to increase the conifer content of the Forest, and a large tending program was planned to help accomplish this. However, this goal of the FMP, and some of the FMP objectives, will not be achieved if current trends continue. Without the planned level of tending, the future forest will differ from the planned future forest as set out in the FMP. During the current plan term, the scale of impact of the shortfall in tending was limited by the low level of harvest compared with the planned level – in area terms, only 31% of the planned harvest area has been cut during the first six years of the FMP. The previous audit identified a number of concerns regarding the strategic direction of the FMP; the audit team applauds the Company's intention to develop a realistic FMP in the next planning cycle.

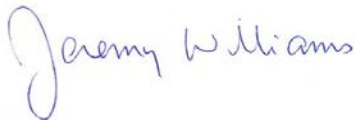
In addition to the findings regarding the absence of tending and the low probability that some of the FMP objectives will be achieved, other notable findings include:

- the three Aboriginal Reports associated with planning are outdated and/or include limited community specific information, limiting their utility;
- several findings related to challenges in planning for and managing values on the Forest;
- changes to planned FOPs/SGRs that are determined by the Company during field assessments are not reported or tracked; and
- A low level of effective resolution of the issues that gave rise to recommendations in the previous IFA.

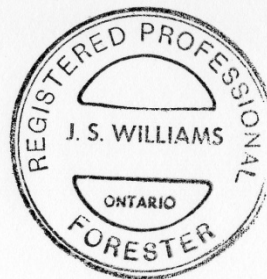
Notwithstanding the issues identified above, the audit team concluded that the forest has been managed sustainably and that Miitigoog LP was in compliance with the terms of the SFL. Key factors supporting a positive conclusion for the audit are:

- MNRF and the Company have an excellent working relationship;
- The Company has developed good relationships with First Nations communities and has a high level of engagement with them, resulting in a best practice;
- The Local Citizens Committee functions very well and is well supported by the District MNRF as well as the Company;
- Renewal is keeping pace with harvesting;
- Monitoring is being undertaken effectively, and the compliance programs in place on the part of the MNRF and Company have provided effective oversight, with MNRF now positioned to increase its level of inspections; and
- The Company and the other forest licensees have managed to make their Crown payments during a challenging period and are in compliance in these requirements of the SFL at the end of the audit term.

Taking all of the results and determinations into consideration, the audit team concludes that management of the Kenora 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 Sustainable Forest Licence #550400 held by Miitigoog LP. The forest is being managed consistently with the principles of sustainable forest management, as assessed through the Independent Forest Audit Process and Protocol.



Jeremy Williams
Lead Auditor



2.0 TABLE OF AUDIT FINDINGS NEEDS A FINAL UPDATE

Concluding Statement
<p>The audit team concludes that management of the Kenora 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 Sustainable Forest Licence #550400 held by Miiitigoog LP. The forest is being managed consistently with the principles of sustainable forest management, as assessed through the Independent Forest Audit Process and Protocol.</p>
Findings
<p>1. The three Aboriginal Reports associated with planning are outdated and/or include limited community specific information. In their current condition, these reports have limited utility.</p>
<p>2. During Phase II planning, it was not clear how much latitude District staff had to apply their professional judgment with respect to the documentation, planning and application of AOC prescriptions and related FMP implementation requirements.</p>
<p>3. District and Company Staff responsible for implementation of the new MNRF/DFO Protocol for the Review and Approval of Forestry Water Crossings are hesitating to proceed with the Company water crossing self-screening approvals in the Protocol.</p>
<p>4. Planning information for Phase 2 AOC prescriptions in forestry operations provided by MNRF through Land Information Ontario has a number of data quality deficiencies.</p>
<p>5. Amendments and revisions related to changes in the aquatic GIS layer that the Company finds and submits to MNRF were not processed as required in the FMPM.</p>
<p>6. Boundary data in the latest versions of ownership products that were delivered to the Company and to Kenora District by MNRF's Mapping and Information Resources Branch do not line up correctly with the same boundaries in the 2018 eFRI.</p>
<p>7. Changes to planned FOPs/SGRs that are determined by the Company during field assessments have not been certified by the silvicultural forester/plan author, formal records of FOP/SGR changes are not being kept by the Company, and data related to FOP/SGR changes have not been provided to MNRF or reported in ARs as per FIM requirements for Annual Reports.</p>
<p>8. Very little of the planned tending for cleaning/competition control has been conducted to date in the 2012-2022 FMP term.</p>
<p>9. The inventory of red pine seed for the Kenora Forest is very low - less than two years' supply is currently in storage, based on average planting levels for red pine to date in the 2012-2022 FMP term.</p>
<p>10. Forest planning staff and others involved in FMP implementation are not instructed on the enforceability and calibration of compliance standards for forestry activities and installations to ensure they are consistent with the FMP.</p>
<p>11. The level of compliance inspections undertaken on the Kenora Forest by the District MNRF was low and below the level that the auditors consider to be sufficient to provide for effective</p>

oversight, as well as in some years being below the targets set in the ACOPs. The ACOPs prepared by the MNRF District provide little information, and exclude risk analysis results.
12. The Year Ten AR/Trend Analysis does not meet all of the requirements of the 2009 FMPM.
13. The 2012 FMP contains a number of objectives and targets that are unlikely to be achieved.
14. Corporate MNRF has not met its obligation to produce the provincial status report for the 2013 IFAs according to the schedule in the IFAPP.
15. Approximately half of the recommendations from the previous IFA directed at the local level of MNRF and the Company were not addressed effectively, if at all, during the audit period.
16. Corporate MNRF has not extended the term of the SFL since it was issued, despite the compliance of the licensee with the terms and conditions of the SFL.
Best Practice
Miitigoog LP has encouraged and supported Miisun Integrated Resource Management Co. in the implementation of a proactive and effective approach to First Nation engagement in forest management planning as well as identifying and implementing ways of achieving a more equal participation by First Nations communities in the benefits provided through forest management planning.

3.0 INTRODUCTION

3.1 AUDIT PROCESS

The Crown Forest Sustainability Act (CFSA), and one of its Regulations (160/04), directs the Minister of Natural Resources and Forestry (MNR) to conduct regular audits of each of the province's managed forests. This Independent Forest Audit (IFA) was awarded to ArborVitae Environmental Services Ltd., which used a four-person team to undertake an audit of the Kenora Forest. Profiles of the audit team members, their qualifications and responsibilities, are provided in Appendix 6.

The IFA's assess compliance with the CFSA, the Forest Management Planning Manual (FMPM), the forest management plan (FMP) and consider whether the licensee has complied with the terms and conditions of its Sustainable Forest Licence (SFL). The effectiveness of operations in meeting plan objectives and improvements made as a result of prior IFA results are also to be evaluated. Consistent with the CFSA, the IFAPP requires the audit team to provide a conclusion regarding the sustainability of the Crown forest and a finding regarding compliance with the terms and conditions of the SFL.

An important characteristic of the IFAs is that they review the performance of both the MNR and the SFL-holder, which is Miitigoog Limited Partnership. (LP). Miitigoog was formed in 2009 as Weyerhaeuser transferred the SFL that it held for the Kenora Forest to the industry-Aboriginal partnership embodied in Miitigoog. Miitigoog is 50% owned by Aboriginal interests and 50% owned by industry, with its Board of Directors reflecting this ownership structure. The Board has a representative of each of the four industry shareholders – Weyerhaeuser, Kenora Forest Products (KFP), E&G Custom Sawing and small sawmills/Kenora Independent Loggers Association - and four representatives of the Aboriginal communities that are Miitigoog shareholders. The seven communities that are shareholders are:

- Wabaseemoong Independent Nations;
- Naotkamegwaning First Nation;
- Ochiichagwe'Babigo'ining First Nation;
- Ojibways of Onagaming First Nation;
- Northwest Angle #33 First Nation;
- Shoal Lake #40 First Nation; and
- Anishnabeg of Naongashing First Nation.

Miitigoog has contracted the delivery of forest planning and management to Miisun Integrated Resource Management Co., which is a private 100% Aboriginal-owned company formed at the same time as Miitigoog. Because of this arrangement, when this report refers to "the Company", it is often Miisun that is being referenced, acting on behalf of Miitigoog.

The MNR has many responsibilities related to forest management, including review and approval of key documents (including the FMP, annual reports, annual work schedules), delivering Aboriginal First Nation and Métis community involvement and consultation, overseeing management of non-timber resources, undertaking compliance inspections, etc. In other words, the activities and accomplishments of both parties with forest management responsibilities are covered by the audit. This audit focuses on the Kenora District of the MNR, which oversees management of the Kenora Forest, and may also generate findings associated with the functions of other parts of MNR.

The Independent Forest Audit Process and Protocol (IFAPP) is the key document that provides direction regarding the audit scope and process. The IFA process has recently been modified to include an early stage screening of the risk associated with approximately 75 of the 170 audit procedures. The procedures which are screened for risk are those that MNRF has assessed as having a low impact on sustainability in the event of a non-conformance or poor effectiveness. As a result of this screening, eleven of the optional procedures were selected to be audited. Greater detail regarding how the audit process was followed, the approach used in the risk assessment and the results, and the operational sampling intensity can be found in Appendix 4.

This audit covers the period April 1, 2013 – March 31, 2018, which spans years two through six of the 2012-22 FMP and includes the development of the Phase II plan that came into force April 1, 2017. The audit examined all forest operations that occurred within that period as well as the process of developing the Phase II plan. The auditors solicited public input using newspaper advertisements, sending out notices to a sample of cottager associations and other groups that have tended to be active during planning, and by asking the LCC members to encourage their constituencies to comment. A Survey Monkey questionnaire was developed and the link was provided in all notices. One comment was received from a lodge owner.

The auditors interviewed more than half of the LCC membership at the time of the audit, and representatives of five First Nations with an interest in the Kenora Forest, as well as the Kenora Métis Council. Appendix 4 also provides more a detailed listing of the comments and discussion points raised by the members of the LCC and Aboriginal reps who were interviewed.

3.2 MANAGEMENT UNIT DESCRIPTION

The Kenora Forest is located in northwestern Ontario in the Kenora administrative district of the MNRF (See). The Forest is bounded by the Manitoba border on the west, the Whiskey Jack Forest to the east, the Crossroute Forest to the south and in the north, by two protected areas (Woodland Caribou Provincial Park and Eagle-Snowshoe Conservation Reserve). The town of Kenora (population approx 15,000) is the business and residential centre of the Forest.

There has been a very long history of forestry in Kenora. The Kenora Forest was a Crown Management Unit (CMU) formed by the amalgamation of the Minaki and Aulneau CMU's. In 2002, management of the Forest was transferred to Weyerhaeuser, which was awarded an SFL for the Forest. Weyerhaeuser managed the Forest until the SFL was transferred to Mitiigoog.

The Forest was traditionally divided into four Working Circles, which are sub-units of the entire forest management unit that recognize differences in ecological characteristics and/or socio-economic characteristics which can affect the forest management approach. The Working Circle concept was used in the 2006 FMP but has largely been abandoned in the 2012. Nevertheless it remains a useful shorthand for identifying regions of the Forest, and has been used selectively throughout this report.

Working Circle One, located north of the English River system, lacks road access from Ontario and has experienced virtually no forest management. The long-time plan has been to construct a bridge to cross the river at Caribou Falls, which is also where the Wabaseemoong community (Whitedog) is located. This access plan would result in haul trucks using the main streets of the community, and the community has held a number of votes and always turned down the access proposal. As described in section 4.3.3, the Company changed its plan to access WC1 in the Phase II Planned Operations.

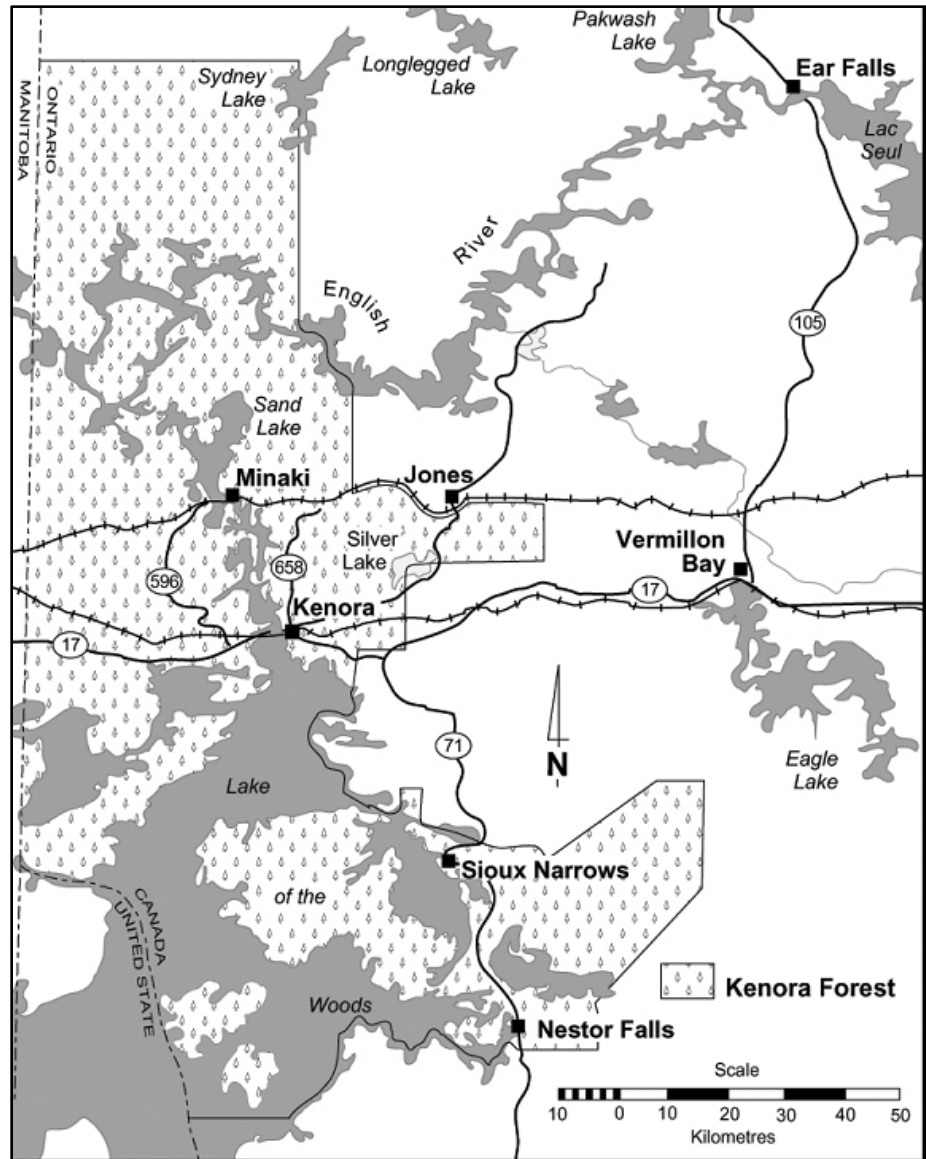
The Aulneau Peninsula is Working Circle Four; it is recognized for its unique ecological and social importance in the Forest. Several decades ago, it had the highest moose densities in the province. Relatively little forest management has occurred there for several decades or more, and the Peninsula was designated as an Enhanced Management Area (EMA) during the Lands for Life process. The management of the Peninsula was the topic of a recommendation in the two previous IFAs. The remainder of the Forest, Working Circles Two and Three, has historically experienced most of the harvest

activity on the Forest and that has been true during the implementation of the 2012-2022 FMP.

There are 18 First Nations communities within or adjacent to the boundaries of the Kenora Forest, as well as a number of Métis Councils that have interests on the Kenora Forest. The communities and councils are listed in Appendix 4.

Table 1 provides an area description of the Forest. There is an abundance of water on the Forest; approximately 36% of the Forest's area is freshwater, with the majority of it in Lake of the Woods. Less than half of the Forest (46%) is productive Crown Forest, and only approximately 378,000 ha of this area is considered available for forest management activities.

Figure 1. Map of Kenora Forest.



The Kenora Forest is ecologically diverse. While most of the Forest is in the Boreal region, elements of the Great Lakes – St. Lawrence forest are present, most notably represented by the occurrence of red pine and white pine. The Kenora Forest is primarily mixedwood, with the hardwood mixedwood (HMX) and conifer mixedwood (CMX) working groups comprising 51% of the Forest area. Much of the remaining forest (43%) is dominated by conifer, exemplified by the Jack Pine dominated (JPD), jack pine mixedwood (JPM), spruce dominated (SPD), spruce

mixedwood (SPM), black spruce lowland (SBL), red and white pine mixedwood (PRW), other conifer lowland (OCL) and balsam fir mixedwood (BFM) forest units (FU). Hardwood FUs include the poplar dominated (POD) FU on approximately 6% of the Forest and the other hardwoods (OTH), which is usually black ash wetland forest, comprising 1% of the Forest.

Table 1. Area description of the Kenora Forest (Source: 2012 FMP).

Land Class	All Land Ownerships (ha) ^a	Crown Land (ha)
Water	407,359	396,819
Non-forested	12,280	9,112
Non-productive Forest ^b	121,837	110,239
Productive Forest ^c	595,987	525,453
Total	1,137,863	1,041,623

a – includes Crown managed forest, parks, private and Federal land. b – areas incapable of growing commercial trees, such as muskeg, rock, etc. c – forest areas capable of growing commercial trees.

The Forest has a tremendous variety of wildlife due to the varied vegetation communities and physiographic conditions. The 2012 FMP reports that 27 vertebrate Species at Risk (SAR) occur on the Forest, and that 63 rare plants occur as categorized by Ontario's Natural Heritage Information Centre. As an example of the Forest's diversity, it is the only unit in the province where four species of ungulates occur: woodland caribou, moose, white-tailed deer and elk.

Tourism plays a tremendously important role in the area's economy. The 2012 FMP reports that approximately 500,000 tourists visit Kenora District annually and that there are 362 tourist operators in the District, with about 150 of these on the Kenora Forest. In addition, there are thousands of cottages throughout the Forest.

The regional forest industry was severely impacted during the 2008-09 recession, although compared with other Ontario regions, the Kenora Forest was fortunate in that the Weyerhaeuser mill in Kenora, Domtar's Dryden mill and Resolute's Fort Frances mill all operated more or less continuously. Unfortunately, Resolute closed the Fort Frances mill in 2014, however Kenora Forest Products re-opened its sawmill in 2015. Between Weyerhaeuser and KFP, there are local buyers for hardwood as well as SPF sawlogs. Despite these changes, the harvest level has remained reasonably steady during the past ten years, averaging 1,387 ha/yr during the 2006-11 FMP period and 1,192 ha/yr during the first five years of the 2012 FMP.

