

**Spanish Forest  
Independent Forest Audit  
2016 – 2023**

**Arbex Forest Resource Consultants Ltd.**

**September 2023**

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## 1.0 Executive Summary

This report presents the findings of an Independent Forest Audit of the Spanish Forest conducted by Arbex Forest Resource Consultants Ltd. The audit utilized a risk-based approach based on the 2022 Independent Forest Audit Process and Protocol. The audit period is April 1, 2016, to March 31, 2023. The audit scope covers the implementation of Phase II of the 2010-2020 Forest Management Plan (years 7, 8, 9, and 10), and the preparation and implementation of the 2020-2030 Forest Management Plan (years 1, 2, and 3).

Audit procedures and criteria are specified in the 2022 Independent Forest Audit Process and Protocol.

The Forest is managed by EACOM Timber Corporation (EACOM) under the authority of Sustainable Forest Licence # 542391. Interfor East Ltd. (Interfor) purchased EACOM in 2021. Interfor continues its operations (e.g., permits, licenses, legal documents, and invoicing) under the EACOM name.

The Forest is situated in the Chapleau Wawa, Timmins Kirkland Lake and Sudbury Districts in the Northeast Region of the Ontario Ministry of Natural Resources and Forestry. The Sudbury District serves as the lead administrative office. One Local Citizens Committee (Spanish Forest Local Citizens Committee) located in Sudbury, is associated with the Forest. The Local Citizens Committee is well managed and provides significant benefits to the forest management process.

EACOM maintains a registered independent third-party Sustainable Forestry Initiative® (SFI) forest management certification for the Spanish Forest

Public input to the audit process was solicited by a notice on the *Sudbury.com* digital platform. Local Citizens Committee members, First Nations communities, the Métis Nation of Ontario (Region 3) and Forest Resource Licencees were notified of the audit by email and invited to participate in the field audit and/or express their views on forest management during the audit period. A sample of tourism operators were also interviewed.

Public safety protocols enacted during the COVID-19 pandemic had implications on the delivery of Ministry of Natural Resources and Forestry tasks. Pandemic-related protocols and guidance resulted in changes to the delivery of some field functions and administrative tasks.

The audit team identified concerns with the administration of the forest management program including a lack of policy direction from the Ministry of Natural Resources and Forestry for staff to effectively audit and assess silvicultural effectiveness and regeneration plot validation quality control. Issues identified in the 2016 Independent Forest Audit were not fully addressed and there were problems with reporting, tabulation and data inconsistencies in the Annual Reports. Also, inconsistencies in data

recording directions/requirements between the Forest Compliance Handbook and the Forest Operations Information Program resulted in some required data fields not being completed in the Forest Operations Information Program database.

The audit team also identified a concern with road materials falling into watercourses at some Lessard Welding Bridge sites.

While only 50% of the planned harvest targets were achieved, an effective silviculture program for activities linked to the harvested area was delivered.

On balance, an effective forest management program was delivered by EACOM and the Ministry of Natural Resources and Forestry. The forest management planning process and the implementation of the forest management plans met all legal and regulatory requirements and Forest Management Plan targets are consistent with the achievement of plan objectives and forest sustainability. The audit team concluded that EACOM did a credible job planning and implementing forest operations.

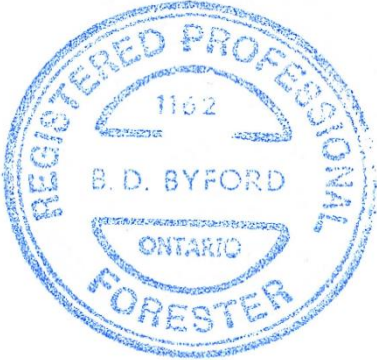
Notably, the assessment of the achievement of management objectives was complicated since forest units developed for the 2010 forest management plan were based on the standard forest unit definitions for the Northeast Region, while forest units developed in the 2020 forest management plan were based on the Great Lake St. Lawrence landscape guide forest unit standards. This circumstance made it difficult to compare forest area, harvest area, and volume trends between the plans..

Despite these challenges the audit team concluded that forest management objectives had been met or satisfactory progress was being made towards the achievement of planned targets and/or indicators of objective achievement. Although harvest area and volume targets were not achieved (due to market fluctuations and mill production levels) the achievement of all other forest management activities was in line with the actual area harvested. Forest sustainability was not a risk during the audit period.

The audit team concludes that the management of the Spanish Forest was generally in compliance with the legislation, regulations and policies that were in effect during the period covered by the audit, and the Forest was managed in compliance with the terms and conditions of the Sustainable Forest Licence held by EACOM Timber Corporation (Interfor East Ltd.) # 542391. The forest is being managed consistently with the principles of sustainable forest management, as assessed through the 2022 Independent Forest Audit Process and Protocol.

*Bruce Byford*

Bruce Byford R.P.F.  
Lead Auditor



## 2.0 Table of Findings

Table 1 Findings

<b>Concluding Statement:</b>
<p>The audit team concludes that the management of the Spanish Forest was generally in compliance with the legislation, regulations and policies that were in effect during the term covered by the audit, and the Forest was managed in compliance with the terms and conditions of the Sustainable Forest Licence held by EACOM Timber Corporation (Interfor East Ltd.) # 542391. The Forest is being managed consistently with the principles of sustainable forest management, as assessed through the 2022 Independent Forest Audit Process and Protocol.</p>
<b>Findings:</b>
<p><b>Finding # 1:</b></p> <p>Some Lessard Welding Bridges allow road material to enter watercourses.</p>
<p><b>Finding # 2:</b></p> <p>Requirements of the Forest Management Plan and the Forest Compliance Handbook related to the preparation of Annual Compliance Operations Plans were not consistently met by the Ministry of Natural Resources and Forestry Sudbury District Office.</p>
<p><b>Finding # 3:</b></p> <p>Not all of the mandatory data requirements for Forest Operations Information Program reports listed in the Forest Compliance Handbook are mandatory on the Forest Operations Information Program creation page resulting in information gaps and/or blank data fields.</p>
<p><b>Finding # 4:</b></p> <p>Although work is currently in progress, policies related to standards and directions for Ontario's silviculture monitoring program under the Forest Operations and Silviculture Manual (2020 version) have not been completed by the Ministry of Natural Resources and Forestry.</p>



**Finding # 5:**

Annual Reports contain errors in tabulation, digital mapping, and inconsistencies in reporting.

**Finding # 6:**

The Ministry of Natural Resources and Forestry and the Sustainable Licence Holder did not fully address recommendations in the 2016 Independent Forest Audit.

### 3.0 Introduction

This report presents the findings of the Independent Forest Audit (IFA) of the Spanish Forest (SF or the Forest) conducted by Arbex Forest Resource Consultants Ltd. for the period of April 1, 2016, to March 31, 2023. The audit utilized a risk-based approach based on the 2022 Independent Forest Audit Process and Protocol (IFAPP).

The audit scope covers the implementation of Phase II of the 2010-2020 Forest Management Plan (FMP) (years 7, 8, 9, and 10), and the preparation and implementation of the 2020-2030 FMP (years 1, 2, and 3). Details on the audit processes are provided in Appendix 4.

The Spanish Forest (SF) is managed by EACOM Timber Corporation (EACOM) <sup>1</sup> under the terms of Sustainable Forest License (SFL) # 542391. The Forest is situated in the Ontario Ministry of Natural Resources and Forestry (MNR) Northeast Region within the administrative districts of Sudbury (lead) Chapleau Wawa, and Timmins Kirkland Lake Districts. One Local Citizens Committee (LCC), located in Sudbury, is associated with the Forest.

The SF is certified as sustainably managed by the Sustainable Forestry Initiative (SFI). EACOM also retains an ISO 14001 registered Environmental Management System (EMS).

The 2010-2016 IFA was conducted by Arbex Forest Resource Consultants Ltd. That audit made six recommendations for improvement to the forest management program (Section 4.8) and recommended that the SFL term be extended for an additional five years.

### 3.1 Audit Process

The Crown Forest Sustainability Act (CFSA) requires that all SFLs and Crown Management Units (CMUs) be audited once every ten to twelve years by an independent auditor. The 2022 IFAPP provides guidance in meeting the requirements of Ontario Regulation 319/20 made under the CFSA. The scope of the audit is determined by the MNR in specifying mandatory audit criteria (Appendix A of the IFAPP). The audit scope is finalized by the auditors who conduct a management unit risk assessment by identifying optional audit criteria from Appendix A to be included in the audit<sup>2</sup>. The final audit scope is reviewed and accepted by the Forestry Futures Trust

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<sup>1</sup> Interfor purchased EACOM in 2021. The Interfor East operations continue to operate under the legal business entity, EACOM Timber Corporation, a subsidiary of Interfor East Limited. As such all permits, licenses, legal documents, and invoicing continue to be issued and maintained under the EACOM Timber Corporation name.

<sup>2</sup> Five optional audit criteria were selected for audit.

Committee (FFTC) and approved by the MNRF with any subsequent changes to the audit scope requiring agreement between the FFTC, MNRF and the Lead Auditor.

The procedures and criteria for the delivery of the IFA are specified in the 2022 IFAPP. The audit assesses SFL and MNRF (the auditees) compliance with the Forest Management Planning Manual (FMPM) and the CFSA in conducting forest management planning, operations, monitoring, and reporting activities. The audit reviews whether actual results in the field are comparable with planned results and determines if the results were accurately reported. The results of each audit procedure are not reported separately, but collectively provide the basis for reporting the outcome of the audit. The audit provides the opportunity to improve Crown Forest Management in Ontario through adaptive management. Findings of “*non-conformance*” are reported. A “*Best Practice*” is reported when the audit team finds the forest manager has implemented a highly effective and novel approach to forest management or when established forest management practices achieve remarkable success.

Details on the audit processes are provided in Appendix 4. Arbex Forest Resource Consultants Ltd. utilized a four-person team to conduct the audit. Profiles of the audit team members, their qualifications, and responsibilities are provided in Appendix 6.

### **3.2 Management Unit Description**

The SF is located along the Highway 144 corridor, north of the city of Sudbury and south of the town of Gogama. Communities within the Forest boundary include Sultan, Cartier and Biscostasing (Figure 1).

There are twelve Indigenous Communities whose interests and or traditional uses may be affected by forest management activities: Mississauga First Nation (FN), Serpent River FN, Matachewan FN, Mattagami FN, Sagamok Anishnawbek, Wahnapiatae FN, Chapleau Ojibwe FN, Chapleau Cree FN, Flying Post FN, Atikameksheng Anishnawbek, Brunswick House FN, Wikwemikong Unceded Indian Reserve and the Métis Nation of Ontario (MNO) Region 3.

The Forest is well accessed by provincial highways and forest access roads. It is used extensively for recreation activities by the local and regional population. There are ten Provincial Parks and eight Conservation Reserves within the Spanish Forest boundary.

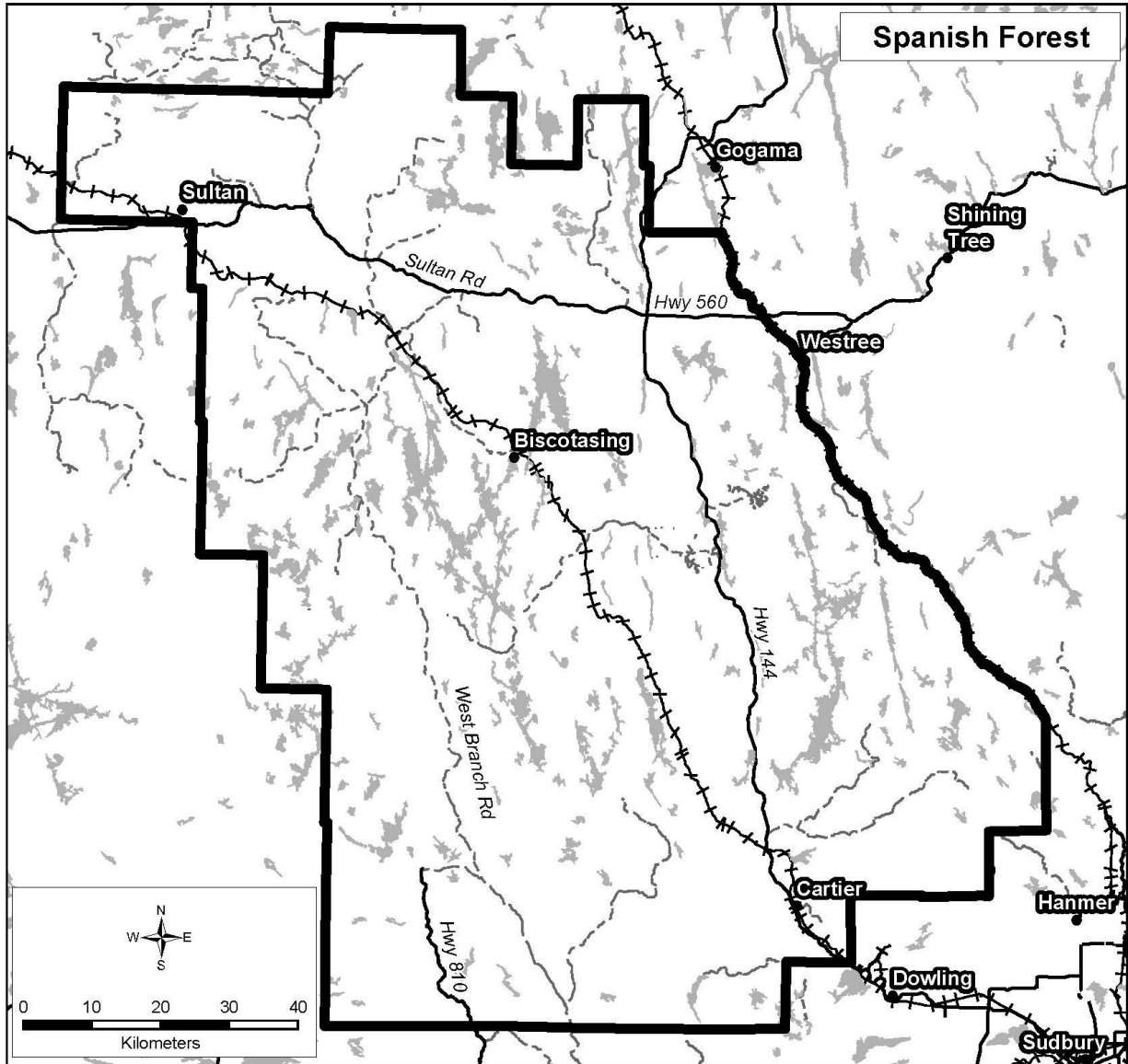


Figure 1 Location of the Spanish Forest.

