

# **Trout Lake Forest**



**Independent Forest Audit  
April 1, 2009 – March 31, 2015**

**FINAL REPORT**

**ArborVitae Environmental  
Services Ltd.**

**Oct. 26, 2015**



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## 1.0 EXECUTIVE SUMMARY

This audit assessed the management of the Trout Lake Forest during the period April 1, 2009 to March 31, 2015, which encompasses all five years of the first phase of the 2009-2019 FMP and the first year of operations from the second five-year term. The audit period was one year longer than the usual five-year term; the extension was intended to better position the timing of the audit within the forest planning cycle. This Independent Forest Audit (IFA) reviewed the performance of both the SFL-holder, Domtar Inc., and the Ministry of Natural Resources and Forestry (MNR). The audit was carried out by a team of four professionals, each with a wealth of experience in forest management.

The auditors viewed a sample of between 14 and 44% of all major types of operations undertaken during the audit period. In addition to reviewing operations, the audit scope included the process of developing Phase II of the FMP (Planned Operations), reporting, monitoring, consultation and compliance with licence conditions.

The economic circumstances at the start of the audit period were very poor as a number of mills in northwestern Ontario that had previously received wood from the Forest were severely affected by the global economic slowdown, either shutting entirely or significantly reducing capacity. Domtar's mill in Dryden closed its two paper-making machines in 2009, ending the use of any hardwood species at the mill. Only recently has the situation improved as Domtar taking is more wood at its Dryden mill and EACOM's Ear Falls sawmill restarted operations in July of 2014 after having been closed since 2009.

The most obvious manner in which the global economic slowdown affected the forest was in the low level of harvest compared to what was planned. Only 26% of the planned volume of wood was harvested during the first five years of the FMP period. The shortfall resulted in the unharvested areas from Phase I of the FMP remaining available during Phase II, with the result being that anticipated harvest levels for the second phase of the FMP are, in the opinion of the audit team, unrealistically optimistic in that they exceed by more than 2.5 times the highest amount of harvest which has ever occurred on the forest and by six times the harvest of the first five years of the FMP. This raises the question of the accuracy of the plan, and gives rise to one of this audit's most challenging and important recommendations – that Corporate MNR consider revising the modeling process used in forest management planning so that more realistic objectives for the forest can be identified.

In addition to the recommendation described above, other notable recommendations include:

- MNR District in collaboration with Domtar shall engage the local tourism outfitters in efforts to develop a long-term strategy for the coexistence of tourism and forest management industries on the Trout Lake Forest;
- Corporate MNR shall consult with the Métis Nation of Ontario regarding the asserted Métis rights on the Trout Lake Forest and attempt to reach a common understanding regarding those rights.
- Corporate MNR and Domtar shall work to increase the use of wood from the Trout Lake Forest, including by more actively marketing allocated wood that is not being harvested to parties that may not have traditionally operated on the Forest.

While there are no dominant themes to emerge from this audit, it is notable that five of the 13 recommendations identified are directed in full or in part to Corporate MNR. This

portrays the fact that some of the needs and opportunities to address forest management issues on the Trout Lake Forest also have broader implications for management of the Province's forests. Another factor contributing to the high proportion of recommendations directed to Corporate MNRF is that recent changes related to MNRF's transformation are still in need of some fine-tuning to provide consistent direction and support to forest managers.

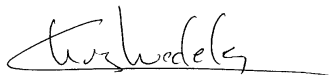
Neither the number nor nature of recommendations made in this audit bring concerns regarding sustainability to the fore. In fact the audit team was very impressed with the quality of forest management.

A number of factors support a positive conclusion for this audit:

- Quality of Operations: The Company's operations were well implemented. The observations made by the audit team in the field, discussions with Company and MNRF staff, and the excellent compliance record all contributed to a positive evaluation of operations.
- Harvest Level – notwithstanding concerns related to the differences between planned and actual harvest, the low level of harvest on the forest was well below that which can be sustained.
- Appropriate Yield Projections - The proportions of planned versus actual harvest were similar for volume as well as area metrics, suggesting that the yields used in the FMP are generally accurate.
- Level of Silviculture - All silvicultural activities were implemented at rates proportionately higher than the level of harvesting.
- Quality of Silviculture - The high rates of both regeneration success and silvicultural success indicate good effectiveness of silvicultural treatments.
- Protection of Values – Review of the AOC prescriptions found them to be appropriate for the values they are intended to protect and implementation of the prescriptions was excellent
- Compliance performance – A very high number of compliance inspections were carried out on the forest and found a very good compliance rate.
- Planning – The requirements related to planning were generally well met.
- LCC – the Local Citizen's Committee is well coordinated, functions well and provides good-quality advice to the MNRF.

The audit team concludes that the Trout Lake Forest was managed sustainably during the review period and recommends that the MNRF extend the term of the Sustainable Forest Licence held by Domtar Inc. for a further five years.

Chris Wedeles



Lead Auditor

## 2.0 TABLE OF AUDIT RECOMMENDATIONS

A description of the background information, discussion and conclusions leading to the audit recommendations is found in Appendix 1. Recommendation #4 is carried forward from the previous Independent Forest Audit.

<b>Recommendation on Licence Extension</b>
The audit team concludes that management of the Trout Lake Forest was generally in compliance with the legislation, regulations and policies that were in effect during the term covered by the audit, and the Forest was managed in compliance with the terms and conditions of the Sustainable Forest Licence held by Domtar Inc. Forest sustainability is being achieved, as assessed through the Independent Forest Audit Process and Protocol. The audit team recommends the Minister extend the term Sustainable Forest Licence 54261 for a further five years.
<b>Recommendations Directed to the SFL Holder/MNRF District</b>
1. MNRF District in collaboration with Domtar shall engage the local tourism outfitters in efforts to develop a long-term strategy for the coexistence of tourism and forest management industries on the Trout Lake Forest.
3. The Company shall review the Phase II plan text regarding clearcut size and Table FMP-12 and correct any errors in the text and table and amend the plan as necessary.
4. Domtar must ensure that a more thorough analysis and discussion is provided in the next FMP regarding any age-class substitution or under-allocation. The analysis and discussion should focus on the affect on plan objectives, future wildlife habitat and sustainability.
5. District MNRF shall ensure that: amendment documentation includes all approval pages, all amendments are posted to the E-FMP website, LCC input into the amendment categorization and approval is documented with the amendment package, and a complete amendment summary is maintained and available on the e-FMP website as per the requirements of the 2009 FMPM.
6. The MNRF District and the Company shall ensure that all signed approval pages for relevant planning documents are kept on file in their respective offices.
9. MNRF shall complete inspections of the roads that Domtar has identified as decommissioned and respond to Domtar's request for formal acknowledgement that the decommissioned roads are no longer the Company's responsibility.
11. With the support of corporate MNRF, the MNRF District and the Company shall consider making the appropriate adjustments to the annual compliance plans to adopt the new risk management approach to compliance planning based on risk analysis and management strategies.
12. MNRF shall collate and summarize SEM survey information related to free-to-grow assessments conducted both before and during the audit periods so that its value in supporting future planning requirements is optimized.
<b>Recommendations Directed to Regional or Corporate MNRF</b>
2. Corporate MNRF shall consult with the Métis Nation of Ontario regarding the asserted Métis rights on the Trout Lake Forest and attempt to reach a common understanding regarding those rights.
7. The Forest Industry Division of MNRF and Domtar shall seek to increase the use of wood from the Trout Lake Forest, including making unused wood available to users who have not been traditional users of wood from the Forest.
8. Corporate MNRF shall explore the value of engaging in a broader modeling exercise during forest management planning that includes scenarios based on maximum possible harvest rates, recent historic rates, and probable future rates to strengthen the basis for identifying objectives and planning for the future forest.