4.0 AUDIT FINDINGS

The following sections of this report describe the observations and conclusions of the auditors regarding the key components of the forest management system being applied on the Kenora Forest. The discussion highlights key themes that emerged during the audit and identifies audit findings and a best practice, which are described in detail in Appendix 1.

4.1 COMMITMENT

The commitment principle is deemed to be met since the Kenora Forest is certified under the Sustainable Forest Initiative standard. The audit team had extensive engagement with Company and MNRF staff throughout the audit and found them to be highly committed and knowledgeable regarding provincial forest management requirements in general and management of the Kenora Forest in particular.

4.2 PUBLIC CONSULTATION AND ABORIGINAL INVOLVEMENT

4.2.1 *The Local Citizens Committee (LCC)*

The Kenora LCC consists of thirteen members that represent a balance of interests relevant to the Kenora Forest. Members are knowledgeable and committed, meet regularly, practice good record keeping, and there is a sense of cooperation and mutual respect among the different committee representatives and points of view. The commitment was demonstrated during the audit with active participation, including interviews and surveys, attending the field audit, organizing a special purpose LCC meeting to learn about the IFA process, and attending the closing meetings. A review of public feedback related to forest planning, as well as interviews with LCC members, indicated that many of the potential issues arising from planned operations were solved pre-emptively by active outreach and information sharing by Kenora LCC members to their constituencies, as well as to the forest managers. The LCC is supported very well by District MNR; there were always 2 -3 District staff members, including senior staff, in attendance at meetings. In addition, Company staff attended regularly. This level of support by the MNR and Company has contributed to the audit's very favourable assessment of the LCC.

The public consultation processes for the Phase II plan and FMP amendments were not directly audited as this aspect was deemed to be low risk. However, the general observation of the audit team was that the Kenora Forest is managed in a manner enabling public input through the standard forest management planning engagement process as well as through the outreach efforts of LCC members, supported by Miisun.

4.2.2 *Aboriginal Involvement*

There are numerous Aboriginal communities associated with the Kenora Forest – eighteen First Nations and four Métis community councils. Seven First Nation communities are currently partners in Miitigoog LP and they are active participants in forest management, receiving economic benefits via harvesting rights, profit sharing through Miisun, and direct employment (see section 4.8. Contractual Obligations). A Best Practice was issued by the audit team in recognition of the Company's excellent Aboriginal community outreach and engagement.

All communities associated with the Kenora Forest were invited to participate in the forest management planning process for Phase II. Representatives of four First Nation communities sat on the planning team. Lack of financial resources and challenges in understanding technical and process aspects of forest management were identified by most interviewees as limiting their community's ability to participate in the FMP process. This was especially emphasized by the Kenora Métis Council, whose members are primarily in volunteer positions.

The audit found that the various Aboriginal reports associated with the Phase II plan and prepared by MNR were generally outdated and/or lacked community specific information (see Finding # 1). None of the communities responded to notices sent by MNR during Phase II planning, including to an invitation to review these reports and update values. However, the Aboriginal communities seemed generally engaged, but chose to provide input to forest management planning via communication with Miisun staff. This situation presents a challenge to the District MNR's ability to effectively undertake its Aboriginal engagement responsibility.

4.3 FOREST MANAGEMENT PLANNING

Miitigoog and MNR prepared the Phase II Planned Operations during the audit period – this is the operating plan for the second five-year term of the 2012-22 FMP period. The development

of the Phase II plan proceeded smoothly, helped by the good working relationship between the Company and MNRF. The Phase II plan came into effect as scheduled on April 1, 2017.

Planning started in 2015, during the latter stage of the extensive re-organization of the MNRF known as Transformation. One of the notable aspects of Transformation is that the MNRF lead for planning was moved from the District to the Region, and while it is fair to say that the Region needed some time to figure out how this would work for Phase II plans, the resultant distribution of work in the Phase II process was much like the pre-Transformation distribution of workload. For example, the Planning Team (PT) included the Regional Planning Forester as Planning Team co-chair (and the person in that position attended all nine PT meetings). The other members of the PT were two Company staff, four District MNRF staff, a representative from the LCC and Aboriginal community representatives. Some key regional positions, such as the regional biologist, were identified in the Terms of Reference as having an advisory role. The members of two of the three task teams were exclusively MNRF District and Company staff, with Regional MNRF in an advisory role. District MNRF staff had been expecting a greater Regional role based on the internal presentations they had been shown regarding Transformation and were somewhat disappointed that their workloads were little changed but the chain of command was now less clear than it was pre-Transformation.

A finding was made about the latitude that District MNRF staff had to make decisions during FMP Phase 2 planning. The split between District and Regional responsibilities is still being worked through and is the subject of Finding # 2.

4.3.1 Values Planning

Overall, planning for the Kenora Forest biological values is well done. Area of Concern (AOC) prescriptions and related plan elements met the FMPM requirements and followed specific Stand and Site Guide direction. Staff at all levels operated very professionally in developing appropriate measures for values conservation.

The PT reviewed the Conditions on Regular Operations (CRO's) and several new species at risk prescriptions were added to the CRO's from the Phase 1 plan. No new species at risk were identified as being known to occur on the Forest, however new AOCs were added to account for species at risk that could possibly be encountered on the Forest.

In 2017 a new water crossing protocol was released entitled "Ministry of Natural Resources and Forestry/Fisheries and Oceans Canada Protocol for the Review and Approval of Forestry Water Crossings". The protocol represents an effort made by MNRF and the federal Department of Fisheries and Oceans (DFO) to "streamline" the approval process for water crossings, however the new protocol contains little incentive for the Company to take advantage of the features intended to "streamline" decision-making. Finding # 3 is related to the need for further clarification of some of the direction in the new protocol.

Finding # 4 relates to Land Information Ontario (LIO) mapping, in which there are some problems with information not appearing properly on the maps that are produced. Planning, especially at the AWS stage, is hindered by these shortcomings, which include poor depiction of values locations, display of null values as actual existing values, and the production of "values" which are simply data or processing artefacts rather than genuine values. LIO contains a very large amount of data and data quality issues are proving to be challenging.

A broken link in the communications system was found to create problems when revisions are required for water crossings. The maps for these were not being sent to the correct location in MNRF, resulting in some missed updates. Refer to Finding # 5. Finding # 6 addresses the lack of consistent boundary lines and other features among various GIS products provided to the PT.

4.3.2 Harvest and Silvicultural Planning

The audit team reviewed the CRO's , planned renewal, tending and protection operations, renewal support requirements, and forecasts of expenditures in the 2017-2022 Phase II Operating Plan. All elements were in conformance with applicable planning requirements and were adequate to reflect the proposed 5 years of operations. Silvicultural Ground Rules (SGR's) and the associated silvicultural standards developed for the 2012 Phase I FMP were reviewed by the planning team, which confirmed that all SGRs were still applicable so that no changes were made to them for the Phase II FMP. However, due to shortcomings in the documentation and reporting of changes to baseline SGRs, free-to-grow data was not used to refine SGRs – refer to Finding # 7 for details.

4.3.3 Access Planning

The Phase II Planned Operations proposed two significant changes to road location and construction standards proposed in the Phase I 2012 FMP. One of the key changes was to the planned route of the main access road to WC1, which was to cross the English River at Caribou Falls, where the community of the Wabaseemoong Independent Nations is located. The community has long opposed to a major road crossing Caribou Falls and leading through the community, due to the resultant increased traffic and the safety risks associated with having industrial traffic passing through the middle of town. The Phase II plan re-routes the road to access WC1 well east of Caribou Falls, from the Werner Lake Rd. While this change should have increased the likelihood that WC1 would be accessed, those plans may be on hold as a large part of WC 1 was burned by the Kenora 71 fire in the summer of 2018.

A second change made in the Phase II Planned Operations was to upgrade the class of the Westway Road from operational to primary. This road is the main access road into the Western Peninsula and has been a winter road. In recent years, winter temperatures have been warmer and more variable, making winter access risky, as a rapid change in conditions could strand equipment and wood. The change to primary road standard would provide all-weather access.

The other large area that has not been accessed by road in the Forest is the Aulneau Peninsula. This situation was the subject of recommendations in the two previous IFAs. The Peninsula supports many values and is of special interest to at least six First Nations. The Aulneau had very high densities of moose, however the population density has declined dramatically, partially due to the aging of the forest. During the audit period, Miitigoog and Miisun have had extensive discussions with the affected First Nations and the following information has been provided to them:

- Miisun has provided a forestry 101 to Onigaming First Nation and Whitefish Bay First Nation (the main communities in support of moving forestry onto the Aulneau);
- Since early 2017, Miitigoog and Miisun have proactively worked closely with affected First Nations to discuss access to the Peninsula in advance of the next FMP;
- Recent fires on the Manitoba border in 2017 and Kenora 71 in 2018 have given forest management a higher priority;
- The Miitigoog Board has discussed the status of the peninsula and how to access it; and
- Revenue sharing with MNRF is a major step in providing benefits to First Nations communities, specifically with respect to the Peninsula.

4.3.4 FMP Amendments

There have been 28 amendments to the FMP since April 1, 2012, which is a normal level of amendment activity at this point in the term of the plan. Of these, two were minor and the rest

administrative. Most amendments were related to operational road and aggregate planning. The LCC was consulted with respect to the classification of the amendments.

4.3.5 Annual Planning

The Company has prepared Annual Work Schedules as required during the audit period. MNRF staff provided evidence that the water crossing information is often submitted in a number of separate submissions over time, and there are often errors or omissions that MNRF is required to correct, or require the Company to correct.

4.4 PLAN ASSESSMENT AND IMPLEMENTATION

4.4.1 Harvest Operations

The audit team viewed more than 40 individual blocks that had been either partially or fully harvested during the audit period. Many of the blocks are harvested over a period of several years. In general, harvesting operations were undertaken well. There was good utilization of the timber, an adequate amount of residual timber was left as wildlife trees and also residual patches, and depletion mapping corresponded well with what was on the ground. In almost all of the blocks there was no site damage, however Block 665 in the Western Peninsula was an exception. This block was harvested in 2017 by a logging crew that was new to the Forest. Contractors for the logging company had participated in the spring start-up training hosted by Miisun however they created extensive site disturbance in Block 665. The extent and depth of the disturbance was not measured by the auditors, and so the auditors were unable to determine whether the disturbance was above or below thresholds set in the Stand and Site Guide. In addition, there were no operational issues identified in either of the two compliance inspections undertaken on the block, one by industry and one by MNRF. Nonetheless, the block stood out from all of the others viewed.

The auditors welcomed Miitigoog/Miisun's commitment to burning roadside slash piles to avoid the loss of productive forest area as well as remove unsightly piles of tops, branches and other unmerchantable wood. Miisun is also very active in cutting firewood that it delivers to Aboriginal communities, which is part of the Company's relationship-building strategy, which was recognized as a Best Practice.

Harvesting was well below the planned levels during the audit period, and during the term of the 2012 FMP to date. Including an estimate of the area cut in 2017-18, the average annual harvest area was 1,192 ha (31% of planned) during the plan period to date, and 1,073 ha during the audit period (27% planned). The primary reasons for the low harvest level include the closure of the Kenora Forest Products mill from 2008 until 2015 and the bankruptcies of major harvest contractors that occurred during the audit period. Harvest contractor capacity had not recovered by the end of the audit period.

Harvested timber volumes were at a similar proportion of planned levels, averaging almost 118,000 net merchantable m³/yr or 28.5% of planned during the first term of the FMP. This includes salvaged volume that averaged approximately 3,400 m³/yr. Red pine and poplar were the two most intensively harvested species, with 58% and 40% of the planned volume being actually harvested. Approximately 28% of the planned levels of spruce and jack pine were harvested, while only 4% and 2.5% of the planned quantities of white pine and white birch, respectively, were cut. The Company met the spirit of the volume commitments in the SFL, even if the amounts provided were below the committed volumes (due to the low harvest level).

The audit team viewed a range of different prescriptions for Areas of Concern and concluded that they were implemented well and were appropriate for the situation.

4.4.2 Roads

The construction of primary and branch roads was below the level expected at this stage of plan implementation. In particular, access to Working Circles #1 and #4 has not yet been constructed. The 2012 Annual Report notes that the lack of a bridge across the English River near Caribou Falls and the absence of any construction of the Caribou Falls Road could create some issues for access to future wood supply.

The audit team viewed road construction, various types of water crossings and bridges, and road maintenance. The Kenora Forest has a good road network and public funds made available to Miiitigoog have primarily been used to maintain the road network, which is heavily used by a wide range of forest users. The only primary road construction during the audit period was a part of the Westway Road; no branch road was constructed. Planned construction north of Caribou Falls did not occur as discussed. A substantial part of roads funding was used for maintenance of existing roads and the auditors found the roads to be in excellent condition.

4.4.3 Silvicultural Operations

Silvicultural projects observed in the field were generally of good quality; the prescriptions were appropriate for the site conditions and were well executed. The observed treatments were consistent with the SGR's and the associated silvicultural standard with the significant exception being the lack of follow-up tending for competition control (see discussion below). The auditors examined 45% of the area of FRT-funded operations during 2016-17, the year of the specified procedures report, and found that the operations on the ground matched what was reported to FRT. There were no systemic issues or concerns associated with renewal operations.

The total area harvested during the Phase I term of the 2012 FMP was 5,690 ha, of which a total of 3,632 ha (64%) was regenerated. The Company plans for a two-year lag after harvesting for artificial regeneration (SIP plus planting or seeding) to be completed on most sites, and the difference between harvested and treated area in the Phase I FMP term reflects this two-year delay period. Prior to the current FMP, the total area harvested for the 9-year period from 2002-2011 was 13,719 ha. Of this area, a total of 13,343 ha was regenerated (97.3%). There is thus no substantial backlog of sites requiring renewal that has been carried over from prior FMP terms. The areas with incomplete renewal treatments consisted of sites assigned to seeding SGRs that had not yet been treated, and sites that were assigned to natural SGRs that had not yet been declared as natural regeneration.

Site preparation was conducted on approximately 60% of artificial regeneration projects during the audit period. Mechanical site preparation treatments were conducted with powered disk trencher equipment using a local, experienced operator. No chemical site preparation was conducted during the audit period.

Very little tending was conducted either during the audit period or during the first six years of the 2012-2022 FMP term. Of the planned area of 11,089 ha, only a small block of 29 ha had been tended manually, using backpack sprayers. The lack of follow-up tending for competition control appeared to have limited the overall stocking of conifer crop species and increased the amount of hardwoods on many sites – see Finding # 8.

Auditors observed that on some sites, especially on mixedwoods where SGRs based on planting or seeding for conifer regeneration were applied but no follow up tending was conducted, the silvicultural standards related to species composition and/or stocking will likely not be met. These sites were observed to be regenerating successfully, but to species mixes that were different than the forecasted composition. Free-to-grow results compiled by MNR on a total of 16,129 ha of area that was assessed during the period from 2004 to 2016 show a shift

in area-weighted species composition as follows: 9.3% increase in poplar, 2.8% increase in white birch, 6.1% decrease in jack pine, and 5.2% decrease in black spruce from the pre-treatment condition.

With respect to the Company's renewal support program, there are two seed orchards within the Kenora Forest, one for jack pine and one for black spruce. No work was required or conducted on these sites during the audit period. During the audit period the Company planted approximately 2,153,000 trees, consisting of (in order of abundance) jack pine, black spruce, white spruce, red pine, and white pine. There was no cone collection conducted during the audit period, however, the current seed inventory is sufficient for the production of planting stock over the next several years for all species except for red pine. After the red pine stock that is currently being grown is planted next year, the seed inventory for red pine will be depleted. This situation is addressed in Finding # 9.

4.5 SYSTEM SUPPORT

The human resources component of the System Support criterion was not audited intensively since the Kenora Forest is certified under the Sustainable Forest Initiative standard. However, Finding # 10 was issued with regard to gaps identified in compliance training that have resulted in part from the recent re-alignment of Regional and District responsibilities and in part from a high level of staffing changes at both levels. People who do not need to be certified compliance inspectors but who need to have a good understanding of compliance thresholds and standards do not have access to appropriate training. The second component of this principle, regarding document and record quality control, was assessed as being below the risk threshold that would lead to its inclusion in the audit.

4.6 MONITORING

4.6.1 Compliance Monitoring

Both the District MNRF as well as the Company undertake compliance monitoring programs designed to assess the conformance of operations with the FMP, applicable laws and regulations. The Company prepared a Ten Year Compliance Plan as part of the Phase I FMP and updated it as part of the Phase II Planned Operations, and annual compliance planning is part of the AWS. The Company's planning met the requirements of the FMPM and the 2014 Forest Compliance Handbook, and the Company generally implemented the compliance plans, although at a lower level than planned due to the below-planned level of operations actually conducted. Compliance inspections by the Company averaged 38 per year, and varied with the level of operations from year to year. During the audit period, there was one FOIP report that was non-compliant and ten that had pending issues which were resolved. There were no FOIP reports in-compliance with comments. This represents a high level of compliance and is consistent with what the audit team observed during its site inspections.

MNRF Kenora District prepared Annual Compliance Operations Plans for each year of the audit period and these contained basic information. The District had a considerable amount of staff turnover during the audit period, including retirements of experienced compliance staff, so that at times the District was short-staffed. Because the District also had the responsibility for leading compliance on the neighbouring Whiskey Jack Forest, the level of compliance inspections suffered in some years – in 2015-16, 2016-17 and 2017-18, the District completed 4, 7 and 7 FOIP reports respectively. The audit team considers this to be an inadequate level of monitoring to maintain effective operational oversight, leading to Finding # 11. As described in Appendix 3, the Company's performance was generally in line with its monitoring plans,

however there is room for improvement in the timeliness of submitting compliant FOIP reports and in providing Suspension and Completion notifications to District MNRF.