Crown managed forest land occupies 1,082,718 ha (Table 2). Patent land occurs mainly in the south-east portion of the Forest and north of the Sultan Industrial Road. The Forest is situated within the transition zone between the Boreal Forest and the Great Lakes-St. Lawrence Forest Region and as such has distinct characteristics of both regions.

Table 2 Area of Crown Managed Land by Land Type (Ha).

Managed Crown Land Type	Area (Ha)
Non-Forested	88,683
Non-Productive Forest	45,973
Protection Forest <sup>3</sup>	10,093
Production Forest <sup>4</sup>	937,968
Forest Stands	810,730
Recent Disturbance	84,641
Below Regeneration Standards <sup>5</sup>	42,597
<b>Total Productive Forest<sup>6</sup></b>	948,061
<b>Total Forested:</b>	994,035
<b>Total Crown Managed:</b>	1,082,718

Source: 2020-2030 FMP

The southern portion of the Forest is situated in Ecoregion 4E (Lake Temagami Ecoregion). The north portion of the Forest lies within Ecoregion 3E (Lake Abitibi Region). The northern portion is dominated by boreal species such as jack pine, trembling aspen, white birch, and black and white spruce. Southern portions have concentrations of tolerant hardwood species and stands of red and white pine. Figure 2 shows the distribution of forest units<sup>7</sup> by area.

<sup>3</sup> Protection forest land is land on which forest management activities cannot normally be practiced without incurring deleterious environmental effects because of obvious physical limitations such as steep slopes and shallow soils over bedrock.

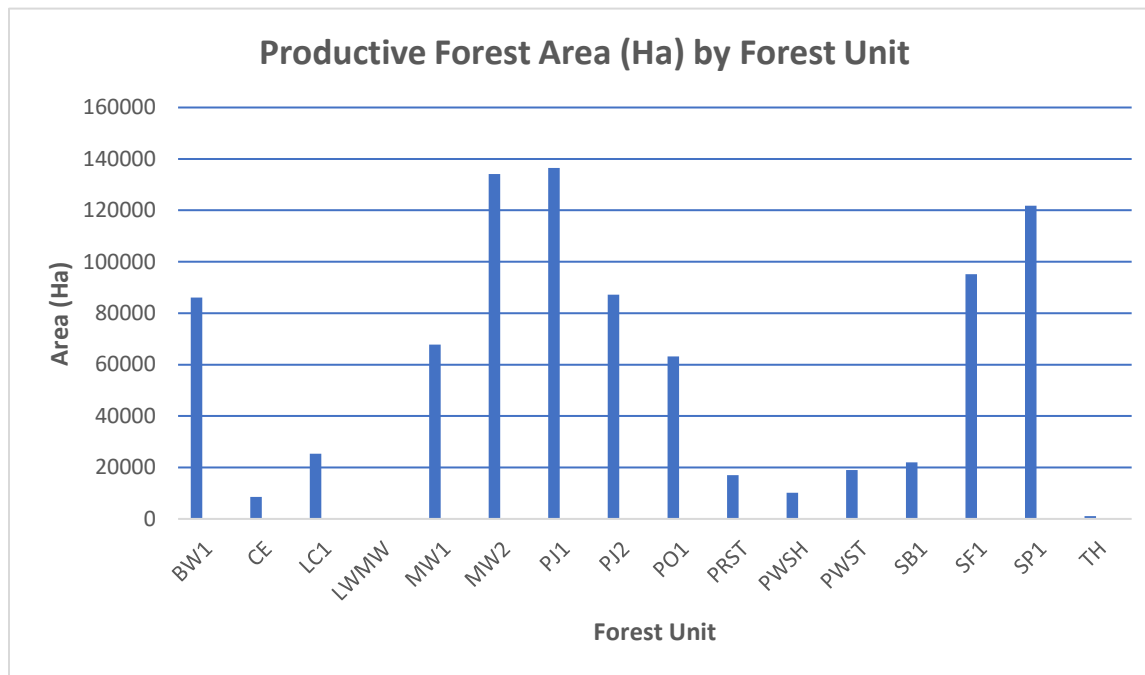
<sup>4</sup> Production forest is land at various stages of growth, with no obvious physical limitations on the ability to practice forest management.

<sup>5</sup> Below Regeneration Standards refers to the area where regeneration treatments have been applied but the new forest stands have yet to meet free-to-grow standards.

<sup>6</sup> Islands are excluded.

<sup>7</sup> Forest units are based on a classification system that aggregates forest stands for management purposes, combining those with similar tree species composition, that develop in a similar manner and are managed under the same silviculture system.

Figure 2 Forest Unit Area Distribution (Ha) - Available Crown Managed Forest<sup>8</sup>



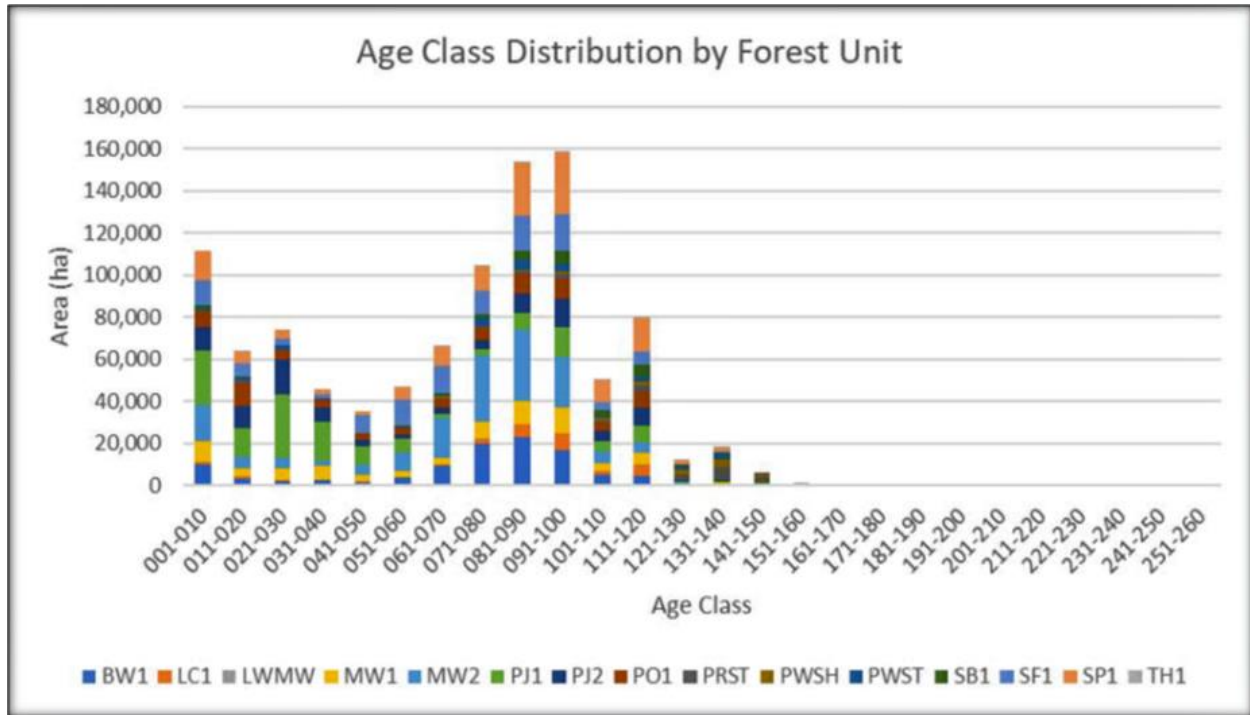
Source 2020-2030 Spanish Forest FMP

The age class area distribution of forest units is shown in Figure 3. An age class area imbalance occurs with much of the forest concentrated in age classes older than 80 years largely reflecting the fire history of the unit. This age class area imbalance is one of the factors limiting a balanced available harvest area between plan terms. The relative lack of area in immature, younger mature and old forest also has implications for the supply of suitable habitat for some wildlife species<sup>9</sup>.

<sup>8</sup> Forest units are as follows TH=Tolerant Hardwoods, PO1=Poplar, BW1=White birch, PWST= White Pine Seedtree, PWSH= White Pine Shelterwood, LWMW= Lowland Mixedwood, MW1= Conifer Mixedwood, MW2= Hardwood Mixedwood, PRST= Red Pine Seedtree, PJ1= Jack Pine, PJ2=Jack Pine Conifer, SP1= Upland Spruce, SF1= Spruce Fir Mixedwood SB1=Lowland Black Spruce, LC1= Lowland Conifer, CE=Cedar,

<sup>9</sup> "By managing for diversity (a range of habitats) we manage for all life forms. The most efficient way to maintain biological diversity in a forested landscape is to have a diverse array of stands and thus a diverse array of ecosystems and their constituent species." (Hunter, M.L., Wildlife, Forests and Forestry. Principles of Managing Forests for Biological Diversity. Prentice Hall Inc. 1990.)

Figure 3. Age Class Area Distribution by Forest Unit.



Source: 2020-2030 Spanish Forest Management Plan.

Most harvest operations are conducted by the SFL holder. Major Forest Resource Licence Holders (FRL) include Midway Lumber Mills Ltd. and Georgia Pacific Northwoods L.P. Harvest operations are predominately by conventional clearcut although shelterwood and seed tree harvests occur within the red and white pine forest units. Harvest levels over the audit period were 50% below planned levels. The lower than planned level of harvesting negatively affected the achievement of some planned silviculture targets (i.e., site preparation and tending); however, the area renewed was 105% of the equivalent area harvested as areas harvested in previous years plan were reported as renewed during the audit period.

Twenty-three Species at Risk (SAR) are associated with the Forest including the Canada Warbler, Olive-sided Flycatcher, Whip-poor-will, Chimney Swift, Golden-winged Warbler, Blanding Turtle, Snapping Turtle and Monarch Butterfly.

## **4.0 Audit Findings**

### **4.1 Commitment**

The 2022 IFAPP commitment principle ensures that an organization's commitment is reflected in the auditees' vision, mission, and policy statements and in their adherence to legislation and policies.

EACOM met the 2022 IFAPP Commitment Principal criterion through its SFI forest management certification.

MNRF vision and mission statements are widely distributed on its website and postings at its various District offices. It is our assessment that MNRF met the requirements of the IFAPP commitment principle.

### **4.2 Public Consultation and First Nations and Métis Community Involvement and Consultation**

FMPM public consultation requirements for the development of the 2020-2030 FMP, the Annual Work Schedules (AWS), and Plan Amendments for the audit period were met. Representatives of the constituencies contacted indicated that they had been made aware of the FMP process and that they were provided with opportunities to become involved and to identify values. Comments received during FMP development were appropriately documented and considered as part of the decision-making process by the planning team. The audit team concluded that IFAPP criteria for public consultation were met.

#### Issue Resolution

Two written issue resolution requests were received by the Sudbury District related to forest harvesting and road access in proximity to tourism lakes and a Bear Management Area. The Northeast Region Director received four written issue resolution requests regarding harvest allocations in proximity to tourism lakes and forest access. EACOM requested an appeal to a District Manager Issue Resolution decision pertaining to planned harvest allocations within a Bear Management Area. The MNRF met all FMPM requirements in responding to and addressing the issues (Optional Procedure 2.3 and 2.4).