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|--|
| 10. Corporate MNRF shall strongly consider retaining an active role in assisting MNRF Districts and companies in training compliance inspectors.   |
| 13. Until appropriate standards, field methods and corresponding technical specifications for silvicultural effectiveness monitoring are developed, Corporate MNRF shall provide support to Red Lake District to ensure that an appropriate program for silvicultural effectiveness monitoring is implemented for the Trout Lake Forest. |



## 3.0 INTRODUCTION

### 3.1 AUDIT PROCESS AND CONTEXT

The Crown Forest Sustainability Act (CFSA), and one of its Regulations (160/04), directs the Minister of Natural Resources and Forestry (MNR) to conduct regular audits of each of the province's managed forests. These audits assess compliance with the CFSA, the Forest Management Planning Manual (FMP), the forest management plan (FMP) and whether the licensee has complied with the terms and conditions of its Sustainable Forest Licence (SFL). The effectiveness of operations in meeting plan objectives and improvements made as a result of prior IFA results are also to be evaluated. The guiding document which describes the precise manner in which audits are to be carried out is the Independent Forest Audit Process and Protocol (IFAPP), which is produced by the MNR (available online through the MNR web site (<http://www.ontario.ca/ministry-natural-resources-and-forestry>)). Consistent with the CFSA, the IFAPP requires the audit team to provide a conclusion regarding the sustainability of the Crown forest and, where applicable, a recommendation regarding extension of the term of the SFL.

An important characteristic of the IFAs is that they review the performance of both the MNR and the SFL-holder, which is Domtar Inc. (referred to in this report as Domtar or 'the Company'). The MNR has many responsibilities related to forest management, including review and approval of key documents (including the FMP, annual reports, annual work schedules, etc.), overseeing management of non-timber resources, undertaking compliance inspections, etc. In other words, the activities and accomplishments of both parties with forest management responsibilities are covered by the audit.

This audit covers the period April 1, 2009 – March 31, 2015 which encompasses all five years of the first phase of the 2009-2019 FMP and the first year of operations from the second five-year term. The audit examined all forest operations that occurred within that period as well as the process of developing Phase II of the FMP. ArborVitae Environmental Services Ltd. (AVES) undertook this IFA using a four-person team. Profiles of the team members, their qualifications and responsibilities, are provided in Appendix 6.

### 3.2 MANAGEMENT UNIT DESCRIPTION

The Trout Lake Forest is located in northwestern Ontario close to the northern boundary of commercial forest management in the province (Figure 1), in MNR's Red Lake District. The communities of Ear Falls and Red Lake are the main settlements in the vicinity of the Forest. Aboriginal communities that have an interest in the Forest include Lac Seul First Nation, Wabauskang First Nation, Cat Lake First Nation, Slate Falls First Nation, Pikangikum First Nation and the Northwest Ontario Métis Nation of Ontario. No First Nation communities are located within the Forest's boundaries.

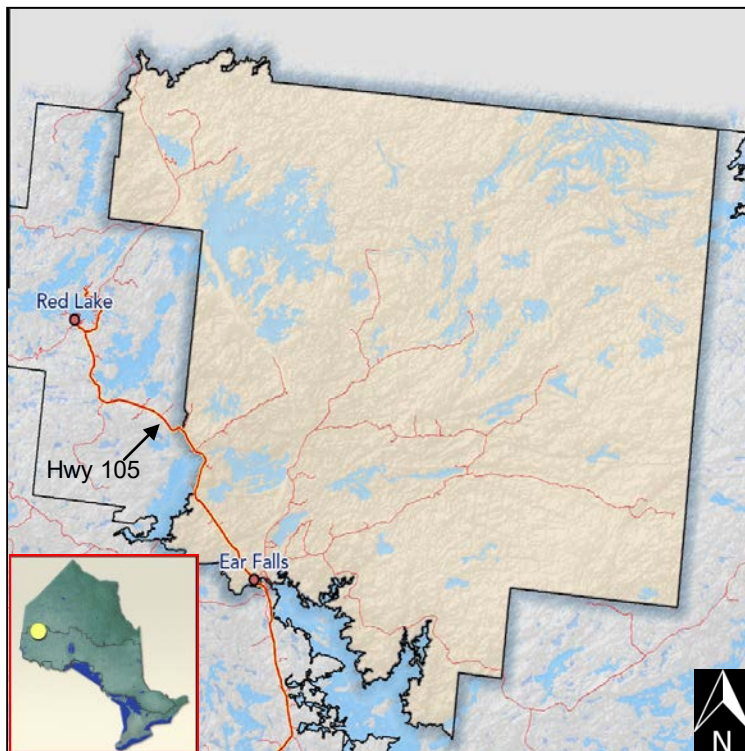
Table 1 provides an area description of the Forest. At just over 1 million ha in area, the Forest is about average in size for SFL areas in Ontario. The Trout Lake Forest has a relatively high proportion of fertile land, with 81 % of the area of managed Crown land classified as productive and only 6% as non-productive. With 15% of the total area of the Forest in water, lakes and rivers comprise a significant portion of the forest area. There is very little patent (private) land on the forest – just more than 4,100 ha.

**Table 1.** Area description of the Trout Lake Forest (From Table FMP-1, Phase I 2009 FMP)

Land Class	All Land Ownerships <sup>a</sup> (ha)	Managed Crown Land (ha)
Water	155,107	114,396
Non-forested	5,700	5,215
Non-productive Forest <sup>b</sup>	63,619	57,440
Productive Forest <sup>c</sup>	806,831	754,282
Total	1,031,257	931,333

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

With a relatively simple structure, the forest type distribution on the Trout Lake Forest is typical of northern boreal forests. There are only a few tree species dominating the flora. Black spruce, jack pine, balsam fir, trembling aspen and white birch are the primary tree species, with less common species such as white spruce, balsam poplar, eastern white cedar, black ash, tamarack and even white pine and red pine occurring as scattered stands, minor components of stands, or as individual trees.



**Figure 1.** Map of the Trout Lake Forest showing its location in Ontario

Logging operations on the Forest extend as far back as the 1930's, although industrial-scale operations didn't commence in earnest until the 1960's.

Figure 2 shows the age-class distribution of the forest by forest units. There is a notable amount of young forest (<20 yrs) in most forest units and considerable old forest (> 80 yrs) in the spruce-dominated units.

The Forest is of great value to the local communities, contributing immeasurably to their identity. Virtually all residents use the forest in a way that is important to them.