4.6.2 Silvicultural Effectiveness Monitoring

The Company has developed and implemented a comprehensive system for monitoring silvicultural operations. This system includes field inspections conducted on all blocks within a year after harvesting. This provides the basic information needed to finalize decisions on silvicultural intensity and to verify treatment prescriptions. The information is also used to determine site preparation requirements, to estimate the need for tree planting and for ordering planting stock by species and stock type. Changes to Forest Operations Plans (FOPs) and SGRs were generally informally recorded at the time of these assessments on paper maps, but SGR changes were not formally tracked by the Company during the audit period using their GIS system or reported to MNRF or included in ARs as required by current FIM specifications for Annual Reports (2017 version). This non-conformance has complicated the compilation and analysis of free-to-grow outcomes and is addressed in Finding # 7.

Company staff conduct quality assessments during all tree planting and site preparation activities. Later, usually four years after application of the respective renewal treatments, the Company assesses the progress of regeneration and determines if any further treatments are needed to meet silvicultural standards. This is particularly important for assessing natural regeneration areas.

In general, the Company did a good job of inventory updating in preparation for forest management planning, including the management of harvesting and silvicultural records. During the audit period, digital maps and associated information regarding harvesting and silvicultural treatments were provided to MNRF in accordance with the appropriate FIM standards. However, as discussed previously, records related to changes to FOPs and SGRs resulting from field assessments were not properly maintained by the Company, and appropriate data were not provided to MNRF in AR's as per current FIM specifications.

Free-to-grow Assessments

The Company used GIS-based tools to identify and map areas requiring free-to-grow (FTG) assessments every year, including areas that were previously assessed and scheduled for re-survey because they were determined to be not free-to-grow. During the Phase I of the 2012 FMP, the Company completed free-to-grow assessments on 8,709 ha. This effort represented 118% of the forecast area of 7,352 ha, which included all area forecast for assessment during the Phase I FMP term, and also addressed some backlog area that had been carried over from prior FMP terms. Approximately 2,250 ha of free-to-grow assessment was completed in the first year of the Phase II FMP term, representing 30.6% of the effort planned for the 5-year term. The Company has also fully completed its survey obligations for Class Y and Z lands.

Of the 7,217 ha declared FTG during Phase I of the 2012 FMP, 4,246 ha was declared as FTG to the projected Forest Unit (FU), while the remaining 2,971 ha was assigned to another FU. The assessed area determined to be not yet FTG was 1,441 ha. Accordingly, the regeneration success rate was 83.4% and the silvicultural success rate was 49%. On the assessed sites that were not declared FTG, crop trees had not yet reached sufficient average height to meet SGR standards and/or stocking was insufficient. Note that these results may change somewhat once changes to SGRs based on field site assessments have been properly recorded and included in this analysis – see Finding # 7.

MNRF District SEM Program

During the audit period, MNRF District staff at Kenora did a good job implementing SEM programs according to direction on core tasks from the Provincial Silvicultural Program and from the Northwest Region. Work was completed on all required core tasks to an acceptable level. In general, there was good correspondence between the results of free-to-grow assessments conducted by MNRF and the Company. Over the course of the audit period, District MNRF collaborated with the Company to conduct joint free-to-grow assessments by air, participated in joint field visits to silvicultural project areas, and conducted compliance inspections of silvicultural projects as part of the District SEM program. During the audit period, MNRF also installed a series of monitoring plots within plantations to assess the survival and growth of planted stock, as well as successional trends in tree species composition. This information will be very valuable in future for comparing the performance of different silvicultural prescriptions and analysing parameters related to silvicultural success.

4.7 ACHIEVEMENT OF MANAGEMENT OBJECTIVES & FOREST SUSTAINABILITY

4.7.1 Summary of the Trend Analysis

The Company prepared a Trend Analysis for this audit, covering plan periods from 1996-2001 to the present. The Trend Analysis describes how the available harvest area has declined while the actual harvest has increased somewhat from 922 ha/yr during the 1996 FMP period to 1,138 ha/yr during the current FMP, largely driven by the hardwood harvest that started when Weyerhaeuser's TimberStrand plant began operations. In contrast, actual harvest volumes fell from 130,000 m³/yr during 2006-11 to an average of 99,500 m³/year during the 2012 FMP period, as less poplar, jack pine and balsam fir was cut during the most recent term. The decline in volume is at odds with the increase in harvest area and is not discussed in the Trend Analysis – the explanation likely centres on the lower productivity of the blocks scheduled for harvest in the 2012-2022 FMP.

The analysis of harvest versus renewal is succinct, and as discussed in Finding # 12, the Company does not track changes that are made to the SGRs following initial planning, which complicates the Company's ability to assess renewal effectiveness. Further, as described in Finding # 12, the Company made a good effort to complete Table AR-10 however MNRF guidance available when the Trend Analysis was being developed very poor in this respect, and as a result, AR-10 does not provide much insight into silvicultural effectiveness. MNRF has since prepared improved guidance, however, this was not provided to the Company in time for the development of their Trend Analysis. Finding # 12 identifies some concerns with the Trend Analysis; the auditors note that the Company's ability to provide a detailed Trend Analysis has been hindered by the disappearance of records during the transfer of management responsibility for the unit from Weyerhaeuser to Miitigoog/Miisun.

The assessment of objective achievement in the Trend Analysis is detailed at the indicator level for those indicators that are planned to be assessed upon completion of the LTMD. Some indicators were scheduled for assessment in the Year 7 and Year 10 ARs, neither of which were scheduled to be completed at the time of the audit, and these were not assessed in the Trend Analysis. Of the assessed indicators, the Company's conclusions were consistent with the assessment by the audit team. The Trend Analysis concluded that the management of the Forest was in conformance with the LTMD and that it was sustainable.

4.7.2 Assessment of Objective Achievement

The 2012 FMP contains 11 objectives, and these can be categorized under broader goals. The first three objectives, as well as objective #9 (the silvicultural objective) are related to the desired future forest; the overarching aim of the plan is to shift the composition and structure of the Forest so that it becomes more like the “pre-industrial” forest. Objectives #10 and #11 are concerned with the maintenance of ecosystem quality, while objectives #4-8 are concerned with the provision of social benefits associated with timber production, access, and participation in forest planning.

The attainment of the desired future forest as expressed by objectives 1-3 is based on returning the forest to a more “natural” condition, as derived by the BFOLDS model and the Ontario Landscape Tool (OLT) model. The targets generated as a result of the analysis reflect a forest subject to the natural disturbance cycle, and are specified for parameters such as patch size distributions, age class distributions, and forest composition. An outcome of these analyses is that the plan objectives call for a large increase in the amount of conifer-dominated forest and a reduction in the amount of area in the mixedwood forest units. This is most evident in two indicators whose desired levels are significantly greater than their values in the current forest:

- the area of upland pine and spruce forest (current area is 177,246 ha and desired area is 290,514 ha); and
- the percentage of 600 ha polygons with > 60% caribou refuge habitat¹ (minimum desired level is 87% versus current value of 70%).

Shifting the forest in this manner requires that the harvest level be close to the planned level and, most importantly, that renewal efforts should increase the amount of conifer in the new stands compared to the amount of conifer present in the harvested stands. Unfortunately, the inability of Miisun to gain social approval for the use of herbicides has meant that many of the areas planted or seeded to conifer are coming back as mixedwoods, as viewed by the auditors in the field. This outcome, in addition to the low level of harvest, means that one of the main goals of the plan is not being achieved.

Many of the objectives regarding social outcomes have or will likely be achieved during the term of the 2012 FMP, with the notable exception of the actual harvest levels falling well short of planned levels. FMP objectives #10 and #11, covering the protection of forest values and of soil and water resources, respectively are also likely to be achieved.

In summary, the auditors’ assessment of the achievement of plan objectives is that most are likely to be met in part. However, one or more key indicators of objectives 1, 2, 3, 4, 6, and 9 are unlikely to be met, leading to Finding # 13.

4.7.3 Assessment of Sustainability

As discussed above, some aspects of forest management during the audit period were not consistent with the direction incorporated into the LTMD and anticipated by the FMP. As a result, some key objectives of the FMP are unlikely to be met. However, the audit team believes that some components of the LTMD in the 2012 FMP were not appropriate for this forest. A full discussion of these concerns can be found in the previous audit report, the three principal ones are:

¹ Caribou refuge habitat is defined on page 61 of the Phase I FMP as an area “consisting of a variety of ages of conifer-dominated stands”

- the choice of the desired future forest is questionable because the 2012 Planning Team had difficulty calibrating OLT and eventually the OLT model was revised by Regional MNRF without the involvement of the Planning Team, with the result that some members of the 2012 Planning Team felt that the modeling results did not suit the Forest;
- The planned severe reduction in the amount of hardwood would be detrimental to Weyerhaeuser's TimberStand mill; and
- The LTMD was based on a large scale tending aerial program that has not been implemented to date and continues to be strongly opposed by the First Nations communities that are partners in Miitigoog.

Nothing occurred during the term of this audit to change the minds of the audit team members that the LTMD in the 2012 FMP is not particularly appropriate for this forest.

The auditors believe that the lack of tending leading to a loss of conifer species is the most significant risk to sustainability of the forest. Free-to-grow results compiled by MNRF on a total of 16,129 ha of area assessed from 2004 to 2016 show a shift in area-weighted species composition as follows: 9.3% increase in poplar, 2.8% increase in white birch, 6.1% decrease in jack pine, and 5.2% decrease in black spruce, from the pre-treatment condition. However, the audit team notes that the low level of harvest in recent plan periods has limited the impacts of the lack of tending; 16,129 ha represents only 3% of the Crown productive forest.

The auditors' conclusion of sustainability is supported by the following points:

- The amount of harvesting is well within the allowable level;
- Essentially all of the harvested area is being renewed to forest;
- Operations viewed in the field were undertaken to a high standard and were generally in conformance with the FMP and provincial regulatory requirements;
- The Company and MNRF have effective oversight of how the forest is being managed;
- The Areas of Concern that have been developed to protect socio-economic and ecological values are appropriate and are being implemented as planned;
- There is a very good relationship between the Company and District MNRF; and
- The forest manager is doing an excellent job of engaging with First Nations communities and forest stakeholders, and the LCC is very effective.

The audit team believes that the next forest management plan should be based on much more conservative estimates of the level of harvesting and the amount of tending that will be conducted, and the Company shares this general perspective. In conclusion, the audit team finds that the forest has been managed within the bounds of sustainability during the audit period.

4.8 CONTRACTUAL OBLIGATIONS

The SFL imposes a number of requirements on its holder and Miitigoog's compliance is described in detail in Appendix 3. Some notable aspects are described below.

The Company made timber available to the three commitment holders, of which Kenora Forest Products (KFP) holds the largest commitment. KFP re-started its mill in 2015 and began using significant volumes of SPF in 2016. E & G Custom Sawing received mostly red and white pine volume in each of the first four years of the audit (data were not available for the fifth year) while Dave Burt Construction closed its sawmill early in the audit period. The Company also met the special condition in the licence, which was to make timber available to Wabaseemoong Independent Nations. Wabaseemoong ended up with a significant amount of debt due to unpaid Crown payments when the company that it contracted to harvest its allocation went

bankrupt. MNRF declared the unpaid dues a bad debt and Miitigoog made good the amounts owing to the FRT and FFT to enable Wabaseemoong retain its eligibility to hold an overlapping licence.

The Company had some cash flow challenges regarding the Forest Renewal Trust in the first half of the audit period, due to generally soft timber demand exacerbated by the bankruptcy of the largest harvest contractor on the forest. The Company was able to remain above the minimum balance on March 31, 2017 and by March 31, 2018, reported a moderate surplus.

The Company prepared all planning and reporting documents as required, has undertaken the required surveys and inventories, including conducting FTG surveys on an area equal to 118% of the area planned for survey during the Phase I FMP. This addressed some backlog area from previous terms. The Company has also completed its obligations on the Class Y and Z lands. The Company's compliance program, including its planning, educational program, level of inspections and the high level of compliance reported, meet licence requirements and the Company's record of engagement and outreach with Aboriginal communities, both those within Miitigoog and those outside of it, is excellent.

The audit team reviewed the manner in which the recommendations from the previous IFA were addressed and found that only about 50% of those directed at the Company and District MNRF had been addressed effectively. In many cases, the same or a similar issue arose in this audit leading to a finding. The lack of closure of so many recommendations leads to Finding # 15.

Measures to address the prior audit's recommendations directed towards the Corporate levels of MNRF were set out in an action plan, to be followed up two years later by a status report. The Status Report has not been prepared, leading to Finding # 14. The auditors also issued Finding # 16 because Corporate MNRF has not extended the term of the SFL, despite the compliance of the licensee with the terms and conditions of the SFL. The SFL is scheduled to expire on March 31, 2022, however MNRF has prepared a licence extension proposal which is awaiting approval.

4.9 CONCLUDING STATEMENT

This audit of the Kenora Forest has found that there has been strong performance by the Company and the MNRF. During the five year audit term, Miitigoog and Miisun have continued to develop and become more established, and they are beginning to deliver some of the results originally envisioned when the two organizations were conceived. MNRF has continued to deliver on its obligations, in spite of a high degree of staffing change and a major organizational restructuring known as Transformation.

The audit period was not without its challenges, as a key consuming mill was closed and there were contractor bankruptcies. However, Kenora Forest Products re-started its sawmill in 2015, which provided a nearby market for SPF sawlogs. Meanwhile, the Weyerhaeuser TimberStrand mill continued to use the majority of the poplar and birch harvested on the Forest.

A total of 16 findings were made in this audit. The most significant of these is the lack of tending on the Forest, which is due to reluctance on the part of First Nations to accept the use of herbicide, especially in aerial applications, to control vegetation competing with regenerating conifer. Based on discussion with MNRF and Company staff, the audit team anticipates that cottagers and other stakeholders would also object strongly if an aerial tending program was proposed. With a large tending program proposed in the 2012 FMP, one goal of the FMP (to increase the conifer content of the Forest) will not be reached if current trends continue. This has implications for how the future forest compares to the planned future forest, as well as the achievement of some of the FMP objectives. There is little likelihood of there being a significant

tending program on the Forest, in the opinion of the auditors. There is also little likelihood that in the near future the harvest level will increase significantly from its present level, which is consistent with the harvest level over the past 20 years. The implications of these conditions need to be carefully considered during the development of the next FMP.

During the term of the current plan, the scale of impact of the shortfall in tending was limited by the low level of harvest compared with the planned level – in area terms, only 31% of the planned harvest area has been cut during the first six years of the FMP. Plans to access working circles #1 and #4 in the Forest have yet to be realized, which contributes to the low level of harvest. The Company has made progress obtaining the social licence to harvest on the Aulneau, and decided to adopt a less socially contentious route into WC #1, although a 2018 fire (Kenora 71) has burnt a large part of the area, raising the possibility that access will be deferred until there is more merchantable timber available to harvest.

Of the audit findings, four were concerned with data and information management, while none were directly associated with the quality of the operations. The auditors found that almost half of the issues that led to recommendations in the previous IFA were not addressed effectively. On top of this, the Corporate levels of MNRF had not prepared an Action Plan Status Report with respect to the recommendations from the 2013 IFA directed toward Corporate MNRF. The SFL's are structured so that their term will be extended every five years or so following a favourable assessment of SFL-holder compliance with the licence. This has not been done and the SFL is scheduled to expire on March 31, 2022, which has the potential to put the licence and forest operations at risk.

In addition to the high quality of the operations, many things were done well during the audit term, including the development of the Phase II FMP, the high level of engagement on the part of the Company with First Nations communities, a well-run Company compliance program, and an adequate level of MNRF oversight.

The audit team concludes that management of the Kenora 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 Sustainable Forest Licence #550400 held by Miitigoog LP. The forest is being managed consistently with the principles of sustainable forest management, as assessed through the Independent Forest Audit Process and Protocol.

APPENDIX 1 – AUDIT FINDINGS

Independent Forest Audit – Record of Finding
Finding # 1
<p>Principle: 2. Public Consultation and Aboriginal Involvement Criterion: 2.5. Aboriginal Involvement in Forest Management Planning To examine the involvement of Aboriginal communities in forest management planning and its benefits. Procedure: 2.5.1. First Nations or Métis community consultation ...: Review and assess whether reasonable efforts were made to engage each Aboriginal community in or adjacent to the management unit in forest management planning as provided by the applicable FMPM and assess the resulting involvement and consideration in the plan or amendment.</p>
<p>Background Information and Summary of Evidence: For the Phase II forest management plan, there are three reports regarding Aboriginal values and input that are required to be reviewed and updated (or prepared if they do not already exist). Two of these reports are the Aboriginal Background Information Report (ABIR) and the Report on the Protection of Identified Aboriginal Values (RPIAV), which appear to be outdated. In Phase II, none of the eighteen communities (see list in Appendix 4) responded to Stage 1-3 notices sent by MNRF, which included a request to review these reports and update values. The third report, the Summary of Aboriginal Involvement, is in the form of a communication record and lacks a summary of communication efforts and a discussion that there was no input received from any community, as described in the FMPM (Part A, s. 4.6.4).</p> <p>Based on interviews with First Nation and Métis community members, there is scant awareness of these reports. In their interviews with the auditors, the communities referenced limited capacity and lack of resources to review these reports, as well as challenges in dealing with the large volume of email/mail correspondence and reports sent by MNRF, so that often these notices do not receive further attention. The communities also seem to prefer to communicate with Miisun on any concerns regarding planned operations, in part because Miisun actively engages communities. Kenora District is also responsible for consulting with a very high number of communities (18) with only one resource liaison specialist on staff. The resource liaison specialist is also participating in a number of treaty land entitlement processes underway within the District. With such a large workload, the District would benefit from having a second Liaison position.</p> <p>Interviews indicated lack of continuity in information and knowledge regarding the past communication between MNRF and communities due to the staff turnover both at MNRF and communities. One of the Aboriginal community interviewees felt challenged to pick up where their predecessor left off, due to lack of information on what had already been done regarding participation in and opportunities from forest management.</p>
<p>Conclusion: These reports, if prepared as described in the FMPM, could provide a concise summary of engagement to both communities and MNRF on the issues, developments in relationship building and values identification and protection. In their current form, the usefulness of these reports informing forest management is limited.</p>
<p>Finding: The three Aboriginal Reports associated with planning are outdated and/or include limited community specific information. In their current condition, these reports have limited utility.</p>

Independent Forest Audit – Record of Finding

Finding # 2

Principle 3: Forest Management Planning

Criterion 3.9: Phase II – Prescriptions for Operations

To review and assess operational prescriptions for the Phase II planned operations.