#### First Nations and Métis Communities

As required by the Forest Management Planning Manual (FMPM) all the identified indigenous communities in or adjacent to the SF, including the and Métis Nation of Ontario (Region 3), were invited to participate in the development of the 2020-2030 FMP. All FMPM requirements for the development of the plan were met and associated communications were properly documented.



Five FN communities (i.e., Brunswick House, Mississauga, Sagamok Anishnawbek, Serpent River, Wikwemikong) and MNO Region 3, identified representatives for participation on the Planning Team. The MNO representative did not participate. Several communities, including the MNO, provided an updated Aboriginal Background Information Report (ABIR). For other communities the most recent ABIR was utilized. Values maps (e.g., cultural heritage areas, trapline areas, etc.) were produced and utilized in the planning process.

Several communities, with interests in numerous Forests expressed an interest in a single customized consultation approach and the MNRF agreed. However, the participation and consultations in the development of the customized approach could not be completed and approved until after the FMP was completed<sup>10</sup>. With the party's agreement the consultation approach on the Spanish was carried out in accordance with the FMPM.

In February 2021, under a five-year pilot project, a Customized Consultation Agreement (CCA) was signed between three FNs (i.e., Chapleau Cree, Missanabie Cree and Brunswick House) and MNRF. The consultation approach (where applicable) will apply to several Forest Management Units (including the Spanish Forest).

During the FMP development specific FN concerns (e.g., wildlife sustainability, access restrictions, herbicide spraying, wood allocations) were addressed, to the extent possible, by the Planning Team.

The requirements for First Nations and Métis community participation in the development of the forest management plan and the implementation of the forest management program were met.

### Local Citizens' Committee (LCC)

The Spanish Forest Local Citizens Committee (LCC) is a standing committee with members appointed by the MNRF Sudbury District Manager. Committee members represent the full range of stakeholder interests. Indigenous representation was lacking, however invitations to participate were extended by both the MNRF and LCC. Many members have long-term involvement with the LCC (e.g., 15-20 years). We determined that members, formally or informally, try to keep their respective stakeholder group informed of LCC proceedings. Member participation over the audit period has been excellent and our sample of minutes indicated there was always a quorum. The Terms of Reference have been updated and conform to FMPM requirements.

During the audit period, the LCC was involved in all aspects of the implementation of Phase II of the 2010-2020 FMP and the preparation and implementation of the 2020-2030 FMP. Minutes of LCC committee, and FMP planning team meetings show on-going LCC involvement providing advice and comment on the full range of

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<sup>10</sup> A Customized Consultation Approach can be developed at any time and can include both forest management planning as well as operational implementation activities.

implementation activities (e.g., Annual Work Schedules, compliance activities, road construction, etc.)

For the development of the 2020- 2030 FMP there was LCC representation on the planning team, and there were regular updates to the full committee. The LCC met all FMPM requirements with respect to participation in the full range of FMP development requirements (attendance at information forums, public consultation advice, etc.).

Our interviews with members indicated they were satisfied with the efforts by MNRF and EACOM to respond to questions, provide information and seek their views on forest management activities. Our interviews indicated the members felt their time on the committee was well spent, and that they provided value to the forest management planning and implementation processes. That assessment was shared by MNRF and EACOM staff.

The LCC statement for the 2020-2030 FMP indicated “...*the planning team and plan author(s) have made a concerted effort to produce a sustainable plan...*” The LCC members share common objectives to ensure long term sustainability of the forest while realizing the many associated benefits. However, stakeholders often share different views on how to achieve that objective (e.g., restricted or open road access). The LCC has provided an effective forum to educate, share views and develop consensus.

Our assessment is that the Spanish Forest LCC is effective and well-managed. The LCC provides significant benefits to the forest management planning and implementation processes.

### **4.3 Forest Management Planning**

The 2020-2030 FMP was prepared in accordance with the 2017 Forest Management Planning Manual (FMPM) and its identified phase-in requirements. All progress checkpoints (e.g., planning inventory, management objectives checkpoint, LTMD checkpoint) were confirmed and documented in the Analysis Package.

Information sources for the development of the 2020-2030 plan included previous FMPs, MNRF guides and planning directions, Annual Reports (ARs), Aboriginal Background Information Reports and consultations with Indigenous Communities, input from the LCC and the public and past IFAs. Operational prescriptions for AOCs were consistent with the Forest Management Guide for Conserving Biodiversity at the Stand and Site Scales (Stand and Site Guide). An analysis of silvicultural activities and past silvicultural performance was completed by a Registered Professional Forester (R.P.F.) to develop growth and yield projections, post-harvest succession rules and silviculture treatment options consistent with local forest conditions and contemporary silviculture practices.

Work was undertaken to revise growth and yield curves in the development of the 2020-2030 plan. Growth and yield data was derived from yield curves developed for each forest unit and modelled in MIST (Modeling and Inventory Support Tool) with the

rationale for selecting the yield curve specifications provided. Under the preferred management strategy, the total volume harvested per term is projected to drop from 13.2 million m<sup>3</sup> in Term 1 to 10.4 million m<sup>3</sup> in Term 6, and then increase to 16.2 million m<sup>3</sup> in Term 16 reflecting the existing age class area imbalance (Section 3.2). It is noteworthy that the total volume harvested (all species groups) exceeds the modeled industrial demand, except for Term 6, which is projected to be 3% below industrial demand (Optional Procedure 3.5).

The planning composite inventory was based on imagery acquired between 2008 and 2010 and interpreted and verified from 2010 to 2016 for harvest and natural depletions, regeneration and Free-to-Grow (FTG) survey results, ownership and regulated provincial park and conservation reserve boundaries in a geographic information system (GIS). Where applicable the eFRI included the interpretation of overstory and understory stand attributes. Canopy blending was utilized in circumstances where the overstory and understory had similar attributes.

Plan objectives, indicators<sup>11</sup>, desirable levels and targets for harvest and wildlife were developed using direction from relevant legislation, policy, regional strategic direction with input from consultations with the LCC, Indigenous Communities and MNRF advisors. The outcomes of a Desired Forest Benefits Meeting also informed the development of objectives and targets<sup>12</sup>. Objectives were classified into categories as specified in the 2017 FMPM. Objectives from the previous FMP that related to forest cover and biodiversity were confirmed and updated according to the policy direction in the Landscape Guide and Stand and Site Guide. For each objective at least one indicator of sustainability was developed along with an associated desired level. Silviculture objectives were based on direction in the FMPM.

The Strategic Forest Management Model (SFMM)<sup>13</sup> was utilized to model timber production capabilities and landscape indicators at various levels of management intensity. Targets were developed with consideration of historic wood utilization and current wood requirements and other social, economic, and environmental considerations. Base assumptions and constraints for management were detailed in the FMP Analysis Package and were in accordance with the direction(s) in the FMPM.

For the development of the 2020 FMP the Forest was categorized as within the Great Lakes -St. Lawrence Landscape Guide (GLSLG) Region rather than as under the

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<sup>11</sup> The FMP established 13 management objectives with 49 indicators of objective achievement.

<sup>12</sup> MNRF conducted several meetings including meetings with three FN communities (Atikameksheng, Sagamok and Mississauga).

<sup>13</sup> SFMM is a non-spatial model based on linear programming techniques that is used to assess the capability of a forest to meet FMP objectives at various levels of management intensity. The tool is also used to evaluate the potential of any number of aggregated forest units to provide resource benefits at multiple scales by assessing outcomes for wood supply, wildlife habitat and forest diversity and other forest sustainability indicators (SF FMP Analysis Package).

direction of the Boreal Landscape Guide (BLG)<sup>14</sup>. The MNRF management direction change was premised on the larger area of the Forest being situated within the Great Lakes-St. Lawrence Forest Region<sup>15</sup>. Forest units developed for the 2010 FMP were based on the standard forest unit definitions for the Northeast Region, while forest units developed in the 2020 FMP were based on GLSL landscape guide forest unit standards, making it difficult to compare forest area, harvest area, and volume trends between FMPs. Landscape level objectives also changed, with the 2010 FMP developed with direction from the Natural Disturbance Pattern Emulation Guide (NDPEG) while the 2020 FMP was developed with direction from the GLSL Landscape Guide. Landscape level simulations (Ontario's Landscape Tool) provided consideration for the GLSL-boreal transition area within the Forest. Wildlife habitat was assessed using landscape level indicators identified in the GLSLG.

Two Strategic Management Zones (SMZs) were identified; a northern zone and a southern zone reflecting the two main woodsheds; the Timmins Woodshed and the Nairn Woodshed. Historically wood harvested north of the Metagama Road was processed at the Timmins Sawmill and wood harvested south of the road was processed at the Nairn Centre Sawmill (the Ostrom Sawmill processes all smaller diameter logs). In addition to the SMZs, several other factors also guided the spatial distribution of the harvest in the 2020-2030 FMP. These included the current distribution of forest units by age class, distance to mills and other economic considerations and biophysical operability constraints. It is noteworthy that harvest volumes or wood deliveries were not limited or restricted by SMZ and that all landscape guides and targets were planned and assessed at the forest level and not according to the management zone.

Road Use Management Strategies (RUMS) were developed for all road corridors and existing road networks. The RUMS summarize the purpose, maintenance, monitoring, access, and decommissioning provisions required for each corridor and existing road network. Access and decommissioning provisions were developed from land-use policy documents.

The LTMD was deemed to provide a realistic available harvest area and volume projections that met current mill demands and allowed for new market entrants.

We concluded that the interpretation of the projected trends in the modelling exercise was valid and that the LTMD achieved a satisfactory balance of all objectives and indicators. The LTMD was consistent with legislation and policy, and appropriately considered the directions in the forest management guides and provided for forest sustainability.

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<sup>14</sup> The objective of the guide is to direct forest management activities to maintain or enhance natural landscape structure and patterns that provide for the long-term health of forest ecosystems.

<sup>15</sup> Source: 2020 FMP Analysis Package for the Spanish Forest 2020-2030 Forest Management Plan - Section 3.2 Landscape Guide Regions.

Proposed forest management operations were consistent with the LTMD. Operational prescriptions were prepared in accordance with the Forest Management Guide for Conservation of Biodiversity at the Stand and Site scales (Stand and Site Guide). Wildlife habitat assessments and management strategies utilized a broad ecosystem approach (coarse filter). Area of Concern (AOC) prescriptions were developed according to broad categories<sup>16</sup> and were documented in FMP Table 11. All AOC prescriptions considered the direction and recommendations in forest management guides and as such, there was no requirement for an exceptions' monitoring program.

The FMP was not designated as a Section 18 *Overall Benefit Instrument under the Endangered Species Act* (ESA) and was prepared under the regulatory exemption for Crown forestry (O.Reg.242/08 s.22.2.). As such, a summary of monitoring for species at risk (SAR), and the Supplementary Documentation required by Part B, Section 4.7.5 of the 2017 FMPM, was not required. While forest operations are exempt from the permitting process under the ESA, there is still a requirement for SAR to be protected. Protection is provided through Area of Concern (AOC) prescriptions and ensuring implementation of those prescriptions during operations (as required in Ontario Regulation 242/08 Section 22.1.)<sup>17</sup>. For the plan term, there are no requirements or conditions related to SAR that require the implementation of a monitoring program. The audit team concluded that SAR was appropriately considered during planning. Habitat descriptions, the application of guidelines and operational prescriptions are provided in the plan text.

Access and decommissioning provisions for the management of Designated Tourism Lakes and Self-Sustaining Coldwater Lakes were developed with direction from relevant land-use policy reports. Remote tourism areas were managed through Area of Concern prescriptions, MNR Enhanced Management Area designations and road use management strategies. There are no Resource Stewardship Agreements (RSAs) associated with the 2020-2030 FMP as AOC prescriptions and Road Use Management Strategies (RUMS)<sup>18</sup> were deemed to be sufficient to protect and/or maintain recreational values. Enhanced Management Areas (EMAs) were also identified to manage remote tourism values requiring a specific level of remoteness.

To date, twenty-two amendments are associated with the 2020-2030 FMP. All amendments were prepared in accordance with the requirements of the FMPM and the FIM and were consistent with the FMP.

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<sup>16</sup> AOCs were grouped into the following broad categories, Indigenous, Biodiversity and Wildlife, Cultural, Social and Economic, and Operational for conditions on roads, landings, and forestry aggregate pits.

<sup>17</sup> Where a Species at Risk's habitat feature, such as a nest, den or hibernacula is encountered during implementation of forest operations and no applicable AOC for the species is documented in the FMP, forest operations are to be suspended in the site-specific feature, application is to be made to MNR for an AOC to be amended into the FMP, as required in Ontario Regulation 242/08 Section 22.1.

<sup>18</sup> Measures implemented to mitigate access-related impacts include signage (restricting the use of forest roads to access designated lakes), installation of temporary physical barriers, and road decommissioning.