The Trout Lake Forest is used extensively for tourism; the 2009 Phase I FMP reports that there are 38 resource-based tourism establishments on the Forest, including a variety of lodges, outposts, camps and resorts. In addition, there are four designated MNR public access points, and a variety of boat caches, including 150 MNR-issued commercial boat caches (which are normally associated with the tourism industry). Domtar has offered to negotiate Resource Stewardship Agreements (RSA's) with the tourism outfitters on the Forest, and there are

presently two in place, as well as a Memorandum of Understanding (MOU) with another operation.

Like all Ontario forests, the Trout Lake Forest supports a variety of wildlife species that depend on a mosaic of habitats. Many of the species common to the Forest are highly valued for providing recreational opportunities such as hunting and viewing, and commercial opportunities such as trapping. Moose and black bear are the main big game species in the area. However, as discussed in Section 4.3, forest management is most strongly influenced by Woodland Caribou, which is classified as threatened by the

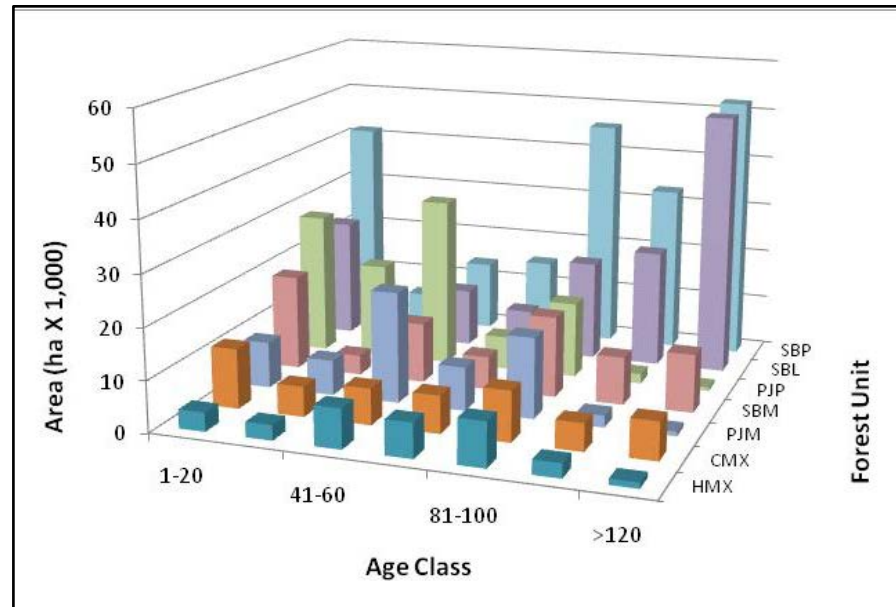
Committee on the Status of Endangered Wildlife in Canada (COSEWIC). The Trout Lake Forest is comprised of portions of three different caribou ranges – the Berens, Sydney and Churchill ranges; about 70% of the Forest occurs in the Churchill range. The Phase I FMP states that there are approximately 150 caribou on the Forest, although it notes the estimate with a considerable amount of uncertainty.

The 2009 FMP notes that other wildlife species at risk known or believed to occur on the Forest include bald eagle, golden eagle wolverine, cougar, short-eared owl, rusty blackbird, yellow rail, olive-sided flycatcher, common nighthawk and Canada warbler.

### 3.3 CURRENT ISSUES

#### 3.3.1 Low Level of Harvest

As is described in considerable detail in a number of places in this report, the level of harvest for the forest was considerably lower than that planned. While this does not raise concerns regarding sustainability, the fact that the planned harvest for the next phase of the FMP is even considerably higher brings into question the validity of the projections and the utility of identifying objectives which are very unlikely to be achieved. The percent of area harvested compared to that planned for the forest was 75% for the 1994 FMP and had declined in each successive plan period, to a low of 28% for the most recent five-year period. Planning of on-going harvest levels similar to those planned for the last five years seems unrealistically optimistic. This issue has repercussions not just related to sound planning, but for projected levels of caribou habitat and is the subject of a key recommendation in this audit.



**Figure 2.** Age class distribution of the Forest. See Glossary for Forest Unit abbreviations.

### **3.3.2 Recommendations directed at Corporate MNRF**

This audit found a number of issues on the forest which are symptomatic of the need for Corporate MNRF to address some broader issues which likely affect other management units as well as the Trout Lake Forest. Another factor contributing to the high proportion of recommendations directed to Corporate MNRF is that recent changes related to MNRF's Transformation Initiative are still in need of some fine-tuning to provide consistent direction and support to forest managers. Important issues identified in recommendations directed at Corporate MNRF include: the need to consult with the Métis peoples regarding their interests in the Forest, addressing the need to increase use of wood on the Forest, and retaining a role in compliance training.

## **3.4 SUMMARY OF CONSULTATION AND INPUT TO AUDIT**

Extensive input was provided to the audit by both Domtar and MNRF, covering all of the topics discussed in this report. The audit team solicited input from representatives of all First Nations in the vicinity of the Forest, but very little input was received. Métis Nation of Ontario was asked to provide input and did so. Most members of the Local Citizens Committee were also interviewed. The audit team placed notices in two local newspapers inviting comment on the audit – two responses were received. An overview of the key points made by interviewees and input providers can be found in Appendix 4.

## **4.0 AUDIT FINDINGS**

### **4.1 COMMITMENT**

Because the Trout Lake Forest was certified by either the Canadian Standards Association or the Sustainable Forestry Initiative during portions of the audit period this principle is considered by the IFAPP to have been met and was not assessed during this audit.

### **4.2 PUBLIC CONSULTATION AND ABORIGINAL INVOLVEMENT**

#### **4.2.1 Public Consultation Process**

The primary public consultation process during the audit period was associated with the development of the Phase II Planned Operations. Stage I Information Centres were held in Red Lake and Ear Falls, and in the Slate Falls, Cat Lake, Wabauskang and Lac Seul Aboriginal communities. Stage 2 Information Centre displays were held in Red Lake, Ear Falls and Lac Seul.

Both MNRF and Domtar retain well-organized records of their efforts at public consultation. Their records indicate approximately 100 instances of correspondence between individuals and either the Company or MNRF querying and responding to elements of Phase II of the FMP. More than half of the instances of correspondence involved individuals in the tourism industry. One concern raised by a tourism operator was taken to issue resolution. The issue proceeded to the Regional Director (RD) level, and although the individual involved was not satisfied with the decision and solutions offered by the MNRF RD, the concern was not pursued further. Review of the correspondence records and other information related to the issue resolution

process established that the MNRF abided by the prescribed process, and actually demonstrated considerable flexibility regarding the timing requirements. However, the difference of opinion regarding appropriate access management measures which led to the issue resolution request is the latest in a history of discord between members of the tourism industry and the forest management planning practice dating back at least to the 1999-2004 FMP. The RSA process has been effective in leading to agreement between Domtar and some remote tourism outfitters, often resulting in specially tailored AOC's. However, some key tourism operators on the Forest evidently do not see RSA's as providing effective solutions to their concerns, which leads to **Recommendation # 1**.