Procedure 3.9.1: Phase II planned operations AOC prescriptions

Review whether any AOC prescriptions were added, modified or deleted for the second five-year term and assess whether:

- documentation of AOCs and any related issues meets the applicable FMPM requirements including whether
 - planning of AOCs followed approved forest management guides

Background Information and Summary of Evidence: The Phase II planning process is set out in the 2009 FMPM, however the FMPM reflects the pre-Transformation organizational structure of MNRF. Accordingly, the regulated direction in that FMPM for the distribution of responsibilities between District and Regional MNRF in Phase II planning is no longer fully appropriate. The new planning process, described in the 2017 FMPM, has eliminated Phase II plans. Neither the 2009 nor the 2017 FMPM fully explain the Regional role in the development of Phase 1 or 2 plans.

Post-transformation, MNRF Regional staff lead many aspects of FMP planning. The FMP Project Plan for Phase 2 of the FMP describes the Regional Planning Biologist role as advisory only.

During plan development, some assistance was requested by District staff and provided by Regional staff for development of new AOCs. Regional staff encouraged District staff to apply professional judgment. As planning progressed, it became clear that the District held the responsibility for protecting biological values and applying the measures in the guides. This responsibility was not clear to District staff at the outset of plan preparation.

Auditors became aware of some differences between Districts in the way AOC prescriptions were developed; improving the consistency of approach would be an important role for regional staff. The auditors received comments that the Regional Planning Biologist role was not made clear, but this does not seem to be the case, as the Project Plan does state the role is advisory. This misperception may be a result of the changes implemented through Transformation. Although Region has a higher level of responsibility in developing the Phase 2 FMP since Transformation, this did not apply to all aspects including AOC development and protection of biological values.

Regional staff commented “all staff are struggling to manage expectations” and “the new model isn’t crystal clear yet.”

Discussion: The Region may have made the role of planning biologists clear in the Project Plan but it is not clear at the District level when is it appropriate to call on Regional advisors, or if they need to be called at all. In the near future the Project Planning exercise will not be relevant to Phase 2 plans, but it will still apply to all other aspects of planning.

Currently training does not cover the bounds of professional judgment at the District level. It would be straightforward to clarify these limits for developing FMP Phase 2 components including AOCs, CROs, SAR, implementation of the Stand and Site Guide, and co-ordinating surveys and values information collection.

The question of what is the District scope for protection of biological values (AOCs, CROs, SAR, implementation of the Stand and Site Guide, and co-ordinating surveys and values information collection) may have arisen because there are different approaches in adjacent Districts. This

causes questions from industry faced with more than one procedure for the same activity. As well, consistency in information collection is essential in compiling large expensive multi District information sources for Land Information Ontario.

Region provided useful examples of the task assignments in other forest management units. It appears that the decision about who is assigned to each task is done by Region or District at the time of preparation of the Project Plan and the Terms of Reference. The auditors assumed this was based on Business Process Maps (BPMs), but there was no description of this process available. The audit team did not have copies of the BPMs for forest planning activities. The leadership role for the District, as is the case in Phase 2 planning of AOC prescriptions, and biological values was an important aspect of the delivery of the plan. In practice the split of responsibility between Region and District was not clear during this exercise. AOC responsibilities did not seem consistent with BPM (BPM Map#2, undated, no source provided).

The bounds of the District leadership role were not as clear as they should be for Phase 2 and this has implications for plans in the future. The role and importance of Project Plans, and task assignments.

Conclusion: The focus of this finding is assisting District staff, faced with a long list of tasks, with ensuring that regulatory requirements are followed, to know how far to apply professional judgment. Going forward, in the absence of Phase 2 planning, when the District is the lead for AOC development or the management of other biological values, it should be made clear to District staff. If the District is the lead on biological values such as AOC prescriptions, this should be understood more widely.

Finding: During Phase II planning, it was not clear how much latitude District staff had to apply their professional judgment with respect to the documentation, planning and application of AOC prescriptions and related FMP implementation requirements.

Independent Forest Audit – Record of Finding

Finding # 3

Principle 3: Forest Management Planning

Criterion 3.9: Phase II – Prescriptions for Operations

To review and assess operational prescriptions for the Phase II planned operations.

Procedure 3.9.1: Phase II planned operations AOC prescriptions - planning of AOCs followed approved forest management guides - Review and assess in the field the implementation of approved AOC operational prescriptions.

Background Information and Summary of Evidence: In 2017 a new water crossing protocol was released entitled “Ministry of Natural Resources and Forestry/Fisheries and Oceans Canada Protocol for the Review and Approval of Forestry Water Crossings” (QP, 2017). This protocol reflects an agreement between MNRF and DFO to collaboratively “protect the sustainability and ongoing productivity of Ontario’s fisheries or fish habitat during the planning and implementation of forest management activities on managed Crown forests” (abridged). One of the purposes of the new protocol is to “...modernize business processes to ensure Ontarians receive quality services that are effective and efficient.” One such function is the setting of appropriate timing windows without the need to wait for a determination from the MNRF Biologist. Training was provided for District staff.

With any new policy, there is a period of clarification that occurs as implementation generates questions about the intent and application of the policy. During the audit review of the new protocol, some questions arose about the implementation of the protocol, especially regarding the following text in the protocol:

“All in-water construction and decommissioning activities must abide by the appropriate fisheries in-water timing windows documented in approved FMPs and/or forest management guides in order to avoid disrupting sensitive fish life stages. In cases **where the fishery community inventories at the location of the proposed project are not well documented**, the most restrictive in-water timing window must be used.”

District staff requested clarification about:

“...inventories ...are not well documented...” - What is considered a good inventory?

“...at the location of the proposed project” - What are the bounds of the location?

In response the regional staff sought clarification from Policy Branch. The response did not address the concerns fully. Region felt that professional judgment could be applied.

Discussion: Many inventories in the northwest may not be considered “well documented”, which possibly leads to the application of extremely restrictive work-in-water windows (July 15 – September 1). Second, it is important to have a clear process for determining the boundaries of the project, because often the project is not far up or downstream from a large water body with better fisheries inventory and critical fish habitat. The approach of using professional judgment may be the solution, however this may require more discussion on the part of MNRF to set the broad boundaries of what is acceptable particularly if industry is making the interpretations.

One implementation issue is that Districts which are proximal to Kenora are applying the protocol differently. For now, Kenora District staff are conducting full water crossing risk assessments for the SFL holder, and the Company is in agreement with this. The Company feels MNRF can process these reviews quickly and it reduces risk to the Company and may optimize the window for when work can be completed. MNRF Policy Division indicated that these and related questions could be addressed through training and continued dialogue between MNRF and the

forest industry.

Conclusion: The Company and District MNRF have a good working arrangement for water crossing approvals. The Company is interested in some possible streamlining but is hesitant to accept new risk, given the good arrangement they already have. To benefit from streamlining, there will need to be some clarifications made about locations and inventories. It appears that there is some need for further direct discussion about professional judgment, and precisely how much latitude the Company has. The auditors felt the comment by Policy Branch suggesting “training messages and continued dialogue” is helpful. This should be done face to face.

Finding: District and Company Staff responsible for implementation of the new MNRF/DFO Protocol for the Review and Approval of Forestry Water Crossings are hesitating to proceed with the Company water crossing self-screening approvals in the Protocol.

Independent Forest Audit – Record of Finding

Finding # 4

Principle 3: Forest Management Planning

Criterion 3.9: Phase II – Prescriptions for Operations

To review and assess operational prescriptions for the Phase II planned operations.

Procedure 3.9.1: Phase II planned operations AOC prescriptions: Review whether any AOC prescriptions were added, modified or deleted for the second five-year term and assess whether ... adequate information was available for AOC planning ...

Principle 4: Plan Assessment and Implementation

Criterion/Procedure 4.1: Plan assessment In the conduct of the field audit examine areas of the FMP that can be assessed in the field ...

Background Information and Summary of Evidence: The system used by MNRF to store and manage values information is Land Information Ontario (LIO). A review of the LIO output used in planning AOCs, road location and block layout showed that there were hindrances to clear presentation of the values. As well, there were concerns about values occurrences that, although properly entered into LIO, are omitted from FMP values maps.

District staff prepared a list of examples of LIO problems, that includes:

- LIO will identify fish species as occurring everywhere in a large water body such as Lake of the Woods, even though the actual occurrence may be local and distant from an actual forestry operation. For example, the output of Crayfish occurrences consisted of spirals covering a large section of Lake of the Woods caused by incorrect structure of the data entered. The output was not used in FMP planning, but these presentation problems hinder map production for FMPs.
- Null entries, which are survey locations where no value was found, sometimes appear on maps as occurrences. In other words, null entries are absence data, as opposed to presence data. While this may be useful in some situations, it can cause confusion when the null entry location appears on maps looking like presence data.
- Bumble Bee data from one colony was entered as 60 separate individual occurrences. Since each record contains 150 characteristics describing the occurrence, proliferating numbers of records cause delays in map production due to the volume of information being processed.
- Different size of occurrence confidence circles for apparently similar values. The reason for the confidence difference is not apparent in the LIO output, although it may be justified.
- Data duplication occurs where there is more than one entry of the same occurrence. Incorrect and infeasible dates for occurrences also occur.
- Each occurrence entry contains about 150 descriptions (columns) of data. Although this is useful at times, it also creates an unwieldy file, which produces “inexplicable” output at times, as described by one respondent.
- Some occurrences that are accepted by LIO were not displayed on output maps from LIO. There was not an explanation for this.

Neither the local industry nor government participants are able to verify all updates to LIO because there are too many records to review. The reaction to this situation is that both the Company and local government staff are keeping their own separate shape files for use in planning and record keeping.

Discussion: As one of the interviewees described, “It is hard to get the computer to do things, without giving you attitude.”

It is to be expected that a large system like LIO will have input and output challenges for some occurrences. By and large the system is working for FMP planning, but it is consuming an excessive amount of staff time to achieve acceptable output for use in FMP administration. Both the industry and the government produced examples of errors. In some cases the root cause of the error was unresolved.

Conclusion: The information contained in LIO is a very valuable asset. Although most data are good quality, some is compromised by duplication or poor resolution. Information is difficult to access and both the Company and the District MNR staff have lost confidence in the reliability of the system. As a result, both Company and District MNR staff keep files separate from the primary LIO data storage system.

This suggests that it would be worthwhile to review the storage system and access issues associated with LIO with respect to their use in forestry applications. The more usable and accessible the information is, the more useful it is in decision-making.

Finding: Planning information for Phase 2 AOC prescriptions in forestry operations provided by MNR through Land Information Ontario has a number of data quality deficiencies.

Independent Forest Audit – Record of Finding Finding # 5
<p>Principle: 3. Forest Management Planning</p> <p>Criterion: 3.13. FMP Amendments To review and assess implementation of the amendment process as applied on the management unit.</p> <p>Procedure: 3.13.2. Amendments and changes to values - new or changed conditions related to road crossings of AOCs were developed as appropriate.</p>
<p>Background Information and Summary of Evidence: In reviewing the procedure for revising the AWS, the Company discussed their approach for changing the stream layer with the audit team. Subsequently, a discussion with MNRF GIS staff found that the aquatic layer changes made by the Company were not being received by the MNRF.</p> <p>Several examples of intermittent streams were provided by the Company as examples of how the LIO aquatic layer was modified. They reported submitting the changes through the FMP portal, and sending them to MNRF District. These submissions were not finding their way to the MNRF GIS technician responsible for aquatic updates.</p> <p>Discussion with both parties revealed that the Company was sending the stream changes to the wrong place. MNRF was not aware of the changes that the Company had made.</p>
<p>Discussion: This is a relatively simple procedural problem that was identified in the audit. Potential fixes to the problem were suggested by the Company.</p>
<p>Conclusion: The Company has been submitting changes to the aquatic layer to the MNRF but they were being sent to the wrong location so that the MNRF was not receiving them.</p>
<p>Finding: Amendments and revisions related to changes in the aquatic GIS layer that the Company finds and submits to MNRF were not processed as required in the FMPM.</p>

Independent Forest Audit – Record of Finding

Finding # 6

Principle 3: Forest Management Planning

Criterion 3.3: Management Unit Description To review the appropriateness of the FMP management unit description ...

Procedure 3.3.2.1 Forest Resource Inventory (FRI) for the FMP. Assess (including achievement of FMPM checkpoint) whether the FRI has been updated, reviewed, and approved to accurately describe the current forest cover that will be used in development of the FMP including classification of lands by land ownership and land types including productive Crown forest land base.

Principle 4: Plan Assessment and Implementation

Criterion/Procedure 4.1: Plan assessment In the conduct of the field audit examine areas of the FMP that can be assessed in the field ...

Background Information and Summary of Evidence: Boundaries contained within the latest versions of ownership products (2017) that were delivered to the Company and District by the Mapping and Information Resources Branch at Peterborough do not line up correctly with the same boundaries within the 2018 eFRI. For example, there were discrepancies between the mapping products regarding the legal SFL boundary, boundaries of Indian Reserves, private lands, parks and protected areas. The discrepancies in the location of boundaries can be substantial, in some cases boundary lines that are tens or hundreds of km in length appear to be offset by several hundred metres along their full length.

Discussion: The accuracy of legal boundaries in mapped products is essential for management planning and operational implementation, for example, for generating accurate areas for reporting of forest management activities and for preventing trespasses.

Conclusion: It is important to ensure that mapped boundaries within different mapping products and updates correspond with each other.

Finding: Boundary data in the latest versions of ownership products that were delivered to the Company and to Kenora District by MNRF's Mapping and Information Resources Branch do not line up correctly with the same boundaries in the 2018 eFRI.

Independent Forest Audit – Record of Finding

Finding # 7

Principle 3: Forest Management Planning

Criterion 3.14: AWS Revision To review and assess AWS production, revision, and FOPs ...

Procedure 3.14.3: Annual Work Schedules - Forest Operations Prescriptions. Determine whether any additions or changes during the year have been conducted in accordance with the applicable FMPM ... and whether additions or changes are consistent with the SGRs and applicable FMPM.

Principle 6: Monitoring

Criterion 6.3: To review and assess whether an effective program exists to assess area that is successfully regenerated ...

Procedure 6.3.1.2: Silviculture Standards and Assessment Program. Assess whether the management unit assessment program (SFL and District) is sufficient and is being used to provide the required silviculture effectiveness monitoring information.

Background Information and Summary of Evidence: The 2009 FMPM states that during annual work schedule implementation, if there is a change to the silvicultural treatment for an area scheduled for harvest, renewal or tending, an appropriate silvicultural ground rule (SGR) from the forest management plan will be selected (the changed SGR will be recorded if necessary), the change will be certified by the plan author, and the documentation will be maintained by the sustainable forest licensee. Sustainable forest licensees will be responsible for maintenance of records for forest operation prescriptions, including changes to silvicultural treatments during annual work schedule implementation. The necessary documentation for changes to silvicultural ground rules will be provided to MNRF, as described in FMPM Part D, Section 3.5.5.

The Company has not fulfilled these requirements during the audit period. Changes to SGRs are noted informally by Company staff during post-harvest regeneration assessments, but these changes are not certified by the silvicultural forester/plan author, are not recorded in the Company's GIS databases, have not been submitted with ARs (the current requirement is to submit a FIM-compliant spatial layer of FOP/SGR changes with the AR, as per the "Annual Report Spatial Information Specifications 2017") and the data have not been provided to MNRF.

Discussion: The significance of this shortcoming is well summarized in the 2018 Trend Analysis "the information that was recorded at the time of the renewal activity did not provide enough information to accurately determine if the outcome of the renewal activity was what was intended." Silvicultural effectiveness monitoring is therefore compromised, since in many cases the baseline treatments have not been accurately recorded or updated. This has obvious implications for analyzing the effectiveness of treatments and the review and updating of SGRs.

Conclusion: The Company's informal method of noting changes to treatments provides a starting point for formalizing the certification, record keeping and reporting of FOP/SGR changes. The Company should make appropriate changes to their procedures to bring their record keeping and reporting into compliance.

Finding: Changes to planned FOPs/SGRs that are determined by the Company during field assessments have not been certified by the silvicultural forester/plan author, formal records of FOP/SGR changes are not being kept by the Company, and data related to FOP/SGR changes have not been provided to MNRF or reported in ARs as per FIM requirements for Annual Reports.

Independent Forest Audit – Record of Finding

Finding # 8

Principle 4: Plan Assessment and Implementation

Criterion/Procedure 4.5.1: Tending and Protection - Review and assess in the field the implementation of approved tending and protection operations. Consider whether there are any gaps between the planned and actual levels of each type of tending and protection seen in the field; consider results of determination under criterion 6.

Background Information and Summary of Evidence: Very little tending for cleaning or competition control has been conducted to date in the 2012 FMP term: a total area of 29 ha has been completed out of a 10-year planned area of 11,087 ha. The area treated to date in the 2012-22 FMP term was manually tended; this represents less than 1% of the area planned for tending. In part this is due to the reality that there is considerable local opposition to herbicide application, especially aerial spraying, by both the public at large and Aboriginal communities. Company efforts to develop the capacity for applying alternative treatments are ongoing, but so far have had limited success.

Discussion: Free-to-grow results compiled by MNRF on a total of 16,129 ha of area assessed between 2004 to 2016 show a shift in area-weighted species composition as follows: 9.3% increase in poplar, 2.8% increase in white birch, 6.1% decrease in jack pine, and 5.2% decrease in black spruce, from the pre-treatment condition to the free-to-grow assessment condition. It is likely that this shift to increased hardwood content and decreased conifer content can be at least partly attributed to the minimal amount of tending conducted during this period.

The lack of tending for competition control has implications for meeting plan objectives related to the maintenance or enhancement of conifer composition. Forest cover-related objectives in the 2012 FMP include substantially increasing the area of conifer-leading stands in the forest to better match the historical forest condition.

Lack of tending also has implications for modelling tree species succession and forest growth and yield for those intensive and basic silvicultural ground rules which include tending treatments for competition control to promote conifer crop species.

Conclusion: The Company has indicated that efforts to develop alternatives to herbicide spraying are ongoing. However, it was acknowledged that limitations in local capacity for implementing alternative treatments, combined with continued public opposition, will mean that future tending programs will likely be small in scale compared with FMP forecasts. During the preparation of future FMPs, it would be prudent to consider the implications of no tending or significantly reduced tending on modelling assumptions, yield curves, successional pathways, SGRs, and ultimately the LTMD.