The content of AWSs conformed to FMPM and Forest Information Manual (FIM) requirements. Proposed forest management activities were consistent with the FMPs.

The audit team concluded that the 2020-2030 FMP is well-written with FMP objectives and targets consistent with the achievement of forest sustainability and that the 2020-2030 FMP provides a satisfactory balance of landscape class objectives with wood supply and other social and economic objectives.

#### **4.4 Plan Assessment and Implementation**

Our field assessments confirmed that Silvicultural Ground Rules<sup>19</sup> (SGRs), Silvicultural Treatment Packages<sup>20</sup> (STPs) and Forest Operations Prescriptions (FOPs) were appropriate for the forest cover types and site conditions. SGRs were appropriately updated/confirmed in the SGR update layer per AR requirements.

##### Harvest

Demand for poplar, white birch, and white and red pine timber was low due to mill closures and reduced production levels at operating mills. The low demand for intolerant hardwoods was particularly acute in the northern portion of the unit which had the effect of forcing harvest operations into purer conifer dominated forest units. During the audit term harvest focused mainly on the PJ1, PJ2, SP1 and MW1 forest units.<sup>21</sup>

EACOM applied an Operational Decision Key and the Deferral Decision Key (Northeast Region Operations Guide for Marketability Issues (2013)) to determine whether a stand should be deferred from harvest or partially cut (Optional Procedure 4.3) until 2020. In 2020, a Low Market Condition Strategy (LMCS) was created to replace the 2013 Guide and the FMP was amended as appropriate to incorporate the LMCS.

Most harvesting operations utilized the clear-cut harvesting system, with cut-to-length harvesting<sup>22</sup> (CTL) being the most frequently utilized logging method. Shelterwood and seed tree harvests occurred in white and red pine forest units. Tree marking activities were carried out to support shelterwood and seed tree harvests. Approximately, nine hundred and twenty-eight (928) hectares were tree marked during the audit period.

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<sup>19</sup> Silvicultural Ground Rules specify the silvicultural systems and types of harvest, renewal and tending treatments that are available to manage forest cover and the type of forest that is expected to develop over time.

<sup>20</sup> A Silvicultural Treatment Package (STP) is the path of silvicultural treatments from the current forest condition to the future forest condition. STPs include the silvicultural system, harvest and logging method(s), renewal treatments, tending treatments and regeneration standards.

<sup>21</sup> PJ1=Jack Pine, PJ2=Jack Pine/Black Spruce, SP1=Black Spruce/Jack Pine, MW1=Jack Pine/Birch/Aspen.

<sup>22</sup> In cut-to-length harvesting trees are felled, de-limbed and bucked to various assortments directly at the stump.

Table 3 presents the actual harvest area by forest unit. Overall, 50% of the planned harvest was achieved, with no harvest more than the AHA for any individual forest unit. Conifer utilization achieved 47% of the planned volume (4.3 million m<sup>3</sup>) during the audit period, while hardwood utilization achieved 17% of the planned volume forecast (0.5 million m<sup>3</sup>).

The inability to achieve planned harvest targets had implications with respect to the achievement of other planned silvicultural activities which follow harvesting, and will, should the trend continue, affect the achievement of objectives related to habitat supply, forest age class distributions and future wood supply.

All inspected sites were approved for operations in the Annual Work Schedules (AWSs) and harvest prescriptions were implemented in accordance with the SGRs and required guidelines. Area of Concern prescriptions were properly implemented. Operator due diligence and care to minimize site damage was evident on all the inspected sites.

Table 3 Actual vs. Planned Harvest Area (Ha) by Forest Unit (2016-2023)

Forest Unit <sup>23</sup>	Planned Harvest Ha	Actual Harvest Ha	Actual vs Planned %
BW1	12,119	3522	29
CE1	148	13	9
LC1	1,211	233	19
MW1	9964	4398	44
MW2	9,706	3774	39
PJ1	11,325	10,226	90
PJ2	13,572	8,983	66
PO1	7,622	2,764	36
PRST*	596	323	54
PRWSH**	145	2	1
PRWST**	627	181	29
PWSH*	146	0	0
PWST**	627	181	29
SB1	2237	1058	47
SF1	2396	947	40
SP1	10,629	5789	54
THSE**	402	3	1
THSH**	726	1	0
<b>Total</b>	<b>83,718</b>	<b>42,258</b>	<b>50</b>

Source: 2016-2022 Annual Reports (2022-23 figures included are estimates).

\*Forest Unit Used in 2020 FMP, \*\*Forest Unit used in 2010 FMP.

<sup>23</sup> Forest units are as follows TH=Tolerant Hardwoods, PO1=Poplar, BW1=White birch, PWST= White Pine Seedtree, PWSH= White Pine Shelterwood, LWMW= Lowland Mixedwood, MW1= Conifer Mixedwood, MW2= Hardwood Mixedwood, PRST= Red Pine Seedtree, PJ1= Jack Pine, PJ2=Jack Pine Conifer, SP1= Upland Spruce, SF1= Spruce Fir Mixedwood SB1=Lowland Black Spruce, LC1= Lowland Conifer, CE=Cedar,

The audit team concluded that harvest operations were properly implemented.

### Slash Management

The cut-to-length (CTL) harvest system mitigates the loss of productive forest land to slash and logging debris. The system was the most frequently utilized harvest method during the audit period.

Our field site inspections of harvest operations utilizing the tree-length harvest system found that slash piling program was implemented. The ARs report 1,029 slash piles were burned.

### Area of Concern Management (AOC)

AOC operational prescriptions and conditions for operations are provided in FMP Table-11. The requirements of the Endangered Species Act (ESA) are addressed through the AOC prescriptions and Conditions on Regulator Operations<sup>24</sup> (CROs).

We reviewed a sample of AOC prescriptions and compared them to current applicable guidelines. In all cases the appropriate prescriptions were used. The SFL has a Forest Handbook and Invasive Species Field card distributed to all operators as well as Species at Risk flashcards. Block specific AOCs are reviewed and information provided to operators at each new block start-up. Our field inspections, as well as a review of applicable photos and documents indicated that appropriate prescriptions were in place. Our interviews with the involved District biologists and review of compliance records indicated there were minimal issues associated with AOC protection during harvesting operations.

### Site Preparation (SIP)

Planned site preparation was mainly by mechanical techniques using powered disk trenchers or occasionally bulldozers. FMP targets for site preparation were not achieved (52% of the forecast area) principally due to the reduced harvest level and/or a lack of area conducive to site preparation treatments (Table 4).

Our site inspections found mechanical site preparation activities were effective in exposing mineral soil for artificial regeneration. No incidences of environmental damage associated with SIP were observed during the field audit. One minor non-compliance was documented in 2017, where site preparation occurred on approximately 1.5 ha of area identified as High Potential Cultural Heritage. EACOM followed up with additional training for the contractor involved. Chemical site preparation treatments appeared to be effective in achieving initial vegetation control and site stocking to natural regeneration.

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<sup>24</sup> CROs provide direction on ecological features (e.g., nests, etc.) encountered during forest operations that are not within established AOCs. CRO categories are described in the FMP with an identifier code.



Table 4 Area (Ha) of Actual vs. Planned Site Preparation (2016-2023)

Site Preparation Treatments	Planned Ha	Actual Ha	Actual vs Planned %
Mechanical SIP	40,915	21,052	51
Chemical SIP	2000	1,626	81
<b>SIP Total</b>	<b>42,915</b>	<b>22,449</b>	<b>52</b>

Source: 2016-2022 Annual Reports (2022-23 figures included are estimates).

### Renewal

Table 5 presents the planned vs actual area renewed. The area renewed (artificial and natural) constitutes 105% of the reported area depleted. Artificial renewal treatments were utilized more frequently than natural renewal (59% and 41% respectively). The focus on artificial renewal reflected the concentration of harvest operations in conifer dominated stands (due to market availability) which are typically regenerated by planting or seeding treatments.

Commonly planted species include jack pine, black and white spruce and red and white pine<sup>25</sup>. Jack pine was the only species utilized in the seeding program. Artificial renewal treatments were generally effective, with high stocking levels achieved on the inspected sites.

Natural regeneration strategies were adopted according to several factors including site access, site relief (presence of boulders and/or shallow soils over bedrock), anticipated levels of site competition post-harvest and pre-harvest site species composition etc. Natural renewal sites were typically well-stocked, with sites exhibiting adequate stocking to the target species.

All inspected renewal sites were approved in the AWSs, and renewal activities were in accordance with the applicable SGR and STP.

Our site inspections found that an effective renewal program was implemented.

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<sup>25</sup> White pine is not planted in monocultures due to the risk of injury and/or mortality by white pine weevil and blister rust.

Table 5 Area (Ha) of Actual vs. Planned Renewal Treatments (2016-2023).

Renewal Treatments	Planned (Ha)	Actual (Ha)	Actual vs Planned %
Natural Renewal	39,087	18,149	46
Artificial Renewal – Plant	22,917	15,491	68
Artificial Renewal - Seed	19,998	10,262	51
<b>Total Renewal</b>	<b>82,002</b>	<b>43,896</b>	<b>54</b>

Source: 2016-2022 Annual Reports (2022-23) figures included are estimates).

### Renewal Support

Renewal support includes the activities necessary to support the forecast types and levels of renewal and tending operations.

Audit period activities included cone (seed collection) and tree improvement activities at two tree seed orchards. Improvement activities were completed through EACOM's participation in the Northeast Seed Management Association tree improvement cooperative. Renewal support activities including seed inventories are sufficient to meet the renewal program requirements.

### Tending

Table 6 presents the planned vs actual area treated by tending. During the audit period there was a commitment to reduce herbicide use to satisfy FMP objectives related to herbicide use.

Table 6 Area (Ha) of Actual vs. Planned Tending Treatments (2016-2023).

Tending Treatments	Planned (Ha)	Actual (Ha)	Actual vs Planned %
Chemical – Aerial	38,510	28,910	75
Precommercial Thinning	5,250	2,090	40
<b>Total Tending</b>	<b>43,760</b>	<b>31,000</b>	<b>71</b>

Source: 2016-2022 Annual Reports (2022-23 figures included are estimates).

Chemical tending treatments were conducted utilizing applications of VisionMax, Weedmaster or Timberline herbicide. The 2016 IFA observed variable results with the efficacy of the aerial tending program and instances where crop trees were damaged by herbicide. Several remedial actions were implemented to address the concern including the application of alternate products, mix rates, nozzle configurations, spray widths etc. (Optional Procedure 4.5). No damage to residual trees from herbicide applications was observed in this audit. It was our assessment that the chemical tending program was effective in controlling site competition.

Precommercial thinning (PCT) occurred on 2,090 ha (primarily within areas renewed to jack pine by aerial seeding). Our site inspections found the thinning program effective in achieving density control of desired crop trees.

Financial assistance for PCT was obtained from the Forestry Futures Trust Fund (FFTF) Silviculture Program<sup>26</sup>. Without thinning interventions site productivity will not be maximized and potential future economic opportunities will be lost. FMP targets for PCT were however underachieved (5,250 ha planned vs. 2,090 ha actual). Seven years of operations remain in the current FMP, and the SFL holder has indicated that they intend to work with the FFTF to meet their objectives.

### Protection

Natural disturbances occurred throughout the audit period, notably with moderate to severe damage by Spruce Budworm in the latter years of the audit term. Damage by other insect pests also occurred<sup>27</sup> (e.g. Large Aspen Tortrix, Forest Tent Caterpillar). We were informed that a Spruce Budworm control program is scheduled for implementation in 2023.

Limited to moderate areas of damage from blowdown (1,219 ha), and other natural disturbance events (e.g., fire and ice damage) also were reported in the ARs. The level of damage did not warrant salvage harvest operations.

### Access Management

Forest access was constructed in accordance with the FMP, AWS and relevant forest management guidelines with construction and maintenance responsibilities assigned to individual Forest Resource Licences (FRLs).

During the audit period, there was 58.2 km of primary road construction, 54 km of branch road construction and 1,039 km of operational road construction. Primary road construction work achieved 24% of the planned target. Branch road construction achieved 50% of the planned target during the audit term.

One hundred and thirty-one water crossings were installed, 34 were removed and seven were replaced. Water crossings were inspected by helicopter and during our on-the-ground site visits. Culverts were well-constructed. No instances of environmental damage or public safety concerns were observed related to culvert installation or culvert removals during road decommissioning. The review of FOIP records confirmed this observation.

Our sample of bridges revealed an issue with road materials entering the water course or collecting on the flanges of the center beams due to a gap between the deck sections on some Lessard Welding Bridges. In some instances, no mitigation measures were in-place while on other inspected bridges EACOM had installed coverings (i.e., used

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<sup>26</sup> Stand Management, Remediation, and Protection.