#### **4.2.2 Local Citizens Committee**

The Local Citizens Committee (LCC), referred to as the Red Lake District Resource Management Advisory Committee (RLDRMAC), provides input into management of four forests whose boundaries fall at least partly within the Red Lake District (Trout Lake Forest, Red Lake Forest, Whiskey Jack Forest and White Feather Forest) However, the Trout Lake Forest occupies most of RLDRMAC's attention by virtue of its size and the extent of operations that occur within the Red Lake District. The audit team interviewed most members of the committee, hosted a committee meeting and reviewed meeting minutes, participation records and other documentation. This IFA found the committee to be an efficient and effective means for providing advice to the MNRF. The committee is well run, has strong leadership and a balance of local interests. The committee benefits from the open participation of its members. It is noteworthy that the MNRF District Manager attends most LCC meetings, a practice which is appreciated by the committee members.

The main concern that the audit team has is that Domtar is no longer a member of the committee. The company's representation on the committee was lost when its designated member left the company and the industry representative role is now being filled by an individual who does not represent Domtar. Given that the Trout Lake Forest is the focus of the committee's concern, it seems an obvious gap that Domtar is not a member. Both Domtar and the MNRF stated that they wish the company to resume its position as a member on the committee, but in spite of many months' absence, the situation has not changed. The Audit Team encourages the MNRF to make a definitive effort to resolve this and provide a seat on the committee to Domtar.

An item raised in discussion by LCC members is the dearth of training opportunities. Some members suggested that because the committee as a whole seems well-versed in forest management there may be a perception that little training is required, however the terminology, planning process and concepts are not well understood by all committee members. The audit team encourages the MNRF to consult the LCC regarding the provision of more training opportunities.

The audit team notes the absence of Aboriginal representation on the LCC is conspicuous. However, following discussions with LCC members, the MNRF and the Company it is apparent that MNRF has, and continues to make concerted efforts to encourage Aboriginal participation on the LCC. The audit team encourages the MNRF to continue these efforts.

The previous IFA identified issues with the currency of the LCC Terms of Reference and the quality of the committee's meeting minutes. Both of these issues have been resolved; the TOR have been brought up-to-date and the meeting minutes were found to be of good quality.

### **4.2.3 Aboriginal Participation**

During the development of Phase II of the FMP, the District MNRF made a concerted effort to involve the five First Nations with an interest in the Forest. Of these, there was little involvement on the part of the Pikangikum or Slate Falls First Nations. Lac Seul First Nation was perhaps the most active participant, with there being numerous phone calls and e-mails between MNRF and the First Nation representatives. An Information Open House to review planned operations was held at the Lac Seul community on June 11, 2013, with approximately 25 attendees, including the Chief and most of Council. A second open house was held in the community on July 8, 2014.

Wabauskang First Nation's involvement was of a similar degree. There were five meetings during the 32-month long process, including an Open House at the community on January 17, 2013. Cat Lake First Nation had a more moderate level of participation, with there being two in-person meetings. An effort to organize a community meeting was unsuccessful. Cat Lake did name a representative for the Planning Team but he attended only one meeting by teleconference.

The audit team's efforts to obtain input from the First Nations yielded only one substantive response (see Appendix 4), which may reflect a First Nation's perspective that the relationship between Domtar and the First Nation is not well developed. The audit team notes that since the audit period ended Domtar has begun to approach First Nations as the start of an initiative to develop more active relationships.

It is a different story with respect to the Métis. The 2011 Red Lake District Condition 34 report noted that two community councils of the Northwest Métis Nation of Ontario asserted rights on the FMU. The 2004 Ontario-wide harvesting agreement between the Métis Nation of Ontario (MNO) and the provincial government also specified that Métis had harvesting rights on a substantial part of the Forest.

However, within MNRF, questions arose regarding Métis rights on the Forest and on May 4, 2012, a letter was sent inviting Métis participation in Phase II planning (but not as an Aboriginal community) and expressing an interest in receiving information regarding Métis interests in this planning process. No response was received; at some time in 2012 or 2013 it appears, at some level within MNRF the position was taken that no Métis rights had been credibly asserted on the Trout Lake Forest.

In any event, MNO has informed the audit team that Métis certainly do have an interest (and asserted rights) in the Trout Lake Forest, which overlaps the regional rights-bearing Métis community's traditional territories. MNO further stated that it completely rejects MNRF's approach in unilaterally deciding that the Métis community does not have rights in this area. This situation needs to be resolved and leads to **Recommendation # 2**.

## **4.3 FOREST MANAGEMENT PLANNING**

### **4.3.1 Planning Team Activities**

Planning team activities during the audit period included preparing the Phase II operating plan (April 1, 2014 – March 31, 2019), six Annual Work Schedules (2010-11 to 2015-16) and six Annual Reports (2008-09 to 2013-14). All planning products were of good quality and were submitted and approved on time with the exception of the one-year delay in the Phase II

operating plan and a four-month delay in the approval of the 2010-11 annual report. Comprehensive MNR reviews were completed.

The main challenges affecting the Phase II operating plan were:

- completing the Year 3 Annual Report including determining the impact of Phase I harvest operations and Red Lake Fire #84 on the caribou mosaic and Long Term Management Direction (LTMD) so Phase II planning could proceed;
- developing new AOCs and CROs according to the March 2010 Stand and Site Guide (SSG);
- completing the new water sensitivity classifications and defining archeological potential areas for AOCs;
- revising the silviculture ground rules;
- clarifying the schedule for addressing a backlog of harvest, renewal, and road rehabilitation in active caribou mosaic A blocks before operations move into intact habitat to comply with the Caribou Conservation Plan;
- updating planned roads and road use management strategies; and,
- undertaking enhanced consultation with affected remote tourist outfitters and trappers.

#### **4.3.2 Phase II Planned Operations Production**

One of the prerequisites for proceeding with Phase II operations planning was the approval of the Year 3, 2011-12 Annual Report. It reports on the first three years of implementation of the 2009 FMP and provides a mid-term review of the management operations to support the development of the Phase II of the FMP. The key question affecting the continued validity of the LTMD was whether the Dynamic Caribou Habitat Schedule (DCHS) was still valid given the limited harvesting and the significant Red Lake Fire #84. Analysis and input from MNR regional and district biologists confirmed that the DCHS was still appropriate. The Year 3 AR concluded that the LTMD remained valid and planning of operations for the second five year term could proceed based on the LTMD.

The Phase II plan was delayed by one year and for 2014-15, the planning team utilized FMPM Section 5.0, Part C, page C-27 to prepare a Year 6 AWS using remaining Phase I allocations. There was no mention of this delay or the rationale for the use of a Year 6 AWS in any of the planning documents (i.e. planning team minutes, updated terms of reference/project plan, plan text, 2014-15 AWS, etc.). Although there is no requirement for discussion of the use of this mechanism in the FMPM, the audit team notes that it was the source of some confusion and creates a lack of transparency in the process. However, in August 2015, Declaration Order MNR-75 was issued by the Ministry of the Environment and Climate Change. Among other things, it streamlines the planning process to a single ten-year plan, eliminating the requirement for a Phase II plan; the issue is no longer relevant to the planning context. The Declaration Order also provides a mechanism to extend Forest Management Plans for up to two years if planned operations are not expected to be completed within the ten-year period. That circumstance is analogous to that which led to confusion in this audit. The audit team suggests that in the development of the next FMPM (which will be developed to implement the provisions of Declaration Order 75) a requirement be incorporated that obliges forest managers to provide the rationale for extensions of an FMP in publically available documents, such as the subsequent FMP or annual work schedule.