Finding: Very little of the planned tending for cleaning/competition control has been conducted to date in the 2012-2022 FMP term.

Independent Forest Audit – Record of Finding

Finding # 9

Principle 4: Plan Assessment and Implementation

Criterion/Procedure 4.6.2: Renewal Support. Review and assess whether actual tree seed collection ... is appropriate for the site conditions encountered on the management unit, and at the level required of actual operations, in consideration of the management strategy and SGRs. Consider whether there are any gaps between the planned and actual levels.

Background Information and Summary of Evidence: There was no cone collection conducted during the audit period.

The seed inventory for black spruce, white spruce, white pine and jack pine on the Kenora Forest is sufficient for the remainder of the 2012 FMP term and beyond. However, the amount of red pine seed currently in storage is very limited.

To date in the 2012 FMP term, an average of 83,600 red pine seedlings have been planted every year. A one-year supply of red pine planting stock is currently being grown, but after that, the supply of seed (approximately 19,000 seeds) will be insufficient to maintain the same level of red pine stock production and planting.

Discussion: There have been no red pine cone crops for several years, but the Company is prepared for collection should a good cone year occur. Local persons will likely be available to assist Company staff with cone collection. The Company may also need to investigate options for collaborating with adjacent SFLs for cone collection, utilizing red pine plantations or seed orchard buffers for cone collection, or purchasing red pine seed from other SFLs for the appropriate seed zone(s).

Conclusion: Maintaining planting levels for conifer species is important for meeting plan objectives related to forest cover. The Company needs to take measures to restore its supply of red pine seed available for planting stock production.

Finding: The inventory of red pine seed for the Kenora Forest is very low - less than two years' supply is currently in storage, based on average planting levels for red pine to date in the 2012-2022 FMP term.

Independent Forest Audit – Record of Finding

Finding # 10

Principle 5: System Support

Criterion 5.1: Human Resources

Awareness, education and training programs are necessary to ensure current general knowledge as well as knowledge specific to an individual's responsibilities in the sustainable forest management system.

Procedure 5.1.1: Review and assess, including through interviews, the organization's commitment to awareness, education and training programs ... Include consideration of:

- adequacy and comprehensiveness of overall training program;

Background Information and Summary of Evidence: Various members of the audit team had discussions with MNRF District and Regional staff, and Company staff, regarding the adequacy of compliance training and calibration mechanisms. A number of unmet training needs were identified.

During the audit several interviewees commented on the compliance system being not well understood by those who provide input to the system, or who make planning decisions that are indirectly assessed through the compliance program, but who are not certified compliance staff. In practical terms this lack of knowledge caused problems for them in ensuring that the FMP is implemented effectively.

One example was water crossings and working around water. Those responsible for the protection of aquatic values were not confident that their reviews were calibrated to the same standards used by other staff in the District and staff in other Districts. Areas of uncertainty included the amount of sedimentation that is acceptable during a water crossing installation and the amount and type of bank stabilization that is required. Uncertainty regarding compliance thresholds led to a further concern regarding how comments should be worded so an acceptable outcome can be achieved and compliance can be enforced.

Another example concerned residual structure on blocks. A key question was whether residual could be assessed ocularly or needed to be measured using a range finder, and what results were acceptable and what results were unacceptable and needed to be identified in the compliance system. Although the audit team found that the amount of residual was acceptable in most blocks, and not a problem, there was much discussion among audit participants about what was the appropriate level.

Another gap concerned mechanisms for providing consistent inspection determinations in different districts across the region. The audit team was informed that the NW Region has recently recognized this gap and has convened a Northwest Region Forestry Compliance Committee. This committee is currently internal to MNRF. Formerly, regional compliance meetings were held with MNRF and Company staff which provided a forum for the discussion of broad issues and trends in compliance.

Discussion: All forestry activities need the rigor of monitoring. For plan implementation to be effective, those advising on forestry activities need to understand the compliance system.

Staff that advise on forestry practices and water crossing installations want to be sure that their advice is consistent with advice being given by others in the District and Region, that it can be implemented, and could be enforced through the Compliance system. The enforcement and calibration of compliance-related advice are the two aspects of most concern. Many staff of MNRF and the Company who do not need to be certified as compliance inspectors would benefit

by having an improved understanding of compliance thresholds and standards, and available options should those standards be breached.

The recently formed North West Regional Forest Compliance Committee provides the base for a regional mechanism that would bring MNRF and Company compliance personnel together to discuss issues, trends and consistency. Mechanisms for enhancing consistency in standards across the region are not well developed.

Conclusion: The audit team found that there was interest on the part of MNRF staff in achieving a better understanding of the compliance system. Staff commented on the need for written reviews to be calibrated with others appropriately and then written into prescriptions in a way that was enforceable. The Company supported the idea of better calibration of compliance requirements among all who comment on plans and reports.

Finding: Forest planning staff and others involved in FMP implementation are not instructed on the enforceability and calibration of compliance standards for forestry activities and installations to ensure they are consistent with the FMP.

Independent Forest Audit – Record of Finding

Finding # 11

Principle 6: Monitoring

Criterion 6.1: District Compliance Planning and Associated Monitoring To review and assess whether an MNRF compliance program has been developed and implemented to effectively monitor program compliance in accordance with MNRF manuals, policies and procedures.

Procedure 6.1.1: Review the MNRF District Compliance Plans ... and assess whether the actual level of the overall monitoring program was in accordance with the FMP/plans ...

Background Information and Summary of Evidence: During the audit period, there were widespread staffing changes, including retirements, in the Kenora District. Many of the District staff present at the time of this audit were not in the District, or held a different position, at the time of the previous IFA. One of the challenges that this high level of change presented was capacity and continuity in the MNRF's compliance program. There were periods during the audit term when there was only one certified compliance inspector in the District, and the other forest for which the District is lead – the Whiskey Jack Forest, managed by the Crown – was a higher priority than the Kenora Forest for much of the period. As a result, the District compliance program regarding the Kenora Forest was challenged throughout much of the audit period.

The result was that the level of compliance inspections undertaken by the District MNRF staff was very low during the latter years of the audit period. In 2015-16, MNRF completed one access and three harvest compliance inspections (including one joint inspection), while in 2016-17, MNRF undertook one access and six harvest inspections, followed by seven harvest inspections (three of which were joint with industry) in 2017-18. In those three years, the Company was active on 20, 17 and 33 harvest blocks, respectively.

Annual Compliance Operations Plans) were prepared for each year during the audit period, however they were quite basic and District staff had difficulty locating all of them, which suggests that they were not much used. The District did prepare a risk assessment of the blocks planned for operations and prioritized those that were judged to have the greatest level of risk. Water crossings were also targeted as relatively high risk operations. For example, the 2017-18 Annual Compliance Operations Plan (ACOP) had a target of inspecting 25% of all harvest blocks licensed for that year, and 10% proposed AWS water crossings.

MNRF has stated that the inspection targets should have been expressed in terms of active sites, so that the target should have been 25% of all blocks that had active harvest operations on them, and 10% of all water crossings that were built, re-built or decommissioned. However, against this standard, MNRF fell short on its number of harvest inspections in 2015-16 and 2017-18, when it inspected 15% and 21%.

Discussion: The auditors consider this level of compliance inspection activity to be insufficient to adequately track the quality of operations on the Forest and to maintain effective oversight. While meeting ACOP targets set as percentages is one metric for performance, the number of inspections that is required to maintain a suitable presence and effective level of monitoring is another important consideration. The Kenora Forest is complex and has had up to half a dozen operators working in the forest, so the auditors consider that more inspections is appropriate. MNRF is fortunate that the Company has a generally high standard of operations, however MNRF cannot depend too heavily on this as a substitute for oversight. Interestingly, MNRF staff do not recall any discussion of contracting out compliance during the period when MNRF's capacity was

limited, which would have been one approach that could have been very effective in addressing MNRF's capacity constraints.

District MNRF is now in a better position to improve the effectiveness of its compliance program, as there are now three certified compliance inspectors on staff and compliance on the Whiskey Jack Forest has been contracted out, enabling MNRF to return to its oversight role on that forest.

Conclusions: The annual compliance plans prepared by the MNRF can be improved by providing more information (for example, the results of the risk analysis should be part of the ACOP) and MNRF needs to increase its level of compliance inspections to meet its targets and, most importantly, to maintain an effective level of operational oversight on the Forest. When the amount of operational activity is low on the Forest and compliance inspection targets are set as a percentage of operations, a very low number of inspections may meet the target but provide what the auditors consider to be an insufficient level of oversight.

Finding: The level of compliance inspections undertaken on the Kenora Forest by the District MNRF was low and below the level that the auditors consider to be sufficient to provide for effective oversight, as well as in some years being below the targets set in the ACOPs. The ACOPs prepared by the MNRF District provide little information, and exclude risk analysis results.

Independent Forest Audit – Record of Finding

Finding # 12

Principle 7: Achievement of Management Objectives and Forest Sustainability

Criterion 7.1: Content of the Year ten annual report (AR) meets FMPM requirements

Procedure 7.1.1: Year Ten AR/Trend Analysis Report

Examine the Year Ten AR for the term of the audit ...

Determine whether a review of the assumptions used in the development of the long-term strategic/management direction was completed and if it included observations, conclusions or recommendations for modifications or refinements.

Criterion 7.3: The latest Year Ten AR/Trend Analysis report determination of sustainability is to be reviewed and assessed.

Procedure 7.3.3: Year Ten AR/Trend Analysis Report assessment/Determination of sustainability

For Year Ten AR/Trend Analysis Reports prepared under the 2009 FMPM, review and assess the analysis by considering:

- FMPM requirements
- Summarize and comment on this review and assessment in the audit report

Background Information and Summary of Evidence: The Company prepared a Year Ten Annual Report/Trend Analysis for this IFA that covers three five-year plan periods beginning with 1996-2001 and ending with the 2006- 2011 FMP, the single year of the 2011-12 Contingency Forest Management Plan, and the first term of the 2012 FMP. The Company's ability to provide a detailed Trend Analysis has been hindered by the disappearance of records during the transfer of management responsibility for the unit from Weyerhaeuser to Miitigoog/Miisun. The Trend Analysis contains the required sections and tables. Many of the sections are informative however some of the interpretations of various data lack suitable context: Examples include:

- On page 6, the analysis states that "Although actual renewal levels are below the planned levels, for all of the terms, Figure 4 shows 105% of the area harvested (6,293 ha) between 1996-2016 has been treated (6,577 ha)." The audit team observes that this is just a statement of the total amount of renewal vs. harvesting that occurred in the time period, not an analysis of the renewal status of the harvest area – which obviously cannot be greater than 100%.
- On page 10, the text states "The Forest Renewal Trust Fund, although there were short periods below the minimum balance, was maintained above the minimum balance at year end for the duration of the FMP term." Records provided by the MNRF state that FRT was below minimum balance at year end (March 31) for the years 2014, 2015, and 2016. The balance requirement was met at the end of fiscal years 2017 and 2018.
- The analysis of renewal and tending trends is minimal, consisting of 3 short paragraphs on page 10. Moreover, the data is not presented in a way that will be easily included in FMP preparation tasks such as reviewing and revising SGRs; on Page 10 the analysis states that "the information that was recorded at the time of the renewal activity did not provide enough information to accurately determine if the outcome of the renewal activity was what was intended."
- The Analysis of Forest Disturbances section is intended to include disturbances due to harvesting as well as natural disturbances, and would have been the place where the implications of the low harvest level could have been discussed.

The Trend Analysis also does not discuss the implications of the lack of tending

The auditors also note that in its present form, Table AR-10 in the Trend Analysis Report does not

provide a meaningful assessment of the state of renewal as compared to harvest depletions. MNRF prepared improved guidance as a result of a 2016 IFA, which should help forest managers preparing Trend Analyses for 2019 IFA's, but it arrived after the submission deadline for Trend Analyses for the 2018 IFAs.

Conclusion: The Trend Analysis does not fully meet all of the requirements in the FMPM or provide informative insight in some important sections.

Finding: The Year Ten AR/Trend Analysis does not meet all of the requirements of the 2009 FMPM.

Independent Forest Audit – Record of Finding

Finding # 13

Principle 7: Achievement of Management Objectives and Forest Sustainability

Criterion 7.2: An assessment of the achievement of FMP objectives must be made ...

Procedure 7.2.1: Assessment of Objective Achievement An assessment of the achievement of management objectives must be made within the Year Ten AR/Trends Analysis Report, in text and tabular forms, comparing planned targets for each objective against the actual level of the target achieved. This assessment is to be reviewed and assessed.

Background Information and Summary of Evidence: There are numerous sources for the objectives that go into a forest management plan – some are policy driven objectives, others are based on meeting licence requirements, some come from the desired forests and benefits meeting and many arise from the planning team’s perception as to what is most appropriate for the forest.

Several of the FMP’s 11 objectives are related to the desired future forest and the aim of the plan to shift the forest composition and structure so that it is more in line with the “pre-industrial” forest. The attainment of the desired future forest is based on returning the forest to a more “natural” condition, as expressed by the Ontario Landscape Tool (OLT) model. The targets produced by the OLT analysis reflect the outcome associated with the natural disturbance cycle, and are expressed as patch sizes, age class distributions, and forest composition. One of the implications of this approach is that the plan objectives call for a significant increase in the amount of conifer-dominated forest and a reduction in the amount of area in the mixedwood forest units. This is most evident in two indicators whose desired levels are significantly above the values in the current forest:

- the area of upland pine and spruce forest (current area is 177,246 ha and desired area is 290,514 ha); and
- the percentage of 6,000 ha polygons with > 60% caribou refuge habitat (minimum desired level is 87% versus current value of 70%).

Shifting the forest in this manner requires that the harvest level be close to the planned level and that renewal efforts should increase the amount of conifer in the new stands. Unfortunately, the low level of harvest and the inability of Miisun to gain social approval for the use of herbicides (See Finding #9) means that the goal of the plan to increase the conifer component of the forest is not being achieved. The audit team believes that the next forest management plan should incorporate planned levels of harvesting and tending that are likely to be conducted so that the plan objectives and targets are likely to be achieved.

Discussion: The 2013 audit report identified that the LTMD direction to significantly increase the conifer content of the forest was controversial within the Phase I planning team, and that the estimate of the historical forest produced by the Ontario Landscape Tool for the 2012 differed materially from the historical forest used as a basis for the LTMD in the 2006 FMP. A significant concern raised in that audit was that such a shift in species composition would disadvantage Weyerhaeuser’s TimberStrand mill in Kenora, which is one of only three mills west of Thunder Bay to have operated more or less continuously over the last decade. The concerns expressed in the 2013 IFA report regarding the LTMD have not been mitigated over the past five years.

The audit team is skeptical that the Company will be able to undertake much if any chemical-based tending on the forest in future years, due to profound concerns expressed by Miitigoog communities and by cottagers and other stakeholders in the forest. The audit team is of the

opinion that in the development of the 2022 FMP, the implications of various levels of tending, as well as continuing low levels of harvest compared to the planned level, would be excellent aspects to consider in the risk analysis of the LTMD determination. The Company's desire to produce a realistic plan for the forest is fully supported by the audit team.

Conclusion: The 2012 FMP contains a number of objectives that are unlikely to be achieved and these objectives, which are linked to the characterization of the desired forest, should be carefully considered in the 2022 FMP.

Finding: The 2012 FMP contains a number of objectives and targets that are unlikely to be achieved.

Independent Forest Audit – Record of Finding Finding # 14
<p>Principle 8: Contractual Obligations Criterion/Procedure 8.1.9.2: Review the audit action plan status report and assess whether:</p> <ul style="list-style-type: none"> • the status report was prepared in accordance with requirements • it was prepared within 2 years following approval of the action plan, unless otherwise directed by the Minister (e.g. an interim status report may have also been required) ...
<p>Background Information and Summary of Evidence: The Status Report related to MNRF’s corporate responsibilities for addressing recommendations from the 2013 IFA has not yet been produced. The Action Plan, which identifies the intended manner in which the recommendations will be addressed, was submitted on September 5, 2014. The Status Report is to be provided within 2 years of the approval of the Action Plan, and as of the date of writing, is two years behind schedule.</p>
<p>Discussion: MNRF’s Transformation, which began in 2012, led to the creation of new branches, considerable movement of staff, creation of new positions and some confusion about how various existing responsibilities would be addressed. The production of the Status Report was caught up in this milieu and has not been completed.</p>
<p>Conclusion: The Corporate MNRF Status Report on the Action Plan is 2 years late and counting. It seems to be delayed due to the large amount of organizational turbulence created a result of the MNRF’s Transformation.</p>
<p>Finding: Corporate MNRF has not met its obligation to produce the provincial status report for the 2013 IFAs according to the schedule in the IFAPP.</p>

Independent Forest Audit – Record of Finding

Finding # 15

Principle 8: Contractual Obligations

Criterion: 8.1.9. Audit action plan and status report

Procedure 8.1.9.1: Review, through interviews, the audit action plan and assess whether:

- the action plan appropriately addressed the audit findings

Procedure 8.1.9.2: Review the audit action plan status report and assess whether:

- the approved action plan was implemented

Background Information and Summary of Evidence: The 2013 IFA produced 15 recommendations that were directed at the Company and/or District MNRF. Of these, three were not acted upon because the recommended action was judged by MNRF and the Company to not be required, while three other recommendations were not effectively addressed and the response to yet another seems to have fallen off everyone's agenda.

Recommendation #7, which was to amend the FMP to include a description of the historical forest, was dropped because MNRF and the Company contended that it is not a requirement. However it is a requirement that a description of the historical forest be prepared as background information for the FMP, while the FMPM does not say what should be done with this report, other background information items were included in the Supplementary Documentation, if not in the plan itself. In 2013, the auditors were aware of the direction in the FMPM and felt that because the reconstruction of the historic forest had changed significantly between the 2006 and 2012 FMPs, and because these changes had significant impacts on the LTMD, that a reader of the plan would have greatly benefited from a relevant discussion.

Recommendation #10 identified inconsistencies in plan indicators and that the plan should be amended to address these. The action plan concluded that the indicators were consistent, however this is not the case. One indicator is a spatial one that is met during the plan term but not assessed thereafter whereas the other is met from Term 7 onwards.

Recommendation #11 was to be implemented if the harvest level remained low, which it has.