<sup>27</sup> Spruce Budworm (161,029 ha between 2016 and 2022); Large Aspen Tortrix (9,704 ha) between 2016 and 2020; and Forest Tent Caterpillar (4,488 ha) between 2016 and 2019.

rubber conveyor belt, landscape fabric etc.) over the gap to prevent or minimize materials entering the water course. The effectiveness of these measures (at the inspected sites) was variable as in some instances the rubber belts had shifted during grading and/or normal traffic use and/or the fabric had become dislodged. In one instance we observed a bridge where cover plates had not been installed allowing road materials to enter the watercourse (**Finding # 1**).

We also noted that a long-standing issue associated with nuisance beaver management had not been fully addressed despite a 2016 IFA recommendation to resolve the issue (**Finding # 6**).

Measures implemented to mitigate access related impacts on specific values included signage, the installation of temporary physical barriers and road decommissioning. We concluded that access control measures were being implemented in a practical manner given the realities of the SF (e.g., size of the unit, labour and budgetary constraints etc.)

Although not an IFAPP requirement, stop signs were not situated at all intersections of forest access roads and highways. This road safety issue should be addressed as expeditiously as possible.

#### **4.5 Systems Support**

EACOM met the 2022 IFAPP System Support Principle through its SFI forest management certification and its ISO 14001 EMS certification (Optional Procedure 6.4).

The MNRF has current organization charts. Files are retained with individual staff members or entered/updated into District and/or Provincial data systems. Generally, current staff training is relevant to their responsibilities. Appropriate protocols and systems are in place at the District Offices.

#### **4.6 Monitoring**

The 2020-2030 FMP contained a Compliance Plan as required by the FMPM and in accordance with the Guidelines for Industry Compliance Planning.

While Sudbury District has the administrative lead for the Forest, each of the associated Districts prepared their own compliance plans. Sudbury, Timmins Kirkland Lake and Chapleau Wawa Districts prepared Annual Compliance Operating Plans (ACOPs) that identified priority areas, targets and assigned staff responsibilities. Inspection activities documented in the Forest Operations Information Program (FOIP) over the audit term generally reflected directions in both the FMP and MNRF Compliance Plans.

A summary of the FOIP shows that the SFL holder and MNRF completed 751 inspections. MNRF completed approximately 26% of the inspections while the SFL holder completed 74%. Over the audit period there were 22 reports where activities

were Not in Compliance (NIC) yielding a 96% in-compliance rate. Our assessment is that an appropriate level of compliance auditing occurred.

EACOM is responsible for all industry inspections and FOIP submissions. Inspection approvals and submissions to FOIP by both EACOM and the MNRF generally adhered to submission deadlines.

Documentation shows that EACOM and MNRF staff worked proactively and cooperatively to identify issues and develop corrective remedies. EACOM included compliance training in contractor training sessions (e.g., SARs, AOC trespass, etc.) including distribution of SAR cards to operators.

EACOM maintains and submits information to the MNRF on movements to and from harvesting blocks. MNRF indicated there were no major issues with respect to reporting timelines or suspended blocks.

There is a disconnect between the Compliance Handbook direction and the practical field application of the Forest Operations Information Program reporting where not all the mandatory data requirements for Forest Operations Information Program reports listed in the Forest Compliance Handbook are mandatory on the Forest Operations Information Program creation page. This results in information gaps and/or blank data fields (**Finding # 3**). The audit team was informed that MNRF is currently conducting a Compliance Handbook review to address the gaps.

### Monitoring of Silvicultural Activities

If forest sustainability and FMP objectives are to be achieved, timely and appropriate silviculture treatments are required to ensure that investments in forest management are not lost and that forest operations prescriptions achieve the desired forest unit.

In accordance with the FMPM, FIM, and Forest Operations and Silviculture Manual (FOSM), a monitoring program must be developed and implemented to determine the effectiveness of silvicultural treatments. The SFL holder is required to assess and report the overall effectiveness of those treatments. EACOM staff monitor silviculture effectiveness through regular assessments, ad-hoc observations and in some instances site-specific analyses. Monitoring activities completed by EACOM staff included plantation survival assessments, regeneration and pre-and post-tending assessments and free to grow surveys.

During the audit period 42,258 ha was harvested and regeneration assessments were carried out on 35,564 ha. The area surveyed was determined to be 100% successfully regenerated (free to grow) with an average of 88% of the area renewed to the projected or an acceptable forest unit. The remaining area was renewed to another forest unit (other than the FU specified in the SGR). Our field sampling (visual assessments) of the assessed area substantiated the reported results. The renewal results indicate that SF is being successfully renewed and that forest regeneration is occurring within the required timeframe.

Performance surveys were not completed during the audit period as they were not a requirement of the 2009 FMPM.

### Silviculture Effectiveness Monitoring (SEM)

A key principle of Ontario's Forest Policy Framework is to ensure that regeneration efforts are achieving the standards in the FMP. The effectiveness of forest operation prescriptions in achieving the desired forest unit must be understood to facilitate reporting on forest sustainability and to provide reliable information for forest management planning (i.e., development of SGRs, Sustainable Forest Management Model (SFMM) inputs, FMP objectives). Information collected assists in the determination/assessment of the extent to which regeneration efforts meet the regeneration standard. During the audit period, over \$20.0 million from the Forest Renewal Trust Fund was invested into the forest, to carry out approved silvicultural activities.

The MNRF, as the steward of the resource, has a responsibility to substantiate and evaluate the effectiveness of the silviculture program implemented by the SFL holder. Silviculture audits conducted by the MNRF aid in the assessment (over time) of the effectiveness of the SFL holder silviculture program, conformance of silviculture activities with the FMP and forest sustainability. MNRF audits/assessments are conducted through the review of submitted materials, ad hoc observations in the field and through formal surveys.

The 2016 IFA identified a shortcoming with respect to the delivery of the SEM program and we are concerned that difficulties in meeting program objectives and reporting of results persist.

We were informed of several factors which contributed to difficulties with the program delivery over the audit period (i.e., the implementation of health and safety protocols associated with the COVID-19 pandemic resulted in operating constraints and restrictions between 2020 and 2021). We note that assessments were carried out in 2018, 2019 and 2022. Weather conditions precluded assessment plots in the Chapeau Wawa District in 2022-2023.

Our review of field audit results showed variations in site occupancy and species composition data between the MNRF and SFL holder. We were informed that data discrepancies could be attributed to factors such as the utilization of different sampling methodologies/designs, different sampling intensities (extensive vs. intensive) and the experience of the survey crew(s). It is noteworthy that, although renewal to other forest units can frequently result in acceptable future forest conditions,<sup>28</sup> discrepancies in the reported data can complicate the assessment of the

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<sup>28</sup> The reality that a percentage of the area treated by a specific STP will not regenerate to the projected forest unit was appropriately addressed during FMP planning by a modeling strategy where STPs reflected the target forest unit and a suite of related forest units which could potentially develop from a specific STP (i.e., 100% renewal to the target forest unit was not assumed).

effectiveness of SGRs and silviculture treatment packages (STPs). We note that, during the audit period there was a shift from auditing the effectiveness of silviculture treatments to plot validations of the SFL holder's assessment results. The Forest Operations and Silviculture Manual (FOSM) (2020 version) indicates that "*Additional standards for Ontario's silvicultural monitoring program will be described in silviculture policy implementation direction and related technical documents as associated policies of FOSM*". Although work is in progress, these associated policies under FOSM have not been completed to date. There are considerable standards in place via the current policy direction, however there is not a clear standard for auditing or validation of the results by MNRF (**Finding # 4**).

#### Exceptions Monitoring

Exceptions monitoring is carried out to determine the effectiveness of prescriptions in forest management plans that are "*not recommended*" in the MNRF forest management guides. There are no exceptions to the approved forest management guides in the 2020-2030 FMP.

#### Monitoring of Forest-Related Species at Risk

No monitoring programs for forest-related SAR were required to be included in the FMP.

#### Forest Renewal Trust Specified Procedures Report

The Forest Renewal Trust (FRT) provides dedicated funding (reimbursement of silviculture expenses) to renew the forest according to the standards specified in the FMP. During the first six years of the audit term \$19,187,911 was invested in forest renewal activities. These activities included natural and artificial regeneration, site preparation, tending, renewal support, tree marking and silvicultural surveys. In addition, FRT invested \$823,423 in precommercial thinning activities.

Our inspections and document review of activities invoiced in the "*Forest Renewal Trust Specified Procedures Report*" (SPR) confirmed that FRT payments were for eligible silviculture work.

#### Monitoring of Roads and Water Crossings

SFL and FRL staff monitor roads and water crossings through the course of normal operations. Primary access and branch roads were well maintained. The status and classification of roads is updated and reviewed with the development of the forest management plan and a roads inventory in a Geographic Information System (GIS) is maintained. **Finding # 1** addresses a concern with road material entering watercourses.

## Forestry Aggregate Pits

Standards for Forestry Aggregate Pits (FAPs) are included in the FMP supplementary documentation and a pit inventory is maintained in the GIS. FAPs inspected during our field audit were compliant with the standards. Our review of FOIP inspection reports for pits confirm our field observations..

## Annual Reports (ARs)

Six annual reports were reviewed to ensure they had been prepared in accordance with the applicable FMPM. ARs were available for each year in the audit period except for the 2022-2023 AR, which is not required until November 15, 2023. Except for the 2019-2020 AR all initial submissions met the FMPM required timeline. The delay in submission of that report was attributed to a focus on preparing the 2020-2030 FMP and staffing changes at the SFL holder. A finding is not provided as most submissions were submitted in accordance with the FMPM.

The ARs were assessed to ensure they accurately reflected the implemented activities and whether they effectively assessed forest management progress and any associated implications related to the achievement of management objectives.

Errors were detected in the tabulation of numbers, cutting and pasting into the wrong activity, and missing activities (e.g., some road construction activities) (**Finding # 5**). It appears that with the change in staff, the previous AR was used as guidance to develop the new AR, unfortunately, this can often perpetuate errors.

### **4.7 Achievement of Management Objectives & Forest Sustainability**

The comparison of objectives between the 2010 and the 2020 FMP is complicated by the following factors:

- Forest Units definitions and managed yield curve are different between the two plans.
- Forest diversity indicator targets in the 2020 FMP are based on the GLSL landscape guide, the previous plan had species-specific habitat targets.
- SGRs developed for the 2020 FMP are based on draft silviculture policy implementation direction arising from the outcomes of the Silviculture Enhancement Initiative (SEI), which requires at least one SGR for each silvicultural stratum.

FMP objectives are monitored annually (as appropriate) and formally reported in Annual Reports. The 2010-2020 FMP objectives and associated desirable levels (and targets) were generally achieved during the development of the LTMD (See Appendix 2).

Based on our site inspections, interviews and document reviews the audit team concludes that on balance forest sustainability, as assessed by the IFAPP, is not at risk. This conclusion is premised on the following findings and observations:



- Forest management was planned and implemented in accordance with the CFSA and FMP targets are consistent with the achievement of FMP objectives and forest sustainability.
- The Planning Team was duly constituted with active representation from several Aboriginal communities.
- All audit period FMPs followed the standards and guidelines of MNRF's approved forest management guides.
- EACOM maintained its SFI forest management certification throughout the audit period.
- An effective field silviculture program was delivered.
- Forest operations were largely compliant with relatively few instances of non-compliance reported in FOIP (96% in compliance rate was achieved).
- On balance we did not observe any significant instances of environmental damage related to forest operations or wasteful practices. We document a concern with road materials entering watercourses at some Lessard Welding Bridges sites (**Finding # 1**).
- Silvicultural Ground Rules (SGRs) and Forest Operations Prescriptions (FOPs) were appropriate for the forest cover types and site conditions.
- The contractual obligations of the SFL holder were largely met.

#### **4.8 Contractual Obligations**

We concluded that EACOM is substantially in compliance with the terms and conditions of the SFL (Appendix 3).

The IFAPP requires auditors to assess the effectiveness of the actions developed to address the recommendations of the previous audit. The 2010-2016 IFA produced 6 recommendations. The required Action Plan and Action Plan Status Report were completed within the required timelines, but not all recommendations were fully addressed (**Finding # 6**).

The Forest Renewal Trust Fund minimum balance was maintained, apart from 2018/19. Forest Renewal Trust Account charges were adjusted as required. As of March 31, 2023, there was a surplus in the account.

## 4.9 Concluding Statement

A high-quality forest management program was delivered by EACOM and the MNRF. Forest management planning and implementation of the FMPs met all legal and regulatory requirements which resulted in the production of a high-quality management plan, an effective silviculture program with a strong compliance record and sustainable forest management operations.

Concerns with the administration of the forest management program including a lack of policy direction for Ministry of Natural Resources and Forestry staff for silvicultural effectiveness auditing and regeneration assessment plot validation quality control are highlighted in the audit findings. Issues identified in the 2016 Independent Forest Audit were not fully addressed and there were problems with reporting, tabulation and data inconsistencies in the Annual Reports. Inconsistencies in data recording directions/requirements between the Forest Compliance Handbook and the Forest Operations Information Program also resulted in some required fields not being completed within the Forest Operations Information Program. There is also a concern that road materials are entering watercourses at some Lessard Welding Bridge sites.