The planning team used the entire one-year delay to prepare the draft and final plans and to complete additional stakeholder consultation. It allowed a second set of open houses to be held

and more review of the road use management strategy with stakeholders. The draft plan, originally planned for submission in July 2013, was actually submitted 7 months later on February 14, 2014. The final plan was planned to be submitted in November 2013 but was actually submitted 13 months later on December 4, 2014. The first delay of 7 months was to allow more time for preparing the draft plan. The additional six-month delay was to allow time to complete the second set of information centres in the summer and to address the required alterations.

There were no requests for Individual Environmental Assessments (IEAs) during plan preparation, and one issue resolution request, which featured in the discussion regarding public consultation and **Recommendation # 1**.

### **4.3.3 Phase II Harvest Planning**

Table FMP-15 of the 2009 FMP shows that 76,847 ha are planned for harvest during the ten years of the plan, with 44,450 ha planned for harvest during Phase I. This implies a planned Phase II harvest area of 32,397 ha. These numbers changed significantly in the Phase II operating plan, which reported the planned harvest for the entire FMP as 71,449 ha and the Phase II planned harvest as being 31,714 ha. These figures imply that the planned harvest during the first five year period of the 2009 FMP was 39,735 ha. No explanation for these changes, which are significant, was provided in the Phase II operational plan. Domtar informed the audit team that the reductions shown in Phase II were caused by fire losses in the allocated forest areas.

Figures from the Annual Reports show that the actual harvest area during the first five years of the FMP was 11,060 ha, which is equivalent to 25% of the original Phase I planned area and 28% of the revised Phase I planned area. The planned area that was not cut during Phase I remains available for harvest in Phase II, and some older uncut area was also added to the harvest area available in Phase II. The result is that the area available for harvest in Phase II is actually somewhere between 64,454 and 69,852 ha. The 2009 FMPM only requires the Phase II plan (and tables, including Table FMP-11) to identify 31,714 ha as being the planned Phase II harvest area, which is misleading, since the Phase II plan clearly indicates an intent to harvest all of the area identified above within the remaining five years of the plan term (page 40). In summary, the treatment of planned harvest levels in the Phase II FMP is very confusing and does not provide an accurate impression of the SFL-holder's intent. However, no recommendation is issued, because the Company did follow FMPM requirements and, as mentioned, Declaration Order MNR-75 eliminates the requirement for a Phase II plan.

The guidance provided in the Phase II plan for planning and conducting operations has been appropriately modified since the Phase I plan was approved, and these modifications affect planned operations in Phase II. Most notable are the AOCs that arose from the 2010 SSG. Many AOCs relate to operations in the vicinity of sensitive features (e.g. nests and woodland pools). In addition, there is a suite of CROs concerning biofibre harvesting, reducing the loss of productive land, avoiding and defining rutting and compaction, retention of downed woody debris and wildlife trees, etc. The CROs also address utilization of incidental species, which was the topic of a recommendation from the previous IFA.

The plan contains a description of the status and planned completion of operations on each of the caribou blocks. The audit team found that this description was very helpful, since the significance of the caribou blocks is such that it is useful to have some discussion of them on an individual basis. As is discussed in sections 4.4.1 and 4.4.2, the slow pace of harvesting



threatens the effectiveness of the Dynamic Caribou Habitat Schedule (DCHS) approach. Presenting a table with explicit dates would encourage the Company to confront the implications of likely actual harvest rates that will almost certainly be a fraction of the planned Phase II harvest (i.e. including the rolled over Phase I and amended area from the 2004 FMP). The audit team suggests that the MNRF consider making use of such a table mandatory in annual reports for operations within the caribou zone across the province, as there are a number of SFLs in similar circumstances in which the actual harvests are considerably less than those planned.

The text of the Phase II FMP also reports that the largest planned clearcut is 57,154 ha, and Table FMP-12 reports that one planned clearcut is 65,725 ha. There are several other discrepancies and questions surrounding the clearcut size data presented in the Phase II FMP, resulting in **Recommendation # 3**.

Recommendation #3 from the previous IFA pertained to the write up of the harvest allocation section of a Phase I plan – since there was no Phase I plan produced during the period of this audit, it could not be acted upon. This audit team considers that the recommendation remains valid and should be acted upon in the event that there is a meaningful amount of age class substitution, and /or under-allocation in the next FMP. Therefore, the recommendation is carried forward here as **Recommendation # 4**.

#### **4.3.4 Silvicultural Planning**

Conditions on regular operations, planned renewal, tending and protection operations, renewal support requirements, and forecasts of expenditures were reviewed in the Phase II Planned Operations Plan. They were found to be in conformance with applicable planning requirements and were adequate to reflect the proposed 5 years of operations. Several changes to the SGRs were made between Phase I and Phase II. Major changes included the addition of prescribed burning for site preparation for all applicable ecosites and inclusion of direct seeding (ground seeding) as a regeneration treatment. Silvicultural standards were improved by modifications to the lists of acceptable species, the inclusion of site occupancy measures, and enhancements to the descriptions of future forest stand conditions. Several unused SGRs were removed and three SGRs were added.

#### **4.3.5 Areas of Concern**

Consistent with the direction in the new SSG, many of the AOC prescriptions for new operations to be conducted during Phase II were revised to be consistent with the Guide's direction. Phase II contains 55 AOCs, 17 of which deal with wildlife, in addition to 12 related specifically to stick nests. Another 12 are related to managing sites of value for tourism and 5 deal with riparian values. The remainder deal with a variety of other values including cultural heritage, tree improvement sites, permanent sample plots and research plots. The values addressed by the Phase II AOCs are broader than those addressed in Phase I, for example there is more specific identification of wildlife values associated with species at risk, and a greater number of AOCs related to protection of water quality.

The audit team reviewed the prescriptions and found them to be appropriate for the values they intend to protect, however see the discussion in section 4.2.1 related to the concerns of the tourism industry.

#### **4.3.6 Access**

The Phase II FMP and Supplementary Documentation include updated descriptions of the use management strategies for existing primary and branch roads. As the Forest is being managed to provide caribou habitat, a key aspect of the program is ongoing road decommissioning. The Phase II Planned Operations states “*Roads that are no longer needed for forest access will be decommissioned as quickly as possible.*” The detailed plans provided in the Supplementary Documentation are consistent with that strategy.

#### **4.3.7 Plan Amendments**

There were only 15 administrative FMP amendments approved during the audit term and one amendment request was rejected. The low number and lack of significant amendments is reflective of reasonably good planning. There was evidence of good MNRF review and consultation with affected stakeholders. However the amendment process is deficient in that it is not adequately managed and documented on the Ministry’s e-FMP web site. This is addressed in **Recommendation # 5**.