Recommendations related to the management of the Aulneau Peninsula (Recommendation #18), the need for a tending program (Recommendation #15) were not addressed effectively. This is not to say that the Company has not expended significant effort to gain support for a chemical tending program, but the effort has been unsuccessful to date and resulted in a significant finding in this audit. Recommendation #1 was for MNRF to seek a meeting with the Kenora Métis Council to discuss how the Métis may better benefit from forest management. MNRF did send two e-mails to the president of the KMC but no response was obtained. However, there has been at least one MNO member on the LCC throughout the audit term and no effort to work with her is reported – this would have been a logical approach to achieve the recommendation. The audit team notes that the Kenora Métis continue to be very dissatisfied with their access to forest benefits.

Lastly, Recommendation #23 was to correct a number of errors in the Year 10 AR. The Action Plan laid out a pathway to undertake the corrections however they were not done. MNRF staff suggest that the organizational changes associated with Transformation meant that tracking the response was inadvertently dropped.

Discussion: The audit team is dismayed that a number of the recommendations from the

previous audit have not been acted on effectively, and in some cases do not seem to have been taken seriously, despite going through two stages of review. In many cases, findings were made in this audit regarding previous recommendations that were not well addressed.

Conclusion: Between the unknown status of the recommendations directed at Corporate MNRF and the number that were not adequately addressed at the local level, a number of opportunities to improve forest planning and management were missed during the audit period. The auditors are optimistic that the issues that led to the previous recommendations as well as the findings in the current audit report will be addressed going forward.

Finding: Approximately half of the recommendations from the previous IFA directed at the local level of MNRF and the Company were not addressed effectively, if at all, during the audit period.

Independent Forest Audit – Record of Finding

Finding # 16

Principle 8: Contractual Obligations

The licensee must comply with the specific licence requirements.

Background Information and Summary of Evidence: The SFL for the Kenora Forest is scheduled to expire on March 31, 2022. It has not been extended in accordance with section 26(4) of the CFSA, which states that if the review conducted by the Minister every five years finds that the licensee has complied with the terms and conditions of the SFL, then “the Minister shall, with the approval of the Lieutenant Governor in Council, extend the term of the licence for five years”. The licensee has complied with the terms and conditions of the SFL during the term of the licence, as determined by previous IFA’s, and the licence should have been extended.

Discussion: In discussion with MNRF’s Timber Allocation and Licensing Section, the auditors were informed that MNRF has conducted the CFSA section 26(3) review of the Kenora Forest SFL and has prepared the necessary documents for the Minister’s consideration of a proposed extension.

Conclusion: Miitigoog has complied with the terms of the licence during the term of this and previous IFA’s, and while MNRF should have extended the licence sooner, MNRF has indicated that the proposed extension is in process. The audit team has decided to retain the finding, which pertains to the situation at the end of the audit period.

Finding: Corporate MNRF has not extended the term of the SFL since it was issued, despite the compliance of the licensee with the terms and conditions of the SFL.

Independent Forest Audit – Record of Finding Best Practice
<p>Principle 8: Contractual Obligations Criterion: 8.1. Sustainable Forest Licence: To review compliance with the terms and conditions of the specific SFL 8.1.15 Aboriginal Opportunities – Direction: The SFL company or Authority shall work co-operatively with the Minister and local Aboriginal communities in order to identify and implement ways of achieving a more equal participation by Aboriginal communities in the benefits provided through forest management planning. Procedure: Determine through interviews the extent to which the SFL or Agreement condition has been addressed.</p>
<p>Background Information and Summary of Evidence: Providing opportunities for First Nations is part of Miitigoog LP’s mandate. Its contracted forest management service provider, Miisun Integrated Resource Management Co. is a First Nation owned company with a management approach that integrates the knowledge and skills of professional forestry staff with the input and values of local Aboriginal communities.</p> <p>The community members interviewed by the auditors were satisfied that Miitigoog/Miisun provided an adequate opportunity to contribute to forest management, as well as receive benefits from forestry. Noteworthy practices include early outreach to the communities regarding planned operations, knowledge transfer via delivering Forestry 101 sessions to interested communities, several relationship-building initiatives, e.g. firewood delivery to the communities and elders, feasts that bring together communities and industry, and seeking and considering community input to road routing and maintenance. In addition, Miisun staff have been working effectively to build forestry capacity in local First Nation communities via training and hiring community members. The number of aboriginal employees has increased from one person in 2010 to 25 people in 2017 (many are seasonal). The one exception is the Kenora Métis Council, whose members felt they have not been enabled with the same opportunities as First Nation communities in the area.</p> <p>The levels of engagement in forest management and forestry appeared to be related to the communities’ focus on the forest sector in comparison to other natural resource sectors, as well as communities’ capacity. An on-ramp process for the new communities to join Miitigoog LP exists and has been successfully implemented in the past.</p>
<p>Best Practice: Miitigoog LP has encouraged and supported Miisun Integrated Resource Management Co. in the implementation of a proactive and effective approach to First Nation engagement in forest management planning as well as identifying and implementing ways of achieving a more equal participation by First Nations communities in the benefits provided through forest management planning.</p>

APPENDIX 2 – ACHIEVEMENT OF FMP MANAGEMENT OBJECTIVES

Achievement of 2012 Kenora Forest FMP Objectives

No.	FMP Objective and Indicators	Auditor Assessment	Auditor Comments
1	<p>Objective 1 –Landscape Pattern: To emulate natural disturbance and landscape patterns characteristic of the management unit.</p> <p>Indicator 1a - % polygons with > 60% old and mature forest.</p> <p>Indicator 1b – Frequency distribution of young forest patches by size class.</p>	<p>This objective was assessed during plan preparation, and the Planning Team balanced the many constraints well. As a recreational landscape with many First Nations, there is limited ability to fully achieve a natural forest pattern in the Kenora Forest. Indicator 1b was achieved in the small size patches, but not for the large-sized patches, consistent with the above comment.</p> <p>Overall, the objective was partially achieved.</p>	<p>The Planning Team did what was possible. The low level of harvest on portions of this forest, coupled with the implementation of fire control, limits the ability of the forest manager to emulate natural disturbances and the associated landscape patterns.</p>
2	<p>Objective 2 -Forest Composition: To maintain or move towards a natural range of forest composition and age distribution.</p> <p>Indicator 2a – Crown Productive Forest by Landscape Class.</p> <p>Indicator 2b – Crown Productive Forest by Forest Unit and Age Grouping.</p> <p>Indicator 2c – Amount and Distribution of Old Forest.</p> <p>Indicator 2d – Amount of Red Pine and White Pine Forest.</p> <p>Indicator 2e – Amount of Upland Pine and Spruce Forest.</p>	<p>Based on the spatial assessment undertaken at the time of the LTMD development, indicators 2a to 2e are achieved in the first term of the plan. Therefore, the objective was also achieved.</p>	<p>Achievement of this objective is to be expected, because Phase 1 spatial planning focuses on the early terms of the plan, and targets should be in range initially.</p>

No.	FMP Objective and Indicators	Auditor Assessment	Auditor Comments
3	<p><u>Objective 3 – Wildlife Habitat:</u> To maintain forest function for wildlife habitat in the management unit.</p> <p>Indicator 3a – Area of Habitat for Forest-Dependent Species at Risk.</p> <p>Indicator 3b – % of Polygons with > 60% Caribou Refuge Habitat in Caribou Zone.</p> <p>Indicator 3c – % of Polygons with > 60% Caribou Winter Habitat in Caribou Zone.</p> <p>Indicator 3d – Landscape Pattern, Interior, Marten Core Habitat.</p> <p>Indicator 3e – % of Conifer Dominated Forest Units in Caribou Zone.</p> <p>Indicator 3f – % of Jack Pine and Spruce Species Composition by Forest Unit in the Caribou Zone.</p>	<p>Indicators 3b and 3c were below the desirable level for caribou habitat, with no change in the level of achievement at the end of the 10-year period so the target is deemed not achieved. The trend analysis concludes that because there is no harvesting within the caribou zone in this plan, the results are acceptable.</p> <p>For other indicators, the target is achieved for term 1, hence the objective is largely achieved.</p>	<p>The achievement of Caribou habitat by Term 3 of the FMP is contingent on harvesting taking place. Currently, with no harvest in the caribou zone, the target cannot be “achieved”, but this is an acceptable situation because natural processes (fire) will work to maintain and possibly improve habitat.</p> <p>For the other objectives related to wildlife, achievement is to be expected, because Phase 1 spatial planning focuses on the early terms of the plan, and targets should be in range initially.</p>
4	<p><u>Objective 4 – Wood Supply:</u> To provide a predictable and continuous supply of wood products to the forest products industry from the management unit.</p> <p>Indicator 4a – Long-term projected available harvest area.</p> <p>Indicator 4b - Long-term projected available harvest volume by species group.</p> <p>Indicator 4c – Short-term projected harvest volume per year.</p>	<p>The first three indicators under this objective are associated with the planned level of harvest determined as part of the LTMD, while the fourth and fifth indicators are associated with actual levels of harvest. The LTMD meets the desirable levels of projected harvest area (> 3000 ha/yr) and short-term projected harvest volume (>400,000 m3/yr), and the auditors concur with the assessment in the Trend Analysis that these indicators have been achieved. There is no desirable level set for the long-term projected volume harvest, other than “as high as possible”.</p>	<p>The harvest is highest during the first two years of Phase I and again in the first year of Phase II because the best timber is sought first by the harvesters and mills that take wood from the Forest.</p>

No.	FMP Objective and Indicators	Auditor Assessment	Auditor Comments
	<p>Indicator 4d - Actual harvest area, by forest unit (% of planned harvest area).</p> <p>Indicator 4e - Actual harvest volume, by species group (% of planned harvest volume).</p>	<p>The actual level of harvesting has been well below planned levels during the first part of the FMP period. During the first six years, the actual harvest area was 27.4% of planned while the volume harvested in the first five years was 28.5% of planned. Harvesting was highest in the first two years of the FMP and fell off significantly in years 3-5. Harvest area was only available for year six, and showed a rebound back to the levels experienced in years 1 and 2 of Phase I.</p> <p>Because the planned harvest level met the desired levels, this objective has been partially achieved, in spite of the large actual under-harvest that has occurred during plan implementation.</p>	
5	<p><u>Objective 5</u> – Managed Crown Forest: To provide continuous social benefits resulting from the managed, Crown forest available for timber production on the management unit.</p> <p>Indicator 5a – Managed Crown forest available for timber production.</p>	<p>The desired level of the indicator for this objective is 378,000 ha of Crown forest area that is available over time for timber production. Table FMP 9 shows the available area of productive Crown forest as being 379,669 ha. Some loss of forest area to roads can be expected, and the amount of future creation of new types of harvest reserves is difficult to predict, hence the general objective is likely to be achieved although the manager may be challenged to meet the desirable level of 378,000 ha over the longer term. To date, this objective has likely been achieved.</p>	<p>The relatively low level of road construction during the audit period is supportive of achieving the desired level of the indicator.</p> <p>The auditors observe that the forest area reported in the new inventory for the Kenora Forest may be quite different from the area reported under the old inventory used to develop the 2012 FMP. This is a reporting issue and not indicative of loss of forest area.</p>
6	<p><u>Objective 6</u> – Aboriginal Involvement: To work with local Aboriginal peoples whose communities are situated in or adjacent to the management unit, to identify and implement forest</p>	<p>Partially achieved. Four communities were represented on the Phase II planning team, which is below the desirable level specified in indicator 6a (5 communities).</p>	

No.	FMP Objective and Indicators	Auditor Assessment	Auditor Comments
	<p>operations (harvesting, access, renewal maintenance and protection) that will maintain or enhance social and economic benefits to Aboriginal peoples.</p> <p>Indicator 6a – Representation on the Planning Team.</p> <p>Indicator 6b – Aboriginal Communities that Contribute Information to the Planning Process.</p>	<p>The information provision to MNR was limited, reflected in outdated and limited community-specific information in the various Aboriginal reports (See Finding #1). However, information was contributed to the planning process directly through Miisun/Miitigoog by a number of the First Nations. There was little involvement on the part of Métis people, who feel excluded from the management of the forest and the associated benefits.</p>	
7	<p><u>Objective 7 – Local Citizens Committee Involvement:</u> To have the Local Citizens Committee effectively participate in the development of the management plan.</p> <p>Indicator 7a – Local Citizens Committee Self-Evaluation of Its Effectiveness in Plan Development.</p>	<p>Achieved. The results of the LCC self-evaluation analysis indicate that, in general, the Kenora LCC members rank the committee’s overall effectiveness at 84% (desirable level was 60%). More generally, the audit concluded that the LCC is very capable and effective at fulfilling its role, and is one of the best LCC’s that the audit team has encountered in Ontario.</p>	
8	<p><u>Objective 8 – Road Access:</u> To provide road-based access, land use and recreational opportunities, through road maintenance and development of access to areas planned for harvest and renewal within the plan period.</p> <p>Indicator 8a – Kilometres of SFL Road per square kilometre of Crown Forest.</p>	<p>This indicator is intended to be measured in the future based on actual primary and branch road construction and decommissioning, measured after completion of 10-year plan period.</p> <p>The audit team could not assess the indicator however the objective was achieved based on the manner in which the Company worked with First Nations and stakeholders when building, maintaining and de-commissioning roads.</p>	<p>It is notable that the actual implementation will be influenced by the road decommissioning strategy.</p>
9	<p><u>Objective 9 – Forest Renewal:</u> To successfully regenerate harvest areas to a free-growing status in a manner</p>	<p>Planned timing for the initial assessment of these indicators is the 7 and 10-year ARs, which have not yet been prepared. The</p>	<p>Early indications were that renewal of harvested sites is keeping up with the rate of harvesting however the level of</p>

No.	FMP Objective and Indicators	Auditor Assessment	Auditor Comments
	<p>that is consistent with the regeneration standards outlined in the Silvicultural Ground Rules.</p> <p>Indicator 9a – Regeneration Success: Percentage of harvested forest area assessed as free growing by Forest Unit.</p> <p>Indicator 9b – Silvicultural Intensity: planned and actual percent of harvested area treated by silvicultural intensity.</p> <p>Indicator 9c – Silvicultural Success: Planned and actual percent of harvested forest area assessed as free growing and successfully regenerated to the Projected Forest Unit.</p>	<p>indicators cannot be fully assessed, since many silvicultural treatments are still in process. According to SGR standards, all free-to-grow assessments are scheduled to occur 10 to 12 years following disturbance, thus no assessments have yet been carried out on areas harvested during the 2012-22 FMP term.</p> <p>The following statistics are presented in order to provide an indication of regeneration status of the forest. The area harvested during the 9-year period from 2002-2011 was 13,719 ha. Of this harvest area, the total regenerated area to date is 13,343 ha (97.3%). There is thus little backlog of sites requiring treatment from prior FMP terms. This level of regeneration exceeds the minimum 95% threshold set for Indicator 9a in the 2012 FMP.</p> <p>For the 2012 FMP, the area harvested during the Phase I term was 5,690 ha, for which the total area reported as receiving a renewal treatment to date is 3,632 ha (64%). The difference between the harvested and treated area reflects the 2-year delay between harvest and the implementation of SIP and renewal treatments. According to MNRF records, the unfinished treatments consist of sites associated with seeding SGRs that have not yet been treated, and areas that were assigned natural SGRs that have not yet been declared as natural regeneration.</p> <p>All the areas that were assessed for FTG status during Phase I consisted of treated sites originating from prior FMP terms. The total</p>	<p>reported regeneration success and silvicultural success on areas declared as FTG during Phase I were below the target levels for Indicators 9a and 9c. The audit team anticipates that the Company will largely achieve this plan objective.</p>

No.	FMP Objective and Indicators	Auditor Assessment	Auditor Comments
		<p>area assessed was 8,658 ha. The area declared as FTG to the projected FU was 4,246 ha, and the area that was declared FTG to another FU was 2,971 ha, for a total of 7,217 ha declared FTG. The “regeneration success” rate was thus 83.4% and the “silvicultural success” rate was 49%. The area assessed as not yet FTG was 1,441 ha (16.7%) – on these sites, crop trees had not yet reached sufficient height to meet SGR standards and/or stocking was insufficient.</p> <p>It is too early to assess this objective since the milestone dates for reporting have not yet been reached.</p>	
10	<p><u>Objective10 – Forest Values: % of Forest Operations Inspections in Non-Compliance, By Activity and remedy Type (i.e. severity).</u></p> <p>Indicator 10a - % of Forest Operations Inspections in Non-Compliance, By Activity and remedy Type (i.e. severity).</p>	<p>During the first six years of the FMP period, one non-compliance occurred in 2014-15, which was an improperly set TV01 buffer (Tourism – Aesthetics along large high volume tourism lakes). The number of relevant non-compliances is thus much lower than the desirable level set for the indicator, which was that no more than 5% of compliance inspections would be non-compliant. This objective has been achieved.</p>	<p>Other indicators of success in achieving this objective include the absence of issue resolution and requests for individual environmental assessments in the Phase II plan development. Miisun also worked extensively with a number of stakeholder groups, especially cottage owners, to reduce/mitigate impacts of operations on values of importance.</p>
11	<p><u>Objective11 – Soil and Water Resources: To maintain productivity of soil function and to protect water quality and fisheries habitat where forest management activities occur in the forest.</u></p> <p>Indicator 11a - % of Forest Operations Inspections in Non-Compliance</p>	<p>There were no non-compliances during the audit period (or the first six years of the FMP for that matter) related to site damage or loss of productivity. More generally, there is a high level of use of water for recreation and the Company is aware of the high level of sensitivity to site damage.</p> <p>This objective has been achieved.</p>	