Despite these shortcomings the audit team concludes that the management of the Spanish Forest was generally in compliance with the legislation, regulations and policies that were in effect during the period covered by the audit, and the Forest was managed in compliance with the terms and conditions of the Sustainable Forest Licence held by EACOM Timber Corporation (Interfor East Ltd.) # 542391. The forest is being managed consistently with the principles of sustainable forest management, as assessed through the 2022 Independent Forest Audit Process and Protocol.

**Appendix 1**  
**Findings**

## Independent Forest Audit – Record of Finding

### Finding # 1

**Principle 4:** Plan Assessment and Implementation

**Criterion:** 4.7.Access

... various types of water crossings including crossing structures, road monitoring, maintenance, aggregates and any other access activities must be conducted in compliance with all laws and regulations, including the CFSA, approved activities of the FMP and the submission of, or revisions to the AWS.

**Procedure(s):**

Review and assess in the field the implementation of approved access activities including ...various types of water crossings...

**Background Information and Summary of Evidence:**

Approximately 30 Lessard Welding Bridges are installed on the Spanish Forest as portable bridge structures. Our sample of these bridges revealed an issue with road materials entering the water course or collecting on the flanges of the center beams due to a gap between the deck sections. In some instances, no mitigation measures were in-place while on other inspected bridges EACOM had installed coverings (i.e., used rubber conveyor belt, landscape fabric etc.) over the gap to prevent or minimize materials entering the water course. The effectiveness of these measures (at the inspected sites) was somewhat limited as the rubber belts had shifted during grading and or normal traffic use or the fabric had torn and become dislodged. In one instance we observed a bridge where cover plates had not been installed over the cut outs. These access points may also allow road materials to enter the watercourse when covers are not installed.

We were informed that the issue is not as prevalent on newer bridges since, by design, the gap between the deck sections is very small (+/- 1/8 inch). We note that existing bridges may be reinstalled in accordance with the Crown Land Bridge Management Guidelines to facilitate access to other areas of operations on the unit.

**Discussion:**

A risk for environmental damage to water courses from road materials falling between the gap in the decking plates of Lessard Welding Bridges exists. Mitigation measures (when

implemented) require monitoring and corrective actions over time to ensure on-going effectiveness.

**Finding # 1:**

Some Lessard Welding Bridges allow road material to enter watercourses.

## Independent Forest Audit – Record of Finding

### Finding # 2

#### **Principle : 6 Monitoring**

#### **Audit Criterion:** 6 District compliance planning and associated monitoring

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

#### **Procedure(s):** 6.1

...a compliance program has been developed and implemented to effectively monitor program compliance...Districts should prepare District Compliance Plans...

#### **Background Information and Summary of Evidence:**

The Forest Compliance Handbook (2014), section FOR 07 02 04 states “...*the annual district forest compliance plan is to outline the Compliance Monitoring plan for the applicable year of the FMP implementation.*” As well the FMP states (Section 4.7.1.2) that “*the Sudbury District, with input from the Chapleau and Timmins Districts, will prepare and implement annual compliance programs.*”

The compliance handbook provides directions that each district will be responsible for activities within its boundaries. The Spanish Forest Compliance Committee provides a coordination role for the three Districts (Sudbury, Timmins Kirkland Lake, Chapleau Wawa) when assessing compliance issues, non-compliances, remedies etc. The approach is intended to ensure that there is one consistent compliance record for the Sustainable Forest Licence, facilitate the risk-based approach to forest compliance and facilitate understanding as to compliance concerns and priorities. These meetings are intended to provide insight to as to what the compliance concerns and priorities are. Compliance Committee meetings also assist in the articulation of the risk-based approach to forest compliance. Recommendation # 4 of the 2016 Independent Forest Audit directed the Ministry of Natural Resources and Forestry District offices to ensure that Annual Compliance Operations Plans are prepared. The approved Action Plan Status Report indicates that for 2017, 2018 and 2019 a process was implemented to develop and submit the Annual Compliance Operations Plan for approval. Plans were not completed for all years by the Sudbury District (2021-2022 and 2022-2023).

**Discussion:**

FMP and Compliance Handbook requirements were not fully met. While inspections and submission of Forest Operations Information Program reports were completed, compliance inspections occurred in some years in the absence of an overarching Annual Compliance Operations Plan. Compliance activities benefit from the development and delivery of effective plans which set annual priorities based on past performance and the understanding and analysis of forest-wide risk factors.

**Finding # 2:**

Requirements of the Forest Management Plan and the Forest Compliance Handbook related to the preparation of Annual Compliance Operations Plans were not consistently met by the Ministry of Natural Resources and Forestry Sudbury District Office.

## Independent Forest Audit – Record of Finding

### Finding # 3

**Principle: 6** Monitoring

**Audit Criterion: 6** District compliance planning and associated monitoring

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

...to determine whether these monitoring and reporting programs, as implemented, were sufficient to monitor and report on the effectiveness of forest operations in meeting FMP objectives.

**Procedure(s): 6.1**

6.1 District Compliance planning and associated monitoring

...determine whether the NDMNRF District electronically submitted...compliance information ...in accordance with requirements ...

6.2.1 SFL/APFA compliance planning and monitoring

...Determine whether the compliance reports have been submitted electronically to the NDMNRF database in accordance with the requirements...

#### **Background Information and Summary of Evidence:**

The Forest Compliance Handbook (2014), section FOR 07 03 05 states”

*“An inspection report is a record of an inspection that was conducted at a point in time on a defined area and creates a history.”*

FOR 07 03 04 states that forest operations will be grouped into Compliance Operating Areas for each operation type (access, harvest, renewal and maintenance).

FOR 07 03 05 provides a list of mandatory data requirements to be included in FOIP reports. These include basic information such as the inspector’s name, the applicable licence number, the Compliance Reporting Area, location, type of operation, year of operation, inspection date and inspection method. Depending on circumstances, the completed FOIP report could also include the Overlapping Licence number and Approval number (Harvest).



Several of the Forest Operations Information Reports we reviewed did not include information in the Compliance Reporting Area (approximately 18%). All the inspections were related to access, renewal, and maintenance.

The MNRF points out that the 2010 and 2020 FMPs grouped renewal activities for reporting purposes. For example, all sites scheduled for tree planting during an AWS period will form one Compliance Reporting Area and since they are reported at the program level, no separate CRA ID was provided for those activities. A water crossing number or road name may also often replace the Compliance Reporting Area identifier.

We were informed that some of the inconsistencies and deviations from the reporting requirements from the Forest Compliance Handbook may be exacerbated by the FOIP application itself. For example:

- The CRA field in the application is entitled “Compliance Reporting Area (Block)” which may lead to an assumption that this field is for Harvest Block identifiers only.
- To create a report for a particular Compliance Reporting Area in the application, the CRA name needs to be pre-loaded into FOIP by an administrator. While it makes sense to add any harvest blocks from a harvest approval this is not consistently done for planned roads and is not necessarily practical in the case of water crossings.
- Inconsistency in approach may be a result of how information is loaded into FOIP by administrators, which will affect the options available to the FOIP inspectors.
- Not all of the mandatory data requirements for FOIP reports listed in the Forest Compliance Handbook are mandatory on the FOIP creation page.

### **Discussion:**

The MNRF and Industry are meeting the intent of the Forest Compliance Handbook. However, there is a disconnect in the Handbook direction and the operation of the Forest Operations Information Program reporting application which has resulted in inconsistencies in reporting and/or meeting the requirements of the Forest Compliance Handbook.

There is a disconnect between the Compliance Handbook direction and the practical field application of the Forest Operations Information Program reporting.

The audit team was informed that MNRF is currently conducting a Compliance Handbook review to address the gaps.

**Finding # 3:**

Not all of the mandatory data requirements for Forest Operations Information Program reports listed in the Forest Compliance Handbook are mandatory on the Forest Operations Information Program applications creation page resulting in information gaps and/or blank data fields.

## Independent Forest Audit – Record of Finding

### Finding # 4

#### Principle 6: Monitoring

#### Criterion: 6.3 Silvicultural Standards Assessment Program

**Procedure(s):** Assess whether the management unit assessment program (SFL and MNRF District) is sufficient and is being used to provide the required Silviculture Effectiveness Monitoring (SEM) information.

#### Background Information and Summary of Evidence:

The effectiveness of forest operations prescriptions in achieving the desired forest unit must be understood to provide reliable information for forest management planning (i.e., development of Silviculture Ground Rules (SGRs), Sustainable Forest Management Model (SFMM) inputs, FMP objectives). Information collected through the Silviculture Effectiveness Monitoring, auditing and plot data verification assists in the determination/assessment of the extent to which regeneration efforts meet the regeneration standard. The information also aids in the assessment (over time) of the effectiveness of the Sustainable Forest Licence holder's silviculture program, conformance of silviculture activities with the FMP and forest sustainability.

The implementation of health and safety protocols associated with the COVID-19 pandemic resulted in operating constraints and restrictions during 2020 and 2021. However full reporting and analysis of monitoring results were only available for the 2016 and 2017 seasons. Assessments were carried out in 2018, 2019 and 2022. Weather conditions precluded assessment plots in the Chapleau Wawa District in 2022-2023.

The direction in the 2020-2030 Forest Management Plan (prepared under the 2017 Forest Management Planning Manual) led to a shift from auditing the effectiveness of silvicultural treatments to plot validation of SFL holder results by the MNRF. The Silvicultural Enhancement Implementation Technical Document that was under development (as referenced in Section 6.1.8.2 of the 2020 FMP) was not finalized. Standards for Ontario's silviculture monitoring program (described in the 2017 Forest Operations and Silviculture Manual) were replaced in the 2020 version which now indicates that "*Additional standards for Ontario's silvicultural monitoring program will be described in silviculture policy implementation direction and related technical documents as associated policies of FOSM*". These associated policies under FOSM have not been completed to date. In the interim the Northeast Region developed the Regeneration Assessment Program with a view to complete the

MNRF validation or quality check after the forest manager has completed their regeneration assessment and before results are submitted in an Annual Report. There is no policy requirement to provide assessment data prior to the AR submission and no formal process to accept or reject the submitted data. The interim process is being adopted in the absence of formalized policy directives under the MNRF's Silviculture Implementation Direction initiative.

**Discussion:**

An effective silviculture program was implemented by EACOM staff. Silviculture investments between 2016 and 2023 exceeded \$20 million. Monitoring and auditing of silviculture program effectiveness is required to ensure the investments are meeting Forest Management Plan objectives and that silviculture activities implemented are consistent with the achievement of the Long-Term Management Direction. As the administrator of the public forest, the Ministry of Natural Resources and Forestry, has a responsibility to ensure that the public investments in forest renewal and other forest management activities are achieving planned objectives and to ensure the sustainability of the forest resource on Crown lands.

Silviculture audits and the latter regeneration assessment plot validation work were not consistently completed on an annual basis. Currently there is no direction provided in the Forest Management Planning Manual, the Forest Information Manual or the 2020 Forest Management Plan that requires the Ministry of Natural Resources and Forestry to implement a silviculture effectiveness quality control program with analysis and reports on conclusions on an annual basis. Associated policies related to standards and directions for Ontario's silviculture monitoring program under Forest Operations and Silviculture Manual (2020 version) have not been completed. Information gaps and/or the lack of standards for auditing/validating the effectiveness of the silviculture program to ensure regeneration of desired species on Crown lands has clear implications for the sustainability of the Crown forest resource.

There are considerable standards in place via the current policy direction, just not a clear standard for auditing or validation of the results by MNRF.

We are concerned that the previous two Independent Forest Audits also determined that the Silviculture Effectiveness Monitoring Program as implemented by the MNRF, was not fully functional as a monitoring/audit program.

**Finding # 4:**

Although work is currently in progress, policies related to standards and directions for Ontario's silviculture monitoring/audit program under the Forest Operations and Silviculture Manual (2020 version) have not been completed by the Ministry of Natural Resources and Forestry.

## Independent Forest Audit – Record of Finding

### Finding # 5

#### **Principle 6:** Monitoring

#### **Criterion:** 6.5 Annual Reports

To determine whether the annual reports have been prepared in accordance with the applicable FMPM. Assess whether these reports accurately reflect the implemented activities and whether they effectively assess progress and any associated implications related to the achievement of management objectives.

#### **Procedure(s):**

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

#### **Background Information and Summary of Evidence:**

Our review of the Annual Reports found inconsistencies and errors in the tables and texts. For example:

- In the audit period \$828,041 in forest renewal expenditures was invoiced to the Forest Renewal Trust under the natural regeneration activity rather than as silvicultural surveys due to a coding error.
- Primary and branch road construction and maintenance invoices were not reconciled with the corresponding Annual Reports resulting in erroneous reporting of road names and construction and maintenance activities.
- Our field investigations found aggregate pits that were improperly mapped or did not exist.