#### **4.3.8 Annual Work Schedules**

The AWSs were consistent with the FMP, and met the requirements of the 2009 FMPM and 2009 Forest Information Manual (FIM). All six AWSs prepared during the audit period had complete and on-time submissions by the Company, were of reasonable quality, had MNRF reviews, and were approved on time. The signed approval page for the 2013-14 AWS could not be located (other approval pages for other planning documents could also not be located). This is addressed in **Recommendation # 6**. All AWSs were processed through the Forest Information Portal and the current year’s AWS is available on the e-FMP website.

A total of 46 AWS revisions were approved during the audit period. There were 22 AWS revisions related to adding 33 new water crossings, repairing 41 existing water crossings and removing 5 water crossings. Revisions had good tracking, complete documentation and were processed appropriately with good review and approval timelines.

### **4.4 PLAN ASSESSMENT AND IMPLEMENTATION**

#### **4.4.1 Harvest**

The actual level of harvest on the Trout Lake Forest was 11,060 ha during the first five years of the 2009 FMP period, representing from 25 - 28% of the planned harvest (see discussion in Section 4.3.3 regarding lack of clarity in planned harvest). The actual harvest volume during the first five years equaled 1.43 million m<sup>3</sup>, excluding salvaged fibre. This represents 26% of the planned harvest volume, as set out in the Phase I FMP. The proportions of planned harvest area and planned harvest volume are nearly identical during the first five years of the FMP, suggesting that the yield curves are generally accurate. The low levels of harvest were the result of the global financial crisis of 2008, and the associated collapse of the US housing construction sector. The Trout Lake Forest was most strongly affected by the 2009-14 closure of the Ear Falls sawmill and the shuttering of the paper machines at Domtar’s Dryden mill (also in 2009), which solely produces pulp now.

Because the majority of the available harvest is committed to existing users, there are few options available for new users to access the timber that is not being harvested. MNRF has been working with the forest industry to develop a pathway that would allow new users to

harvest wood that is planned for harvest yet is not being taken, however the discussions are moving very slowly. **Recommendation # 7** is intended to encourage increased utilization of wood that is available for harvest and which has gone unharvested for a considerable period of time.

When the Ear Falls sawmill was not running, almost all of the harvesting in the bush was conducted via full-tree chipping. This way, the tops, large branches and defect could be chipped and used as pulp mill furnish. Now that the Ear Falls mill is running, the sawlog portion of the harvest is being shipped to EACOM, and the residual chips flow to the Dryden mill. This is necessitating a shift to sawlog harvesting followed by roadside chipping of the tops and other non-sawlog wood. Both EACOM and Domtar are in the process of working with the contractors to ensure an efficient processing operation and maintain integration with the renewal program. The management of chipper debris improved steadily during the course of the audit period and now, with much less chipping (since the sawlogs are moved whole), further improvements will be possible.

During the audit period, harvesting operations have been carried out very well on the Forest. Site protection, utilization and retention of residual trees, including wildlife trees, were all well-executed. The Company also designated two blocks, one near Ear Falls and the other near Red Lake, as public fuelwood blocks, however uptake was less than had been anticipated. Nonetheless the practice shows consideration and should be continued.

#### **4.4.2 Implementation of the Dynamic Caribou Habitat Schedule (DCHS)**

As with all of Ontario's forests in caribou range, the DCHS is the main strategy for directing harvest scheduling. The Phase II Planned Operations includes 13 blocks scheduled for harvest during the plan period. Approximately 80,100 ha of the blocks has been depleted through harvesting from as far back as the late 1970's, and approximately 64,500 – 70,00 ha is allocated for harvest in Phase II (See Section 4.3.3 for discussion on allocated harvest levels in Phase II). According to the Trend Analysis provided for this audit, since 1994 the maximum area harvested during a five-year period on the Forest was approximately 26,000 ha, and the area harvested during the first five years of the 2009 plan was approximately 11,000 ha. The percent of area actually harvested compared to that planned was 75% for the 1994 plan and has declined in each successive plan period, to a low of 28% for the most recent five year period. The low rate of harvest has meant that harvesting has not been completed yet in any caribou block, and of the open A blocks, completion rates range from 34% to 98%.

Although the restarting of the Ear Falls sawmill bodes well for increased harvest levels, as discussed above, given the history of underutilization on the Forest, it does not seem likely that the full allocation for Phase II will be harvested, and there will likely be a perpetuation of partially harvested caribou blocks on the Forest.

It should be noted that this phenomenon is by no means limited to the Trout Lake Forest, as harvests across Ontario as a whole often do not exceed 70% of the planned harvest, and on many Ontario forests actual harvests have been between 30-40% of planned levels in the past five years (data from MNRF Ontario's Annual Reports on Forest Management). The broader implications of this are that plans are not accurate, future forests will not be as predicted in forest management plans, and a host of objectives which are dependent, either directly or indirectly, on harvest levels and future forest conditions are likely not to be achieved. This is the subject of **Recommendation # 8**.

The previous IFA noted that the ‘fluid’ nature of the caribou mosaic and issues related to incomplete or off-schedule completion of blocks is challenging to incorporate into forest management planning, and would be facilitated by use of spatial planning tools. The previous audit incorporated the benefits of spatial planning into a recommendation to the MNRF and Company to ‘consider’ in early plan renewal. Although early plan renewal was not sought, this audit team concurs with the opinion of the previous audit team and suggests that the MNRF and Company strongly consider using spatial planning in the development of the next FMP. (See Appendix 3 for a synopsis of implementation of the previous audit’s recommendations.)

#### **4.4.3 Special Audit Deliverable Regarding Caribou**

A special deliverable is required of this audit in response to a Ministry of the Environment (MOE) condition related to requests for Individual Environmental Assessments (IEA). Five requests were submitted by Environmental Non-Government Organizations (ENGOS) asking that the MNRF be required to prepare an IEA for the 2009-2019 FMP. All the requests were related to concerns that the then-existing caribou habitat management processes did not provide adequate safeguards. The MOE<sup>1</sup> denied all the requests based largely on the rationale that caribou policy development was ongoing and the MOE expected new/revised policies to be implemented in the 2009 FMP. The MOE’s denial of the IEA requests was accompanied by the following condition:

*“Within six months of the later of the following dates:*

- a. The date on which MNRF publishes a statement summarizing the actions that the Government of Ontario intends to take in response to the Recovery Strategy for Woodland Caribou (forest-dwelling boreal population) in Ontario (the proposal for such statement being commonly referred to as the proposed “Ontario Woodland Caribou Conservation Plan”); or*
- b. The date on which a regulation made under the Endangered Species Act, 2007 (ESA 2007) defining the habitat of Woodland Caribou (forest-dwelling boreal population) comes into effect;*

*MNRF shall review the Trout Lake Forest 2009-2019 FMP (the “FMP”) and shall prepare and submit to the Director of EAAB a report specifying any potential amendments to the FMP that MNRF considers appropriate, as of the date that the Report is submitted, to (i) provide consistency with any applicable regulations made under the ESA 2007 pertaining to Woodland Caribou (forest-dwelling boreal population) habitat, and (ii) implement any requirements from the published statement referred to in paragraph a. immediately above that MNRF considers applicable to the Trout Lake Forest.”*

Subsequent points in the MOE’s condition required MNRF to initiate amendments and notify the MOE as appropriate if the MNRF’s review indicated that revisions to the plan were necessary.