APPENDIX 3 - COMPLIANCE WITH CONTRACTUAL OBLIGATIONS

Licence Condition	Licence Holder Performance
1. Payment of Forestry Futures and Ontario Crown charges	In general, the Company has kept up with its payments for Crown charges and payments to the Forestry Futures Trust in a timely fashion. At the end of the audit period, March 31, 2018, MNRF records indicated that the Company was in arrears for Crown charges by an amount of \$9,609, and in arrears to the Forestry Futures Trust Fund by \$17,110 primarily due to payment delays associated with wood consumed by the KFP mill.
2. Wood supply commitments, MOAs, sharing arrangements, special conditions	<p>There is one special condition in the SFL – that the Company shall provide opportunities to Wabaseemoong Independent Nations (formerly known as Islington Band 29) to harvest a minimum of 7,200 m³ of timber annually. This condition has been met, as Wabaseemoong has a quota of 35,136 m³/year. District MNRF and Miitigoog assisted Wabaseemoong when it was left with a debt of as much as \$95,000 in unpaid Crown dues when a contractor it had hired to harvest its quota went bankrupt in 2014. MNRF agreed to consider the dues as a bad debt and Miitigoog paid the amounts owing to the Forest Renewal Trust and Forestry Futures Trust to enable Wabaseemoong to be eligible again to obtain a licence. This was a very generous solution to the situation.</p> <p>The three Wood Supply commitments – to Kenora Forest Products Ltd., E&G Custom Sawing Ltd. and Dave Burt General Contractors Ltd. – were met during the audit period. Kenora Forest Products only resumed operations in 2015, and has become the main conifer user on the Forest since then. E & G has received the committed supply volume or more in 2012-13 and 2013-14, and received much less in 2015-16 and 2016-17 (the data for 2017-18 are not yet available). This pattern is typical for a five year operating plan period and the low level of harvesting on the forest limits the amount of wood that can be provided to commitment holders. Dave Burt no longer operates a mill.</p> <p>The Company was in general compliance with this licence condition during the audit period.</p>
3. Preparation of FMP, AWS and annual reports; abiding by the FMP, and all other requirements of the FMPM and CFSA.	<p>The Company prepared the Phase II Planned Operations, Annual Work Schedules (AWSs), and Annual Reports (ARs) on time and according to the requirements of the FMPM and CFSA. The draft Phase II FMP was submitted and accepted by the Forest Information Portal on August 15, 2016 and the final plan was submitted on November 22, 2016.</p> <p>Initial submissions of the 2016-17, 2017-18 and 2018-19 AWS were generally in December and the final submissions in March; the FI portal shows single submissions of the 2013-14, 2014-15, and 2015-16 in February or March.</p> <p>The final re-submission of the 2011-12 AR was on June 5, 2013, the final re-submission of the 2012-13 AR</p>

Licence Condition	Licence Holder Performance
	<p>was on April 10, 2014, and the final submission of the 2013-14 AR was on January 27, 2015. The 2014-15 – 2016-17 ARs were all submitted prior to November 15 and were reviewed by MNRF, with the re-submissions generally in February of the following year. The Company was in compliance with this licence condition during the audit period.</p>
<p>4. Conduct inventories, surveys, tests and studies; provision and collection of information in accordance with FIM.</p>	<p>The Company has developed and implemented a comprehensive system for monitoring of silvicultural operations. This system includes field inspections conducted on all blocks within a year after harvesting. This provides the basic information needed to finalize decisions on silvicultural intensity and to verify FOPs. The information is also used to determine site preparation requirements, to estimate the need for tree planting, and for ordering planting stock by species and stock type. Changes to FOPs and SGRs are generally informally recorded at the time of these assessments on maps, but SGR changes were not formally tracked by the Company during the audit period via their GIS system nor reported to MNRF as required by FIM specifications for Annual Reports.</p> <p>The Company also conducts fourth-year regeneration assessments, usually at four years after application of the respective renewal treatments, to assess the progress of regeneration and to determine if any further silvicultural treatments are needed to meet silvicultural standards. This is particularly important for assessing natural regeneration areas. Company staff also conduct quality assessments during all tree planting and site preparation activities.</p> <p>The Company used GIS-based tools to identify and map areas requiring free-to-grow assessments every year, including areas that were previously assessed and scheduled for re-survey because they were determined to be not free-to-grow. During the 2012-2017 Phase I FMP term, the Company completed the assessment of 8,709 ha for free-to-grow status. This effort represented 118% of the forecast area of 7,352 ha, completing the area forecast for the Phase I and addressing backlog area from prior FMP terms. An area of approximately 2,250 ha of free-to-grow assessments was also completed in the first year of the 2018-2022 FMP term, representing 30.6% of the planned 5-year effort. The Company has also fully completed its survey obligations for Class Y and Z Lands.</p> <p>During the audit period, MNRF District staff at Kenora implemented SEM programs on core tasks according to direction from the Provincial Silvicultural Program and from the Northwest Region. Work was completed on all required core tasks to an acceptable level. In general, there was good correspondence between the results of free-to-grow assessments conducted by MNRF and the Company. MNRF collaborated with the Company to conduct joint free-to-grow assessments by air, and also conducted joint field visits to silvicultural project areas. During the audit period, MNRF installed a series of monitoring plots within plantations to assess the survival and growth of planted stock, as well as successional trends with regard to tree species composition. MNRF also conducted 8 compliance inspections of silvicultural projects as part of</p>

Licence Condition	Licence Holder Performance
	<p>the District SEM program over the course of the 5-year audit period.</p> <p>In general, the company does a good job of inventory updating in preparation for forest management planning, including the data management of harvesting, and silvicultural records. During the audit period, digital maps and associated information on harvesting and silvicultural treatments were provided to MNRF in accordance with the appropriate FIM standards. However, data records related to changes to FOPs and SGRs resulting from field assessments were not properly maintained by the Company, and data was not provided to MNRF in AR's as per current (2017) FIM specifications for Annual Reports. This shortcoming has complicated the compilation and analysis of free-to-grow information.</p> <p>The Company was in compliance with most aspects of this licence condition during the audit period, with the exception of the record keeping and provision of data with regard to changes to SGRs/FOPs – refer to Finding # 7 for details.</p>
<p>5. Wasteful practices not to be committed.</p>	<p>There were no FOIP reports issued during the audit period that show non-compliance due to wasteful practices and the auditors did not see examples of wasteful practices during the field inspections, with one exception. In general, the merchantable wood that was harvested was well merchandized. The exception was a series of relatively small blocks in the Western Peninsula that were harvested from late spring of 2012 and onwards at various times during the audit period. Largely due to difficult access caused by rapidly changing later winter weather conditions, there was a substantial amount of merchantable wood harvested and left at roadside. Compliance inspections for relevant blocks – 12.240, 12.253, 12.254, 12.256 – were variable in their documentation of the issue. MNRF was aware of the situation and gave the Company some time to remove the wood however a string of winters with variable temperatures prevented operations from occurring in the area and MNRF eventually decided that active steps were needed to address the situation. MNRF and Weyerhaeuser reached an agreement that Weyerhaeuser would remove the wood that was still merchantable (the winter of 2017-18 allowed excellent access to the area) and pile and burn the unmarketable balsam and cedar wood. The auditors saw the piles ready for burning on the aerial portion of the field inspections. Weyerhaeuser also agreed to pay Crown dues on the wood. The audit team feels that this situation was well handled by MNRF and the Company and that the Company was in substantial compliance with this licence condition during the audit period.</p>
<p>6. Natural disturbance and salvage SFL conditions must be followed.</p>	<p>MNRF and the Company followed the procedures in the SFL for dealing with potential salvage opportunities. One salvage licence was issued during the audit term, under FMP Amendment #17. The amendment was requested by Miitigoog on behalf of Iskatewizaagegan No 39 Independent First Nation, which wished to salvage a 2015 burn area as a commercial firewood opportunity. Miisun engaged in outreach with the adjacent communities to ensure that community members were aware of the planned harvest and agreed with it. The 2014-15 AR reports that 2,248 m³ of salvage harvest was conducted that year.</p>

Licence Condition	Licence Holder Performance
	The audit team notes that there is extensive damage and mortality currently being caused by jack pine budworm on the Aulneau Peninsula however no salvaging is taking place – the Peninsula is a sensitive area that is inaccessible by road. The Company was in compliance with this licence condition during the audit period.
7. Protection of the licence area from pest damage, participation in pest control programs	No insect pest management was undertaken during the audit period. There was an infestation of jack pine budworm on the Kenora Forest in the early part of the audit period. Damage and mortality associated with this infestation were reported in 2013, but were mostly confined to the Aulneau Peninsula on Lake of the Woods – this area has been deferred from harvesting and was not included in the land base used to model the Available Harvest Area (AHA) in the 2012 FMP. Jack pine budworm has re-appeared in large numbers on the Aulneau however no action has been taken as of yet to control it.
8. Withdrawals from licence area	There was no withdrawal of area from the licence area, with the minor exception that the MNRF sold several hectares to a local gun club so that it could own all of the land it was using as a shooting range. It is noted that the GIS layers for the boundary of the FMU do not line up with boundaries in other layers (see Finding # 6), which could mean that the reported area of the Forest needs to be adjusted once the mapping of the boundaries is properly located. (The actual boundaries on the ground are well-established and identifiable.)
9. Audit action plan and status report	The previous IFA was accepted on December 18, 2013, and the local level Action Plan was completed Feb 24, 2014, with the Regional Director signing it on March 7, 2014. This is essentially within the two month required timeframe. The associated Status Report is dated February 25, 2016, two years after the Action Plan was completed, as required. The auditors note that a number of the recommendations directed at the local level were not achieved (Finding # 15) and that an MNRF corporate level Action Plan and Status Report have not been prepared yet (Finding # 14).
10. Payment of forest renewal charges to Forest Renewal Trust (FRT)	In general, the Company has kept up with its payments to the Forest Renewal Trust. At the end of the audit period, March 31, 2018, MNRF records indicated that the Company was in arrears to the Forest Renewal Trust Fund by an amount of \$17,317.
11. Forest Renewal Trust eligible silviculture work	Auditors reviewed in the field a total of 184 ha of area that was mechanically site prepared and/or planted in the year 2016-2017, representing 45.3% of the eligible silviculture work that was charged to the Forest Renewal Trust for that year. Field inspections of these activities determined that maps were accurate and that work was completed as invoiced to the FRT per the Specified Procedures Report.
12. Forest Renewal Trust forest renewal charge analysis	Renewal rate analyses were conducted annually by representatives of MNRF and the Company, and these were documented in accordance with Northwest Region requirements. Renewal rate adjustments that were made during the audit period appear to have adequately addressed silvicultural program costs.
13. Forest Renewal Trust account minimum balance	For the first three years of the audit period (2013/14, 2014/15, and 2015/16), MNRF records indicate that the Forest Renewal Trust account was below the minimum balance of \$444,200 at March 31. For the years

Licence Condition	Licence Holder Performance
	<p>2016/17 and 2017/18, the Forest Renewal Trust account was above the minimum balance at March 31, and at March 31, 2018, a surplus of approximately \$278,000 was reported. This surplus is beneficial since it will provide a buffer in the event of a market downturn or other factors that may act to reduce harvest revenue. The size of the minimum balance was consistent with average annual silvicultural spending on the Kenora Forest during the audit period, however, this does not take into account the lack of spending on tending treatments. The Company was in compliance with this licence condition during the latter half of the audit period.</p>
<p>14. Silviculture standards and assessment program</p>	<p>Prior to the current FMP, the harvested area for the 9-year period from 2002-2011 was 13,719 ha. Of this harvest area, the total area that was regenerated was 13,343 ha (97.3%). There is thus no substantial backlog of sites requiring renewal from prior FMP terms.</p> <p>During the Phase I term of the 2012 FMP, the total area regenerated on the forest was 3,563 ha. This represented 18.7% of the planned five-year effort, based on the FMP forecast area of 19,119 ha. For the first year of the 2016-2021 FMP term, the reported area of total regeneration was 760 ha, or approximately equal to the area harvested 2 years prior (i.e., 805 ha, in 2015-16). The Company plans for a two-year lag time after harvesting for artificial regeneration (SIP + planting or seeding) to be completed on most sites.</p> <p>A total of 5,690 ha was harvested during the Phase I FMP term. Of this harvested area, 3,632 ha (64%) has been regenerated to date. The difference between harvested and treated area during this period reflects the planned two-year delay between harvest, SIP and renewal; the areas with outstanding treatments consist of sites assigned to seeding SGRs that have not yet been treated and sites that were assigned to natural SGRs that have not yet been declared as natural regeneration.</p> <p>The audit team’s review of a sample of these treatments indicated that the silvicultural prescriptions implemented by the Company were appropriate for the site conditions, were generally of good quality, and appeared to have been effective. The exception to this was the lack of follow-up tending for competition control. In general, this appears to have reduced the overall stocking to conifer crop species and increased the amount of hardwoods. In the case of some sites where SGRs based on planting or seeding for conifer regeneration were applied, the silvicultural standards associated with these SGRs that are related to species composition and/or stocking will not be met. Free-to-grow results compiled by MNRF on a total of 16,129 ha of area assessed from 2004 to 2016 show a shift in area-weighted species composition as follows: 9.3% increase in poplar, 2.8% increase in white birch, 6.1% decrease in jack pine, and 5.2% decrease in black spruce, from the pre-treatment condition.</p> <p>For these reasons, the auditors believe that in general, the Company has met its contractual obligations related to the silvicultural standards and assessment program, with the exception of the tending program.</p>

Licence Condition	Licence Holder Performance
15. Aboriginal opportunities	Miiitigoog has encouraged and supported Miisun in the implementation of a proactive and effective approach to the First Nation engagement in forest management planning as well as identifying and implementing ways of achieving a more equal participation by Aboriginal communities in the benefits provided through forest management planning (Best Practice #1). Benefits that have been provided include revenue to shareholders from Miisun, employment, training and capacity building, firewood and funding for special projects in communities and other community incentives, and early outreach ahead of the FMPM requirements. The Company was in compliance with this licence condition during the audit period.
16. Preparation of compliance plan	As part of the development of the Phase II Planned Operations, the Company reviewed its Ten Year Compliance Plan from the 2012 Phase I FMP and made some adjustments – for example, by-pass and chipper debris were identified as issues in the 2012 FMP while these aspects were not referenced in the 2017 Planned Operations Compliance Plan. The updated compliance plan in the Phase II Planned Operations contained all of the required elements, and the AWS components were also complete. The risk ranking of each proposed block was identified in the AWS compliance plan. The Company was in compliance with this licence condition during the audit period.
17. Internal compliance prevention/ education program	<p>The Company runs an internal education program aimed at ensuring operations are undertaken in compliance with regulations and requirements, including the FMP and AWS. The main event is an annual one-day meeting that all harvest contractors are required to attend. Topics on the agenda include a review of compliance focus areas, new requirements, and approaches for avoiding non-compliance issues. The company also provides to a contractor preparing to enter a block or install a water crossing a pre-works file that includes a detailed map and a checklist, and the contractor as well as a Miisun representative are required to sign this before any work on the site commences. Company staff are also in the forest regularly and are able to provide supervision and advice as required.</p> <p>In order to maintain its Sustainable Forestry Initiative certification, the Company is also required to hold awareness training and have annual audits, which are all part of Miiitigoog's Environmental Management System (EMS).</p> <p>The program is effective since the reporting rate of non-compliances, operational issues and pending issues is low, which corresponds to the observations of the audit team in the field. The Company was in compliance with this licence condition during the audit period.</p>
18. Compliance inspections and reporting; compliance with compliance plan	The Company maintained an appropriate level of oversight on the Forest throughout the audit period. Miisun undertakes all of the industry inspections on the Kenora Forest. The number of FOIP reports prepared by Miisun each year ranged from 16 to 48, and was generally proportional to the level of harvesting activity. The average number of inspections each year of the audit period was 38, which represents a good rate of coverage.

Licence Condition	Licence Holder Performance
	<p>The dates of FOIP report submission were compared with the dates of inspection in two years of the audit period – 2015-16 and 2017-18. The Compliance Handbook states that in-compliance reports are to be submitted within 20 working days of the inspection date, and the average time from inspection to submission was 76 days in 2015-16 and 42 days in 2017-18. In 2017-18, 14 out of 26 FOIP reports were submitted within 30 days of the inspection, eight of the late reports were submitted between 70 and 90 days after the inspection. While the Company has improved its conformance with reporting timelines, there is further room for improvement. The Company has also been improving its performance in providing MNRF with timely notification of operational status – the Company maintains a spreadsheet of operational status which it provides to MNRF each month, and this is very helpful. The auditors observed that the content related to suspended and completed status notifications is sparse and MNRF staff identified this as an area where they are encouraging the Company to improve. Miisun, to its credit, is making sincere efforts in this regard. The Company was in compliance with this licence condition during the audit period.</p>
<p>19. SFL forestry operations on mining claims</p>	<p>Not audited – considered a low risk procedure in the risk review completed by the audit team and accepted by the Forestry Futures Committee.</p>
<p>20. Obligations on Class X, Y and Z lands.</p>	<p>The Company has met all silvicultural and monitoring obligations on Class Y and Z Lands, as described in the IFA Report for the 5-year period 2007-2012. Clauses related to obligations on Class Y and Z Lands could therefore be removed from future versions of the SFL licence document. Refer to item 14 (Silvicultural Standards ...) in this table for a description of the Company’s performance with regard to silvicultural obligations on Class X Lands. Class X Lands consist of all areas harvested after 1995 for which the Company has full responsibility for meeting silvicultural standards and for conducting all required monitoring.</p>

APPENDIX 4 – AUDIT PROCESS

Overview

The Crown Forest Sustainability Act (CFSA) directs the Minister of Natural Resources and Forests to conduct a review of each tenure-holder every five years to ensure that the licensee has complied with the terms and conditions of its licence². The IFA contributes to this mandate, as well as complying with the direction to the Ministry laid out in the 1994 Class EA decision, subsequently confirmed in a number of Declaration Orders, the most recent dating from 2015³. Regulation 160/04 under the CFSA sets out direction related to the timing and conduct of IFA's, the audit process and reporting.

The Independent Forest Audit Process and Protocol (IFAPP) sets out in detail the scope and process requirements of an IFA, and contains approximately 170 individual audit procedures. The IFAPP, which is reviewed and updated annually by the MNRF, states that the purpose of the audits is to:

- *“assess to what extent forest management planning activities comply with the CFSA [Crown Forest Sustainability Act] and the Forest Management Planning Manual;*
- *assess to what extent forest management activities comply with the CFSA and with the forest management plans, the manuals approved under the CFSA, and the applicable guides;*
- *assess, using the criteria established for the audit, the effectiveness of forest management activities in meeting the forest management objectives set out in the forest management plan;*
- *compare the planned forest management activities with actual activities undertaken;*
- *assess the effectiveness of any action plans implemented to remedy shortcomings identified in a previous audit;*
- *review and assess a licensee's compliance with the terms and conditions of the forest resource licence; and*
- *provide a conclusion stating whether or not the forest is being managed consistently with the principles of sustainable forest management.*

The audit team may develop findings and best practices. Audit findings result from the comparison of audit evidence compared against the audit criteria. Findings may be the high level identification of [a] non-conformance or a situation where the auditors perceive a critical lack of effectiveness in forest management activities, even though no non-conformance with law or policy has been observed.