#### **Discussion:**

The errors in fact (or table tabulations) were attributed to staff turnover and “*cutting and pasting*” from previous Annual Reports which allowed initial errors to be carried forward to subsequent Annual Reports. Document quality control measures need to be established and implemented. Annual Reports are public documents and errors and omissions within reports

do not serve to advance public understanding of, or confidence in the forest management process.

**Finding # 5:**

Annual Reports contain errors in tabulation, digital mapping, and inconsistencies in reporting.

## Independent Forest Audit – Record of Finding

### Finding # 6

**Principle 8:** Licence and contractual obligations.

**Criterion:** 8.1.9 Action plan and reporting on progress towards the completion of actions

**Procedure(s):**

Review, including through interviews, the action plan to assess:

- The extent to which the actions completed were effective in addressing the findings.
- The degree to which the approved action plan was implemented.
- Whether the status report appropriately reflects what actually occurred to address the audit findings.

**Background Information and Summary of Evidence:**

Specific actions are planned and documented in an Action Plan to resolve the recommendations/findings of an Independent Forest Audit. The Audit Action Plan for the 2016 Independent Forest Audit was approved by the Regional Director in February 2017. The MNRF was required to report on progress towards the completion of the actions per the requirements of the 2016 Independent Forest Audit Process and Protocol. The submission of an Action Plan Status Report was due in February 2019. Three recommendations of the 2016 Independent Forest Audit were not adequately addressed.

*Recommendation # 3. The MNRF District(s) and EACOM should investigate options to improve the current nuisance beaver management program to ensure the timely and effective implementation of the program vis-a-vis forest industry access roads.*

The Action Plan advocated that a Task Team be assembled to address the issues associated with nuisance beaver management and develop options and/or strategies appropriate to the circumstances of the Spanish Forest. The team was to formalize a “*Protocol for Nuisance Beaver Management*” and examine the results of the implementation of the protocol. Our interviews confirmed that meetings occurred amongst District and EACOM staff, but no formalized approach was adopted. The parties continued to address beaver issues according to the processes in place at the time of the 2016 Independent Forest Audit. We were informed that although acceptable, the continued use of past processes is not ideal.

*Recommendation # 4. The MNRF District Managers in Sudbury, Timmins and Chapleau must ensure that Annual Compliance Operations Plans are prepared.*

Annual Compliance Operations Plans for the entire Spanish Forest (all Districts) were only completed for 3 years of the audit period, as such Forest Management Plan and Compliance Handbook requirements were not fully met. Forest Operations Information Program inspections did occur over the audit period despite the absence of direction from the annual compliance plans.

*Recommendation # 5. The MNRF Districts must ensure that silvicultural effectiveness monitoring (SEM) of forest operations prescriptions is conducted in accordance with FIM direction.*

Reporting and analysis of Silviculture Effectiveness Monitoring tasks is only available for work completed in 2016 and 2017. We were informed that COVID pandemic health and safety protocols and guidance precluded monitoring activities in 2020 and 2021. For monitoring/auditing conducted in 2018, 2019 and 2022 no documented analysis of the results were available. Currently there is no direction provided in the Forest Management Planning Manual, the Forest Information Manual or the 2020 Forest Management Plan that requires the Ministry of Natural Resources and Forestry to implement a silviculture effectiveness quality control program with analysis and reports on conclusions on an annual basis.

The previous two Independent Forest Audits have identified that Silvicultural Effectiveness Monitoring Program requirements have not been consistently met.

**Discussion:**

*The Independent Forest Audit Process and Protocol states that “..Action plans are significant components of the sustainable forest management framework und the CFSA. Action plans address a range of considerations that are integral to sustainable Crown forest management, including instances of non-compliance or inconsistency with applicable Crown Forest Policy Requirements. Action Plans related to forest management in particular forest management units also provide information to assist in the development of subsequent forest management plans...”.*

A failure to develop and implement appropriate action items has potential negative consequences for the successful delivery of a forest management programs as the intent of the Independent Forest Audit Action Plan is to remedy shortcomings and/or non-conformances identified by the audit and improve the effectiveness of forest management activities in meeting forest management plan objectives, the long-term management direction and forest sustainability.

**Finding # 6:**

The Ministry of Natural Resources and Forestry and the Sustainable Licence Holder did not fully address recommendations in the 2016 Independent Forest Audit.



**Appendix 2**  
**Management Objectives Table**

For the period of the audit, two separate FMPMs were used to guide the development of the two FMPs. For the 2020 FMP, a determination was made by the MNRF to group the Spanish Forest within the Great Lakes-St. Lawrence (GLSL) Landscape Guide Region, a deviation from the 2010 FMP which took direction from the Boreal Landscape Guide. The 2010 FMP objectives were not carried over into the 2020 FMP as the Natural Disturbance Pattern Emulation Guide is no longer relevant. However, the chart below assesses the objective's achievement based on the outline of objectives and indicators in the approved 2010 FMP.

<b>OBJECTIVE</b>	<b>AUDITOR ASSESSMENT (ACHIEVED, PARTIALLY ACHIEVED, OR NOT ACHIEVED)</b>	<b>AUDITOR COMMENTS</b>
Management Objective #1:  Move towards a distribution of disturbances that more closely resembles the expected natural disturbance template.	NOT ACHIEVED	The disturbance pattern moved away from the natural disturbance template due to the spatial conditions created from past management activities.
Management Objective #2: To maintain the area of forest cover types that would occur naturally on the Spanish forest, similar to the expected natural landscape dynamics.	ACHIEVED	This objective was met during the planning phase.
Management Objective #3: To provide for a forest age class structure that maintains mature and over-mature ecosystem conditions, similar to the expected natural landscape dynamics.	ACHIEVED	This objective was met during the planning phase. On-going low harvest levels may negatively affect the achievement of this objective should they continue.
Management Objective #4: to maintain wildlife habitat for forest-dependent provincially and locally featured species on the Spanish forest.	ACHIEVED	Harvest allocations were planned in accordance with the wildlife habitat requirement levels projected by SFMM.
Management Objective #5: To maintain 10% to 20% of	NOT APPLICABLE	Achieved at the planning stage. The indicators were

the forest, which has the capability to produce marten habitat, in suitable conditions in core area.		not assessed as the policy direction changed.
Management Objective #6: To provide early successional shoreline forest habitat similar to what would be created during natural disturbance events, during the plan term.	PARTIALLY ACHIEVED	Habitat was created to the extent possible given the low harvest level. Approximately 1,625 ha of shoreline harvest was planned and approximately 352 ha were harvested.
Management Objective #7: To maintain wildlife habitat for forest-dependent, wildlife species at risk with known occurrence on the Spanish forest.	ACHIEVED	Achieved at the planning stage. During the term of the 2010 plan, there were zero non-compliances related to AOC prescriptions related to SAR.  During the audit period an in-compliance rate of 96% was achieved.
Management Objective #8: To ensure that enough roads are in place to allow for effective and efficient forest operations.	ACHIEVED	The target to achieve an average road density of between 0.4 and 0.6 km/km <sup>2</sup> was met. The actual density achieved was 0.57 of km/km <sup>2</sup> . The current target (2020 FMP) is to maintain the road density at this level.
Management Objective #9: To ensure the successful renewal of harvested stands.	ACHIEVED	More area was assessed than harvested, and 100% of the area assessed was successfully regenerated to either the projected forest unit, an acceptable forest unit or another forest unit.
Management Objective #10: To reduce the use of pesticides while maintaining forest productivity.	ACHIEVED	The area treated with herbicide was 55% of the harvested area due to the lower than planned area harvested and the

		judicious selection of sites for treatment. Less area harvested also implied that less area required herbicide treatment which effectively reduced the FMP target level.
Management Objective #11: Implement forest operations in a manner that minimizes conflicts with non-timber resource users and protects non-timber values, in order to provide the opportunity to benefit from the forest.	ACHIEVED	During the term of the 2010 plan, there were zero non-compliances.  A 96% in-compliance rate for forest operations was achieved during the audit period.
Management Objective #12: To provide a continuous, predictable, and economical supply of quality timber products required by wood processing facilities that receive wood from the forest.	PARTIALLY ACHIEVED	The total area harvested during the 2010 FMP was 55% of the available harvest reflecting prevailing market conditions.  During the audit period 50% of the planned harvest area was depleted.
Management Objective #13: To minimize the impact of forest operations on cultural heritage values.	ACHIEVED	During the 2010 plan term there was one incident affecting an area of 1.5 ha. A warning letter was issued. A 99% in-compliance rate was achieved,  There were no incidences of non-compliance associated with cultural heritage values during the audit period.

<p>Management Objective #14: To undertake all forest management operations using sound environmental practices such that any negative environmental impacts are avoided or minimized.</p>	<p>ACHIEVED</p>	<p>During the 2010 FMP there were no reported instances where forest management activities had caused site or environmental damage.</p> <p>This audit identified an issue with road materials entering watercourses (<b>Finding # 1</b>).</p>
<p>Management Objective #15: To ensure the maintenance of riparian zones and water quality and habitat for fisheries resources adjacent to water bodies where forest management activities occur.</p>	<p>PARTIALLY ACHIEVED</p>	<p>During the 2010 FMP term there were eight instances of non-compliance related to operations within riparian zones. The overall in-compliance target of 95% was exceeded.</p> <p>During the audit period a non-compliance rate of 96% was achieved.</p>
<p>Management Objective #16: Maintain the area of managed crown productive forest available for timber production at the highest possible level by minimizing the conversion of managed crown forest area to non-forest land.</p>	<p>ACHIEVED</p>	<p>The target to limit the loss of managed crown productive forest available for timber production to less than 2% was met.</p>
<p>Management Objective #17: to provide opportunities for First Nation involvement in forest management planning activities.</p>	<p>ACHIEVED</p>	<p>For the preparation of the 2010 FMP all eight First Nation communities with known interests in the Spanish Forest were invited to participate in forest management planning.</p> <p>Twelve First Nation communities and MNO Region 3 were consulted for the development of the 2020-2030 FMP. Five FNs</p>

		had representation on the Planning Team.
Management Objective #18: To encourage support for the participation of the local citizens committee in the development of the forest management plan for the Spanish Forest.	ACHIEVED	<p>Attendance at LCC meetings during the FMP process was 78%. One LCC member was appointed to the planning team. The LCC's self-evaluation score was 8.8. This was above the desired target score of &gt;8.</p> <p>For the preparation of the 2020 FMP the LCC self-evaluation resulted in an average rating of 8.0. The desired level was &gt;8.</p>
Management Objective #19: To improve forest operations compliance on the Spanish Forest.	ACHIEVED	<p>During the 2010 FMP term, 1,102 compliance inspections were completed. A 99% in-compliance rate was achieved.</p> <p>In the audit period, 751 inspections were conducted (199 by MNRF and 552 forest industry). with an in-compliance rate of 96%. rate.</p>

## **Appendix 3**

### **Compliance with Contractual Obligations**

Licence Condition	Licence Holder Performance
Payment of Forestry Futures and Ontario Crown charges.	Payments by the SFL holder are up to date.
Wood supply commitments, MOAs, sharing arrangements, special conditions.	<p>Annual wood supply commitments were as follows:</p> <ul style="list-style-type: none"> <li>• Georgia Pacific Northwoods L.P. - Englehart (non-veneer poplar)</li> <li>• Midway Lumber Mills Limited - Thessalon (sawlog red and white pine)</li> <li>• Rockshield Engineered Wood Products ULC – Cochrane (veneer poplar)</li> <li>• Gervais Forest Products Ltd - Falconbridge (sawlog red and white pine)</li> </ul> <p>Commitments were met to the extent possible given prevailing market conditions.</p>
Preparation of FMP, AWS and reports; abiding by the FMP, and all other requirements of the FMPM and CFSA.	Reports were prepared, FMPM production and reporting schedules were substantially met. Tabulation and textual errors were noted in some ARs ( <b>Finding # 5</b> ).
Conduct inventories, surveys, tests and studies; provision and collection of information in accordance with FIM.	Inventories and surveys were completed as required.
Wasteful practices not to be committed.	No wasteful practices were reported in FOIP or observed during our field audit.
Natural disturbance and salvage SFL conditions must be followed.	No salvage harvest operations were required or undertaken.
Protection of the licence area from pest damage, participation in pest control programs.	No pest management other than monitoring and reporting activities occurred during the audit period. Pest control measures are scheduled for 2023 to address a Spruce Budworm infestation.
Withdrawals from licence area.	There is no documentation of land withdrawal in Appendix A or G of the SFL.