Although the MOE anticipated that a habitat regulation specific to caribou would be implemented under the ESA, no such regulation has been put in place as the MNRF made use of a transition provision of the ESA which allows that, in the absence of a habitat regulation, general habitat provisions take effect. Furthermore, in 2013 Ontario passed a regulation that exempts a number of industries, including forestry, from broad provisions under the ESA, and so part b) of the MOE’s condition is not applicable, leaving the benchmark date as that associated with part a) – the Caribou Conservation Plan (CCP). The CCP was approved in

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<sup>1</sup> In the period when it reviewed the requests for IEAs and issued the condition, the Ministry was known as the Ministry of the Environment (MOE). In mid-2014, Climate Change was added to the Ministry’s portfolio.

2009, and MNRF completed an analysis of the extent to which the requirements of the CCP are addressed in each of the SFLs (including Trout Lake) in northwestern Ontario. A response was provided from the Red Lake District Manager to the MOE in April of 2012 explaining that the analysis had been completed, that the FMP was found to be consistent with the CPP and that no amendment was required. The analysis undertaken by MNRF was provided to the audit team as evidence of their efforts. Therefore, the MNRF has met the substance of the condition imposed by the MOE. However, the audit team notes that the MOE condition required that the MNRF complete its review and provide a response to MOE within six months of the later of dates relevant to parts a) and b) above. The CCP was approved in 2009, but MNRF did not provide a response to MOE until April of 2012, indicating substantial tardiness by the MNRF in responding to the MOE's condition.

#### 4.4.4 Areas of Concern

The audit team inspected 12 different types of AOCs during the course of the audit, primarily by aerial reconnaissance. The audit team found no violations of the prescriptions in the AOCs inspected. Two minor non-compliances were noted during the course of the audit period, neither compromised the integrity of the AOC and the audit team has no concerns about systemic non-compliances associated with the implementation of AOCs.

#### 4.4.5 Silvicultural Operations

Table 2 compares planned versus actual levels of silvicultural activities during the 2009-2014 FMP term. The planned levels were not achieved because the reduced level of harvesting resulted in less area being available for treatment. All silvicultural activities were implemented at rates proportionately higher than the level of harvesting. During the 2009-2014 FMP term, 18,483 ha were regenerated compared with 11,060 ha harvested. Harvested areas were regenerated in a timely manner and additional effort was spent on regenerating area carried over from prior FMP terms. In the first year of the 2014-2019 Phase II Operating Plan, an additional 3,263 ha was regenerated, all by planting, and 831 ha of mechanical site preparation was completed. No tending was conducted in 2014-2015.

**Table 2.** Planned vs. actual renewal, silvicultural activities, 2009-2014 FMP Phase I.

Renewal Activities	2009 P1 FMP Planned	2009 P1 FMP Actual	2009 P1 FMP Planned / Actual
Natural Regeneration	6,304	2,371	38%
Planting	14,640	12,912	88%
Seeding + Scarification	9,321	3,199	34%
Total Artificial Regeneration	23,961	16,112	67%
<b>Total Regeneration</b>	<b>30,265</b>	<b>18,483</b>	61%
Site Preparation (mechanical)	24,298	7,249	30%
Site Preparation (chemical)	160	497	311%
Tending (aerial spray)	8,025	3,308	41%
Spacing (PCT)	2,516	0	na
<b>Harvest</b>	<b>44,450</b>	<b>11,060</b>	25%

Silvicultural projects observed in the field were generally of good quality; the prescriptions were appropriate for the site conditions and appeared to have been effective. There were no systemic issues or concerns associated with renewal and tending operations. A few sites visited by the audit team will require follow-up tending and/or fill planting to meet silvicultural standards, and the Company has planned ground surveys within the next year to determine the most appropriate follow-up treatments for these sites.

All silvicultural activities on the Trout Lake Forest were conducted by contractors. One of the issues for the Trout Lake Forest in the past, and throughout the audit period, has been the lack of locally available contractors. It has also proven difficult to engage regional contractors to work in the relatively remote location of the Forest for small-scale silvicultural programs, often within a narrow time window. This has led to difficulties in implementing the tending and chemical site preparation programs, and cone collection. In response to this issue, Domtar has linked the silvicultural contracts for the Wabigoon and the Trout Lake Forests to gain the efficiencies associated with larger contracts. In addition, local contractors have recently been retained (as of the current year, 2015-2016) for aerial application of herbicides for tending and/or site preparation, and cone collection. This should ameliorate concerns about the delivery of these silvicultural programs in future years.

The renewal support program was reviewed and found to be sufficient to support Domtar's proposed tree planting program. However, the seed inventory maintained by the Company will be insufficient to support a large program of jack pine seeding. Three seed orchards are located within the Trout Lake Forest or nearby in adjacent Forests. Two seed orchards located on the Forest supplied improved seed for all black spruce and white spruce planting stock production. A third orchard for jack pine is not yet sufficiently mature for seed production, which contributes to the low inventory of jack pine seed.

In response to the low seed inventory for jack pine, Domtar has reduced the jack pine aerial seeding application rate by half, from 50,000 to 25,000 seeds/ha, and has conducted trials of direct seeding using site preparation / seeding equipment. Direct seeding is more efficient with regard to seed use since it uses one-fifth the amount of seed compared with aerial application. These methods appear to have been effective and were not observed to have compromised the effectiveness of seeding treatments. In addition, there may be benefits in future, since there may be less need for pre-commercial thinning since seedling establishment densities are likely to be lower. Retention of a local contractor for cone collection should increase the seed inventory over the next several years.

Site preparation was conducted on approximately 48% of artificial regeneration projects. This was an appropriate proportion for the observed site conditions, since many sites had little competition and limited amounts of slash and debris, and these could be planted without site preparation. The mechanical site preparation treatments, which were conducted mostly with powered disk trencher equipment, were of generally good quality. The MNR silvicultural effectiveness monitoring program related to site preparation quality, discussed in Section 4.6.3, came to a similar conclusion.

During the audit period, tending programs have not been conducted annually, but were delayed until a program of sufficient size to be feasible had been accumulated. As a result, an aerial tending program was carried out in only one year of the audit period (2012-2013). This does not appear to be a significant concern since, as observed by auditors, many of the regenerating sites on the Trout Lake Forest had low levels of competing vegetation. Domtar also implemented a program of chemical site preparation in 2012-2013 to facilitate the renewal of

richer, more competitive sites. The tending treatments were conducted on appropriate sites and were observed to be effective. All tending was conducted by the aerial application of herbicides. There were no compliance issues related to tending projects during the audit period.

#### **4.4.6 Access**

For the first five years of the audit period (data for the final year are not yet available), 56.3 km of primary and branch roads were constructed, which is only about one-third of the 167.7 km planned in the FMP. The low level is due to the significant shortfall in actual harvest compared to that planned. The audit team drove on approximately 300 km of primary and branch road over the course of the audit. These roads were of good or reasonable quality and suitable for the operations they were intended to facilitate. The audit team inspected approximately 15 water crossings (primarily culverts, including a crossing in Block 101 which was the subject of a recommendation in the previous IFA) and all were found to be in good repair consistent with the Environmental Guidelines for Roads and Water Crossings.