Findings may be directed towards the Company and/or at the appropriate administrative level of the Ministry of Natural Resources (District, Region or Corporate) or they may not be directed towards any party. Auditees must address all findings through follow-up actions.

² In some circumstances, the period between reviews may be up to seven years.

³ Declaration Order MNR-75: MNR's Class Environmental Assessment Approval for Forest Management on Crown Lands in Ontario, approved by Order in Council 1126/2015 on August 25, 2015.

If the Audit Team feels that an aspect of forest management is exceptional it may be identified as a best practice. The IFAPP states that “*Highly effective novel approaches to various aspects of forest management may represent best practices. Similarly, applications of established management approaches which achieve remarkable success may represent best practices.*” In contrast, “*situations in which the forest manager is simply meeting a good forest management standard*” do not qualify.

The IFAPP describes each of the components of the audit process and contains the audit protocol, which constitutes the main framework for the audit. The procedures, which are the basis for assessing the auditees' compliance and effectiveness, are organized according to eight principles. A positive assessment of the procedures under each principle results in the principle being achieved. A negative assessment of a procedure typically leads to a recommendation.

Risk-based Auditing Approach

In 2017, the auditing process was changed to incorporate aspects of risk management. The audit uses the widely-recognized concept that risk is a function of both the probability of an event occurring and the impact of the event should it occur. Those procedures for which non-compliance would result in a medium to high negative impact on sustainability were identified by the MNRF and Forestry Futures Committee as mandatory, while the procedures associated with a low impact were identified as optional. Early in the audit process, the auditors reviewed evidence related to the optional procedures to evaluate the risk of non-conformance or negative outcomes associated with procedure. The auditors also considered the audit team's familiarity with the procedure and its general tendency to lead to non-compliance in previous IFA's. Where the likelihood was considered to be moderate to high, the optional procedure was audited.

Using this process, it was identified that 11 of the 76 optional procedures should be audited. The assessment of risk was reviewed and accepted by the Forestry Futures Committee. The optional procedures to be included in this audit are:

- 3.9.4.2 – Phase II planned clearcuts > 260 ha
- 3.9.9.1 –Phase II monitoring and assessment program
- 3.13.1.2 – Frequency of plan amendments
- 3.14.2.1 – Changes during AWS implementation
- 6.1.1 – MNRF District compliance plan and associated monitoring
- 6.1.2 – Electronic submission of MNRF compliance info
- 6.2.1.1 – Review of SFL Compliance Strategy
- 6.2.1.3 – Quality of SFL compliance prevention /education program
- 6.2.1.4 – SFL management oversight through compliance plan
- 6.2.2.1 – OLL compliance responsibilities
- 6.2.2.2 – MNRF compliance oversight

Audit Implementation

The audit commenced with the preparation of a detailed audit plan⁴, which described the results of the risk assessment, set out the audit schedule, described the procedures to

⁴ ArborVitae Environmental Services Ltd. Plan for the Independent Forest Audit of the Kenora Forest, May 18, 2018.

be used during the audit and assigned responsibilities to members of the Audit Team. A pre-audit meeting was held on May 17 in Kenora with the lead auditor, the Company and the MNRF. The primary purposes of the meeting were to familiarize the auditees with the audit process, review the Audit Plan, and make a preliminary selection of sites to inspect in the field during the audit. Subsequent to the pre-audit meeting, there were minor adjustments made to the selected sites due to access issues and to improve the balance of operations and sites.

The focus of the audit was an intensive five-day site visit (June 25-29, 2018), which included document review, interviews and inspections of a variety of sites throughout the Forest where activities had been undertaken during the audit period. Ground-based tours took place on June 25 and June 26, and were well-attended by staff of the MNRF District and Region and Company, as well as Forestry Futures Committee representatives. The auditors were pleased with the excellent turnout of LCC members on July 25 (three members joined the truck tours). The formal closing meeting for the audit took place on July 6 by teleconference, at which the audit team reviewed its draft findings. In the two-week period following the closing meeting the audit team received comments on the draft recommendations and those have been considered in preparing this draft final report.

Sampling and Sample Intensity

The IFAPP requires that at least 10% of each major operational activity be sampled. **Table 3** shows the total amount of each key activity that took place during the audit period, and the sample size and sampling intensity in the IFA. Most sites were pre-selected during the pre-audit meeting although a small number were added on an *ad hoc* basis during the field visits.

Only four years of verified operational data were available, so the figures in **Table 3** include estimates of the level of activity in 2017-18 provided by the Company. The audit met or exceeded the minimum sample size specified in the IFAPP for all operational activities, with the overall level of sampling ranging from 10% to 78% for key activities.

Table 2. Audit procedures by principle and risk assessment outcome.

Principle	Optional			Mandatory	Comments
	Applicable (#)	Selected (#)	% Audited	Audited (#) (100% Audited)	
1. Commitment	0	0	0	0	The forest is certified to a third-party standard (Sustainable Forest Initiative) and this principle was determined to be low risk.
2. Public Consultation and Aboriginal Involvement	5	0	0	3	Three optional procedures were determined to be low enough risk that they were not audited, and two (related to issue resolution and individual EAs) were not audited as neither were applicable.
3. Forest Management Planning	14	4	28	13	Of the 14 applicable optional procedures; four were audited. One procedure was selected because there was a relatively high number of plan revisions and a second associated with the number of AWS revisions was subject of a recommendation in the prior IFA. Procedures regarding the rationale for clearcuts over 260 ha and the exceptions monitoring were also identified.
4. Plan Assessment & Implementation	2	0	0	9	Neither of the two optional procedures was assessed as high risk, since bridging was to be completed before the audit period and roads funding has not been a source of findings in audits AVES has conducted.
5. System Support	2	0	0	0	The forest is certified to a third-party standard and procedures associated with the principle were determined to be low risk
6. Monitoring	11	7	64	6	Screening identified risks associated with MNRF's compliance program. MNRF had difficulty locating its ACOPs and seemed to have done only one compliance inspection in 2015-16. The previous IFA identified a low level of MNRF compliance inspections. Procedures related to the Company's compliance program were also selected since there was a relevant recommendation in the prior IFA and compliance has been a source of findings in many audits conducted by ArborVitae.
7. Achievement of Objectives and Forest Sustainability	0	N/A	N/A	15	All procedures are mandatory and were audited.
8. Contractual Obligations	6	0	0	18	Optional procedures concerned contractual obligations that were either not applicable, linked to other parts of the IFAPP or for areas assessed as acceptable risk.
Totals	40	11	82	64	

The IFAPP directs the auditors to verify in the field at least 10% of the areas reviewed in a specified procedures assessment undertaken by KPMG for the 2016/17 fiscal year. AVES verified in the field 45% of the eligible silvicultural activities undertaken by Miitigoog /Miisun and its contractors/shareholders.

Examples of operations were examined in each major forest unit present on the Forest, representing a range harvest years, seasons of operation, and silvicultural treatment packages. A number of sites where renewal activities had been conducted during the audit period were visited to evaluate the appropriateness and quality of these treatments and to perform an initial evaluation of their effectiveness. These included sites that were site prepared, seeded, and planted, and those that were naturally regenerated.

Table 3. Sampling intensity of the field operations, by key feature investigated.

Feature	Total in Audit Period	Total Sampled	Sample Intensity %
Harvest (ha)	5367	1987	37
Primary/Branch Roads (km)	8.5	8.5	100
Forestry Aggr Pits (#)	62	7	11
Mech Site Preparation (ha)	1250	541	43
Natural Regeneration (Clearcut)	1800	586	33
Planting (ha)	1653	792	48
Seeding (ha)	284	59	21
Tending (ha)	30	30	100
Free-to-Grow Assess (ha) ¹	8720	1635	19
2013/2014 FRT Areas (ha)	406	184	45

The table is intended to portray an approximate level of effort only. There are several factors which preclude too-precise an interpretation of the figures presented in the table. Although we viewed many individual harvest and/or treatment blocks during the field inspection portion of the audit, more than one aspect of forest management was inspected at some sites. For example, at sites where harvesting had taken place, harvest practices, compliance issues, road construction, AOC protection, site preparation, and regeneration activities may all have been inspected. Finally, of the area figures shown above, it should be noted that we did not inspect every hectare of the blocks we visited – such a level of effort would be infeasible.

Input from Indigenous Communities

There are 18 First Nations communities within or adjacent to the boundaries of the Kenora Forest. The seven communities that members of Miitigoog are:

- Wabaseemoong Independent Nations (Whitedog);
- Ojibways of Onigaming (Onigaming First Nation);
- Ochiichagwe'babigo'inning Ojibway Nation (Dalles First Nation);
- Anishnabeg of Naongashing (Big Island First Nation);
- Northwest Angle #33;
- Naotkamegwanning (Whitefish Bay) First Nation; and
- Shoal Lake #40.

Grand Council Treaty #3 is also a member of Miitigoog LP.

The following additional communities are not members of Miitigoog but have an interest in the Kenora Forest:

- Animakee Wa Zhing (North West Angle #37) First Nation;
- Asubpeeschoseewagong Netum Anishinabek (Grassy Narrows First Nation);
- Buffalo Point First Nation (in Manitoba);
- Eagle Lake First Nation;
- Iskatewizagegan No. 39 Independent First Nation (Shoal Lake No. 39);
- Lac Seul First Nation;
- Mishkosim�iibing (Big Grassy River) First Nation;
- Mitannjiamiing First Nation;
- Obashkaandadang (Washagamis Bay) First Nation;
- Waubuskang First Nation; and
- Wauzhusk Onigum (Rat Portage) First Nation.

In addition, the Kenora Métis Council (KMC), Sunset County Community Métis Council, Northwest Métis Council and Atikokan and Area Métis Council have an interest in the Kenora Forest.

The audit team contacted all First Nations, the Métis organizations, identified as being interested in the forest by e-mail, letter and telephone. Following email discussions with the MNRF Resource Liaison Officer and provision of the list and contact information of communities within or adjacent to the Forest, auditors contacted the Chief or Lands and Resource specialist of each of these Aboriginal communities through email, Canada Post and telephone to request their input into the audit. Opportunity to arrange in-person meetings was also offered to each of these Aboriginal communities. Follow up phone calls were made to each community in an attempt to set up an interview.

In-person and phone interviews were conducted with the representatives of five First Nation communities (of which two are members of Miitigoog) and two members of the KMC (~30% of the communities associated with the Forest). Email correspondence was conducted with a third member of KMC.

All interviewed First Nation communities were satisfied with the communication and responsiveness of Miisun on forest management planning and supportive of how the First Nation concerns have been taken into consideration (e.g. no use of herbicide). The interviewed communities acknowledged receiving mail from MNRF inviting them to attend the planning process, but were generally unaware about the Aboriginal reports and/or their purpose and referenced capacity limitations within the community to review and respond to all the communication from MNRF. The representatives of the two Miitigoog partner communities expressed strong support to the shareholder model and ease of bring up their concerns or comments to Miisun, as well as economic benefits.

The KMC members expressed strong concerns on the limited economic opportunities that were available to them compared with First Nation communities. Concerns were also brought up regarding the perceived unresponsiveness of one of the industrial partners of Miitigoog in providing employment opportunities to Métis people, as was a condition of the issuance of the mill facility licence, as well as some environmental concerns. Issues regarding the mill licence are outside of the scope of the audit and were not explored by the audit team.

Input to the Audit from LCC members

Early in the audit process, a letter was emailed to each of the 13 members of the Kenora LCC, except for the Chair of the LCC who does not use email and was contacted via phone. The objective was to notify LCC members of the audit and invite their input. The Chair of the LCC organized an LCC meeting during the week of the field audit for the auditors to meet the LCC and discuss the performance of the LCC, their role in the audit and their views on the management of the forest. The meeting was attended by vast majority of LCC members and the auditor presentation was followed by lively discussion on issues, LCC membership and management of Kenora Forest in general.

Three LCC members also attended the field trip, including the cottager rep, a Métis rep and one independent member. Four members of the Kenora LCC were interviewed individually (~30% of LCC). Auditor sent out a questionnaire with the LCC performance related questions to all members and three members responded. The feedback from the LCC, as well as the auditor review of the LCC Terms of Reference, meeting minutes and agendas indicates a very engaged, knowledgeable, well-functioning and motivated LCC. Some of the LCC members observed that the committee could benefit from First Nation representation. Some of the members felt that at times, the frequency of the meetings could be higher, but all agreed that once planning commences, meetings take place frequently. All interviewed members agreed that MNR and Miisun are easy to work with and responsive. Their understanding of the forest management process and issues was good and all members felt that the LCC meets its purpose and mandate.

Input through Public Comment

In an attempt to solicit public input into the audit, advertisements were placed in two local newspapers (Kenora Daily Miner and the Enterprise). In addition, the auditors developed an on-line questionnaire using Survey Monkey and included the link in the newspaper notice. The link was also circulated to LCC members, who were asked to distribute it to their constituents. Finally, a limited targeted mailing was done to a sample of groups that had been active during the Phase I and Phase II planning.

One response was received by the audit team in response to these advertisements and notifications. The respondent commented on cutting right to the water's edge in some places however they also noted that renewal has been adequate. They also commented on what they felt to be poor maintenance of the English River Road, especially the section beyond the Sand Lake Road. The auditors note that the Company does not cut to the water's edge, and in fact there was a recommendation in the previous audit to do this in certain places where appropriate however after much discussion the Company decided not to implement any cut-to-shore harvesting. The cutting that the respondent mentions may have been on private land. The auditors also noted that the English River Road was in good shape during the field tours; Company staff commented that the roads receive heavy weekend and holiday use from tourists and recreationists frequent grading is required.

APPENDIX 5 – LIST OF ACRONYMS

ACOP	Annual Compliance Operations Plan
AOC	Area of Concern
AR	Annual Report
AWS	Annual Work Schedule
BFM	Balsam Fir Mixedwood Forest Unit
BFOLDS	Boreal Forest Landscape Dynamics Simulator
CFSA	Crown Forest Sustainability Act
Class EA	Class Environmental Assessment for Timber Management on Crown Lands in Ontario
CMX	Conifer Mixedwood Forest Unit
CROs	Conditions on Regular Operations
DFO	Department of Fisheries and Oceans (federal government)
eFRI	Enhanced Forest Resource Inventory
EMA	Enhanced Management Area
FIM	Forest Information Manual
FMP	Forest Management Plan
FMPM	Forest Management Planning Manual
FOIP	Forest Operations Information Program
FOP	Forest Operations Prescription
FRI	Forest Resource Inventory
FTG	Free-to-Grow
FRT	Forest Renewal Trust
FU	Forest Unit
GIS	Geographic Information System
ha	hectares
HMX	Hardwood Mixedwood Forest Unit
km	kilometres
IFA	Independent Forest Audit
IFAPP	Independent Forest Audit Process and Protocol
JPD	Jack Pine Dominated Forest Unit
JPM	Jack Pine Mixedwood Forest Unit
KFP	Kenora Forest Products
KMC	Kenora Métis Council
LCC	Local Citizens Committee
LIO	Lands Information Ontario
LP	Limited Partnership
m ³	cubic meters
MNRF	Ontario Ministry of Natural Resources and Forestry
MNO	Métis Nation of Ontario
NWR	Northwest Region
OCL	Other Conifer Lowland Forest Unit
OLT	Ontario Landscape Tool
OTH	Other Hardwood Forest Unit
POD	Poplar Dominated Forest Unit
PRW	White/Red Pine Mixedwood Forest Unit
PT	Planning Team
RPF	Registered Professional Forester

SAR	Species at Risk
SBL	Black Spruce Lowland Forest Unit
SEM	Silvicultural Effectiveness Monitoring
SFL	Sustainable Forestry Licence
SGR	Silvicultural Ground Rules
SOP	Standard Operating Procedure
SPD	Spruce Dominated Forest Unit
SPM	Spruce Mixedwood Forest Unit
SSG	Stand and Site Guide

APPENDIX 6 – AUDIT TEAM MEMBERS AND QUALIFICATIONS

Auditor	Role	Responsibilities	Credentials
Dr. Jeremy Williams	Lead Auditor, Harvest and Wood Supply Auditor	<ul style="list-style-type: none"> • overall audit coordination; • oversee activities of other team members; • liaise with Company & MNRF; • review and inspect harvesting records and practices; • review aspects of forest management related to forest economics and social impacts; • reviews FMP modeling inputs and activities 	B.Sc.F., Ph.D. (Forest Economics), R.P.F. More than 22 years consulting experience in Ontario related to forest management, planning, wood supply modeling, and forest economics; participated in more than 40 previous IFA assignments; certified as an auditor by the Quality Management Institute.
Rob Arnup	Silvicultural Auditor	<ul style="list-style-type: none"> • Review and inspect silvicultural practices and related documentation; • Review renewal /silvicultural success and FTG assessment; • review and inspect selected environmental aspects of forest management. 	B.Sc. Senior forest ecologist with 35 years' experience in silviculture, forest management applications and environmental consulting in boreal Canada and elsewhere. Completed 27 IFAs. Associate member of the OPFA.
Mr. Tom Clark	Ecologist and Roads Auditor	<ul style="list-style-type: none"> • review and inspect Areas of Concern Documentation and Practices; • review and inspect aspects of forest management related to environmental practices and wildlife management integration; • review and inspect access and water crossings 	M.Sc. Zoology (wildlife ecology). Tom is an experienced auditor and has participated in more than 23 Independent Forest Audits from 1996 to 2012. Tom is a Board member of Westwind Stewardship and a long-serving member of the Provincial Policy Committee.
Dr. Triin Hart	LCC and Aboriginal Engagement Auditor	<ul style="list-style-type: none"> • review the performance of the LCC • Assess Aboriginal engagement in planning and in obtaining benefits from forest mgmt 	Ph.D. in Forest Sciences; 9 years of forestry experience in Ontario. Triin has been a team member of three IFAs as aboriginal and public engagement auditor. Triin's consulting projects include forest management and conservation, forest policy analysis, jurisdictional scans, and public consultations on natural resource management projects.