Audit Action Plan and progress towards the completion of actions as reported in annual reports or status reports prepared under previous versions of the IFAPP.	An Action plan and an Action Plan Status Report were prepared and submitted in accordance with the requirements of IFAPP. Some recommendations have not been fully addressed ( <b>Finding # 6</b> ).
Payment of forest renewal charges to Forest Renewal Trust (FRT).	Payments are up to date.
Forest Renewal Trust eligible silviculture work.	Work invoiced under the program was completed as invoiced.
Forest Renewal Trust, forest renewal charge analysis.	EACOM and the MNRF completed annual analyses of renewal rates for five of the six years.  Due to MNRF staff turnover, the 2016/17 forest renewal charge analysis could not be retrieved. No finding is provided as the minimum balance was managed and the 2018/2019 shortfall in the FRT was addressed.
Forest Renewal Trust account minimum balance.	The minimum balance of \$3,338,600 was maintained for six of the seven years of the audit period (in 2018/19 the account was short approximately \$525,000). As of March 31, 2023, there is a surplus in the account.
Silviculture standards and assessment program.	An effective silviculture assessment program was implemented.
First Nations and Métis opportunities.	FMPM requirements for consultation during plan development were met. Five FNs were represented on the 2020-2030 planning team. First Nations and Métis individuals are employed within the forest sector.
Preparation of a compliance plan.	Compliance plans were prepared which met Forest Compliance Handbook requirements.
Internal compliance prevention/education program.	EACOM has an EMS which documents a full range of educational and issue specific training programs.

<p>Compliance inspections and reporting; compliance with compliance plan.</p>	<p>An effective compliance program was implemented. Compliance planning and timelines for the submission of FOIPs were met. Not all FOIP report data fields were fully completed (<b>Finding # 3</b>).</p>
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**Appendix 4**  
**Audit Process**

The IFA consisted of the following elements:

**Risk Assessment:** A risk assessment was completed in April 2023 to determine which IFAPP optional procedures would be audited. The risk assessment report was submitted to the Forestry Futures Trust Committee and MNRF Divisional Support Branch for review and approval.

**Audit Plan:** An audit plan describing the schedule of audit activities, audit team members, audit participants and the auditing methods was prepared and submitted to EACOM, the MNRF Northeastern Region Office and the Sudbury District Office, the Forestry Futures Trust Committee, MNRF Divisional Support Branch and the LCC Chair.

**Public Notices:** A public notice advising of the audit and soliciting public input into the audit process was placed on a local media platform for 60 days (*Sudbury.com*) in June. No public comments were received. Three tourism operators were interviewed.

All Indigenous communities with an interest in the SF were contacted by mail and invited to participate and/or express their views. Indigenous community leaders/consultation staff received follow-up calls and/or e-mails. Representatives from three FNs were interviewed. Two representatives from one FN community attended one day of the field audit.

All LCC members received an email explaining the audit process with an invitation to participate. Four LCC members were interviewed and an LCC member participated during one day of the field audit.

Harvest contractors were invited by email to participate in the field audit and/or provide comments to the audit firm. No comments were received and there was no participation by contractors in the field audit.

**Field Site Selection:** Field sample sites were selected randomly by the Lead Auditor in April/May. Sites were selected in accordance with the guidance provided in the IFAPP (e.g., operating year, contractor, geography, forest management activity, species treated or renewed, and access) using GIS shapefiles provided by EACOM. The sample site selections were reviewed by EACOM and MNRF representatives in May 2023. No requests to visit additional sites were received.

**Site Audit:** Two audit teams spent three days each conducting field site inspections in July. A helicopter reconnaissance was conducted on July 19<sup>th</sup>. The field audit achieved a minimum of a 10% sample of the forest management activities that occurred during the audit period (see the IFA Field Sampling Intensity on the SF below). A sample of the areas invoiced in the "*Forest Renewal Trust Specified Procedures Report*" (SPR) was also inspected to verify work was performed.

The Closing Meeting was held on August 2<sup>nd</sup>, 2023.

Not every hectare of the area sampled is surveyed, as this is not feasible. Individual sites are selected to represent a primary activity (e.g., harvesting, site preparation) but all associated activities that occurred on the site are assessed and reported in the sample table below. The audit team also inspected the application of Areas of Concern prescriptions, forestry aggregate pits (including site rehabilitation) and water crossing installations and removals.

**Report:** This report provides a description of the audit process and a discussion of audit findings and conclusions.

#### Procedures Audited by Risk Category

Principle	Optional – Applicable (#)	Optional – Selected (#)	Optional - % Audited	Mandatory Audited (#) (100% Audited)	Comments
1. Commitment	N/A	N/A	N/A	N/A	The' SFI forest management certification met IFAPP Principle 1 criterion.
2. Public Consultation and FN/Métis Community Involvement& Consultation	5	3	60	0	Issue Resolution Criterions were examined because there were several issue resolution requests associated with the development of the 2020-2030 FMP and remote tourism concerns.
3. Forest Management Planning	43	1	2	41	Auditors assessed the planned implementation of the management strategy and determined if FMP forecasts are consistent with the proposed management strategy as there was an inability to achieve planned hardwood harvest levels due to marketability of hardwood species.
4. Plan Assessment & Implementation	4	2	50	9	The previous IFA identified issues with the efficacy of the chemical tending program including damage

					to crop trees arising from chemical herbicide.
5. System Support	N/A	N/A	N/A	N/A	The SFI forest management certification met IFAPP Principle 5 criterion.
6. Monitoring	10	3	30	9	Programs were reviewed to ensure that data will be available for the reporting on FMP measurable indicators of forest sustainability.
7. Achievement of Management Objectives and Forest Sustainability	0	0	0	14	The 2010-20 FMP objectives were assessed, as well the 2020-30 FMP objectives were reviewed and assessed as appropriate.
8. Contractual Obligations	6	1	17	28	Some contractual obligations were not met in full, resulting in <b>Findings #3, #5, and #6</b> .

#### IFA Field Sampling Intensity on the Spanish Forest (2016-2023)

ACTIVITY	TOTAL AREA	PLANNED SAMPLE AREA (Ha)	ACTUAL AREA SAMPLED (Ha)	NO. OF SITES VISITED	PERCENT SAMPLED %
Harvest	42,258	4,225	5,325	40	13
Renewal - Plant	18,149	1,814	1,963	30	11
Renewal - Seed	10,262	1,026	1,044	10	10
Renewal - Natural	18,149	1,814	1,966	26	11
Site Preparation - Mech	21,052	2,105	3,015	33	14
Site Preparation - Chem	1,626	162	234	3	14
Tending	28,910	2,891	2,960	43	10
FTG	35,564	3,949	4,538	12	13
Specified Procedures	8,195	819	977	13	12
No. Water Crossings	131	20	20	20	12
No. Forestry Aggregate Pits	182	21	21	21	12
Pre-Commercial Thinning	2,090	414	395	1	19

Source: EACOM Forestry Shapefiles

## **Summary of Consultation and Input to the Audit**

### **Public Stakeholders**

No public comments were received. Interviews with tourism operators indicated the following concerns:

- Tourist operators were concerned that the value of their industry was not well understood.
- Concerns with the use of herbicides.
- Concerns about the effect of harvesting on some wildlife species.
- Access concerns that included a desire for more access or less access.
- The potential effects of harvesting on climate change.

### **MNRF**

MNRF staff comments expressed to the audit team were concerns with:

- General satisfaction with the working relationship between EACOM and the MNRF.
- Satisfaction with the functioning of the LCC.

### **EACOM**

EACOM staff provided the following comments to the audit team:

- General satisfaction with the relationship between the SFL and MNRF.
- Satisfaction with the functioning of the LCC.
- Some frustration with lack of standardization among the three MNRF Districts on several issues (e.g., nuisance beaver).

### **LCC Members**

LCC members provided the following comments to the audit team:

- Pleased with the assistance and involvement of MNRF and EACOM.
- Overall satisfaction with the functioning of the LCC.
- Believe that the LCC added value to the forest management process.
- Concern with the use of herbicides and a desire to see the use of other vegetation control alternatives explored.
- Different views with respect to more or less road access but a unanimous view that when roads are closed the closure needs to be better enforced.
- Concern about the vulnerability of moose to hunting when roads initially access Moose Emphasis Areas.
- Concern that the value and importance of tourism and recreational use is not valued as highly as forest harvesting.

### First Nations Communities

- Desire for increased employment opportunities.
- Concern with the use of herbicides.
- Concern about access restrictions and road closures
- A lack of capacity to properly review and provide input to forestry decisions.
- Confusion with respect to the purpose of the IFA process.

### Forest Resource Licence Holders

No comments were received.



**Appendix 5**  
**List of Acronyms Used**

ABIR	Aboriginal Background Information Report
AHA	Available Harvest Area
AOC	Area of Concern
AR	Annual Report
AWS	Annual Work Schedule
B.A.	Bachelor of Arts
B.Sc.F.	Bachelor of Science in Forestry
BLG	Boreal Landscape Guide
CCA	Customized Consultation Agreement
CFSA	Crown Forest Sustainability Act
CRO	Conditions on Regular Operations
EMA	Enhanced Management Area
ESA	Endangered Species Act
FAP	Forestry Aggregate Pit
FFTC	Forestry Futures Trust Committee
FFTF	Forestry Futures Trust Fund
FIM	Forest Information Manual
FMP	Forest Management Plan
FMPM	Forest Management Planning Manual
FN	First Nation
FOIP	Forest Operations Information Program
FOP	Forest Operations Prescription
FOSM	Forest Operations and Silviculture Manual
FRT	Forest Renewal Trust
FRL	Forest Resource Licence(e)
FSC	Forest Stewardship Council

FTG	Free-to-Grow
FU	Forest Unit
GLSLG	Great Lakes-St. Lawrence Landscape Guide
Ha	Hectare(s)
IFA	Independent Forest Audit
IFAPP	Independent Forest Audit Process and Protocol
KM	Kilometer
LCC	Local Citizens Committee
LMCS	Low Market Condition Strategy
LTMD	Long-Term Management Direction
MIST	Modeling and Inventory Support Tool
MNRF	Ministry of Natural Resources and Forestry
m <sup>3</sup>	Cubic Meters
M.Sc.F.	Master of Science in Forestry
NDPEG	Natural Disturbance Pattern Emulation Guide
RAP	Regeneration Assessment Program
R.P.F.	Registered Professional Forester
RUMS	Road Use Management Strategies
SAR	Species at Risk
SEM	Silviculture Effectiveness Monitoring
SEI	Silviculture Enhancement Initiative
SFL	Sustainable Forestry Licence
SF	Spanish Forest
SFMM	Sustainable Forest Management Model
SGR	Silvicultural Ground Rule
SMZ	Strategic Management Zone

SIP	Site Preparation
SPR	Specified Procedures Report
SRNV	Simulated Range of Natural Variation
SUAOC	Shoreline Use Area of Concern
VS	Versus

**Appendix 6**  
**Audit Team Members and Qualifications**

Name	Role	Responsibilities	Credentials
<p><b>Mr. Bruce Byford</b> <b>R.P.F.</b> President Arbex Forest Resource Consultants Ltd.</p>	<p>Lead Auditor Forest Management Planning Harvest &amp; Silviculture Auditor</p>	<p>Audit Management &amp; coordination. Liaison with MNRF, EACOM and FFTC. Review documentation related to forest management planning and review and inspect silviculture practices. Determination of the sustainability component.</p>	<p>B.Sc.F. ISO 14001 Lead Auditor Training. FSC Assessor Training. 44 years of consulting experience in Ontario in forest management planning, operations, and resource inventory. Previous work on 47 IFA audits with lead auditor responsibility on all IFAs. 27 FSC certification assessments with lead audit responsibilities on seven.</p>
<p><b>Mr. Al Stewart</b> Arbex Senior Associate</p>	<p>Public Participation including First Nations &amp; LCC Participation in Forest Management Process Forest Compliance</p>	<p>Review documentation and practices related to forest management planning &amp; public participation/consultation processes. Review &amp; inspect AOC documentation &amp; practices. Review of operational compliance related to AOC implementation. Determination of the sustainability component.</p>	<p>B.Sc. (Agriculture) ISO 14001 Lead Auditor Training. FSC assessor training. 52 years of experience in natural resource management planning, field operations, policy development, auditing and working with First Nation communities. Previous work experience on 47 IFA audits.</p>
<p><b>Riet Verheggen</b> <b>R.P.F.</b> Arbex Senior Associate</p>	<p>Silviculture Contractual Compliance Assessment of Achievement of Forest Management Objectives</p>	<p>Determination of the sustainability component. Review and inspect silvicultural practices and related documentation. Review and inspect documents related to contractual compliance. Determination of Objective Achievement.</p>	<p>H.B.Sc.F. 33 years of experience in natural resource management, policy development and auditing. Previous work experience on 10 IFA audits.</p>
<p><b>Jon Peroff</b> Arbex Associate</p>	<p>Harvest Compliance</p>	<p>Review of the planning and delivery of the operational compliance program</p>	<p>Forest Technologist Certified FOIP Compliance Inspector.</p>

	Road Construction and Maintenance Forestry Aggregate Pits		31 years of experience working in the forest industry in various capacities such as field operations and management planning. Previous work experience on 3 IFA audits.
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