Decommissioning activities in the audit period took place primarily in 2011-2012 when 36.2 km of branch roads were decommissioned, leading to the concomitant decommissioning of 112.5 km of tertiary roads. Although the FMP does not contain an explicit target for the amount of decommissioning, it does provide a road density target of 0.40 km/km<sup>2</sup> Crown productive area. Without taking the decommissioning into account, the density of roads on the forest is 0.21 km/km<sup>2</sup>, considerably lower than the target level. Nonetheless, the audit team notes that the FMP identifies additional decommissioning of roads to take place during the FMP period. However, given the lower level of harvesting which has occurred it is likely that the planned extent of decommissioning will not be achieved as access will be continue to be required to harvest wood along existing road reaches.

The audit team inspected a sample of records related to use of the funding provided through the MNRF's Road Construction and Maintenance Program and reconciled the records to the observed road conditions.

MNRF and Domtar have developed a protocol for road transfer and decommissioning intended to "*efficiently and effectively return roads to productive tree growing area as practically as possible*". The final part of the protocol is the sign off by MNRF that a subject road has been decommissioned by Domtar and that MNRF accepts responsibility for the road from that time forward. MNRF has not responded to correspondence from Domtar asking it to accept responsibility for some decommissioned roads. This is addressed in **Recommendation # 9**.

### **4.5 SYSTEM SUPPORT**

#### **4.5.1 Training**

Because the Forest is certified to an independent third-party Standard, it was not required to audit IFAPP Criterion 5.1, which addresses Training. However in the review of the previous audit's recommendations an issue regarding training of compliance inspectors came to light. Recommendation #15 of the 2009 IFA required Corporate MNRF to look at offering varied compliance inspection training options. There has been a loss of capacity at the District level to provide mentoring of compliance inspectors and so Corporate MNRF should continue to have a role in compliance training. As circumstances seem to be somewhat in flux as MNRF's Transformation continues, **Recommendation # 10** is issued.

#### **4.5.2 Document and Record Quality Control**

Document control, record retention and information management procedures were in place as required with the following exceptions:

- Shortfalls related to the management of amendments as described in Section 4.2.7 and addressed in **Recommendation # 5**; and
- Deficiencies with planning document approval pages are described in Section 4.3.8 and addressed in **Recommendation # 6**.

### **4.6 MONITORING**

#### **4.6.1 Compliance Planning and Monitoring**

During the audit period Domtar completed 453 inspections reporting 1 non-compliance and 19 operational issues. MNRF completed 209 inspections reporting 4 non-compliances and 9 operational issues. Non-compliances were related to a trespass into an AOC, crossing an un-mapped stream, rutting and leaving merchantable wood. There is a good compliance program in place highlighted by good communication, comprehensive harvest pre-work reports, accurate block status reporting, a large number of enthusiastic and certified compliance inspectors and most importantly a good compliance record that was correlated with the auditor site visits.

Forest Operations Inspection Program (FOIP) reporting timelines are difficult to assess as the system only reports the inspection, submission and approval dates, but not the block completion date which is the basis for the reporting timelines. FOIP reporting timelines are between 1 and 20 days after block completion. During the audit period, 41% (184 of 453 inspections) of industry reports and 17% (35 of 209) of MNRF reports were submitted 30 days after the inspection, indicating reporting timelines are not routinely being achieved. Also the five non-compliances during the audit period were reported 10, 11, 14, 35 and 86 days after the inspection which was longer than the 5 days outlined in the 10 year and annual compliance plans. However, there do not appear to be adverse impacts from not meeting FOIP reporting timelines and the large number of FOIP inspections completed is indicative of thorough coverage of potential operational issues. Although a recommendation is not warranted, the audit team encourages Company and the MNRF to be mindful of reporting timeline requirements.

The Company updated the 10 year compliance strategy as per the 2010 Compliance Handbook as part of the Phase II FMP. The Annual Compliance Plans included in each AWS were not very useful since they only briefly identify general compliance issues, roles and timing of inspections. However the Annual Compliance Plan requirements are not well defined in the 2010 or 2014 compliance handbooks and so the brief descriptions in the AWSs meet the handbook requirements. MNRF Annual Compliance Operations Plans (ACOPs) are recommended but not required according to the 2010 and 2014 Forest Compliance Handbooks. MNRF did not prepare ACOPs during the audit period which means there were no formal work targets and priorities for MNRF staff to implement compliance monitoring.

The 2014 Compliance Handbook outlines the need for a risk management approach to compliance planning which requires a risk analysis and management strategies to address specific compliance issues. Although the risk management approach is not required to be implemented for plans prior to 2015, the improvements offered by this approach should be incorporated into the existing FMP. **Recommendation # 11** is designed to improve annual compliance plans.



Notwithstanding the above recommendation to strengthen compliance planning, MNRF and the Company have reasonably effective compliance programs in place. The monitoring program is in accordance with the 2009 FMPM and 2010 Compliance Handbook requirements and is quite good given the large number of inspections and low number of non-compliances and operational issues encountered.

#### **4.6.2 Annual Reports**

The Company prepared six annual reports during the audit period. Four of them were standard reports, and there was a year 3 AR for 2011-12. The AR for 2008-09 should have been a Year 10 AR as that was the final year of the 2004 FMP, however a standard AR was prepared and accepted. No recommendation is issued, since the auditors do not feel it is worthwhile to reconfigure the AR, especially since the missing tables are in the Trend Analysis prepared for the 2009 IFA. The quality of the AR's was high, and the drafts were submitted on time. The MNRF reviewed the AR's, the Company revised them and MNRF approved them in a timely manner (although the 2010-11 AR was approved August 10, 2012 despite the submission of the revised version on March 22 of that year). The Company responded well to the two 2009 IFA recommendations related to AR's.

#### **4.6.3 Silvicultural Effectiveness Monitoring**

The Company's program for silvicultural effectiveness monitoring (SEM) of renewal and maintenance operations was reviewed and found to be of good quality. The program includes a comprehensive suite of formal and informal surveys to assess the need for further treatment to achieve silvicultural standards, and to monitor the quality of site preparation, tree planting, seeding, and tending operations, as well as the development of areas declared for natural regeneration. These surveys are conducted entirely by Domtar personnel.

The MNRF SEM program for monitoring silvicultural operations is also good, and includes assessments of tree planting and mechanical site preparation quality, and tending program compliance with regulations and effectiveness. Results of MNRF's silvicultural operations monitoring is reported through the normal forest compliance program. No issues were identified by MNRF through this monitoring.

#### **4.6.4 Free-to-grow Assessments**

During the audit period Domtar assessed an area equal to 95.7% of the 5-year forecast in the Phase I FMP. This level of free-to-grow assessment has kept pace with past and present harvesting and renewal activities such that there is no backlog of sites requiring assessment. An additional 13,497 ha, consisting of sites assessed by Domtar in the previous FMP term, was reported on in the 2009-2010 Annual Report, which addressed a recommendation from the 2004 IFA for timely reporting of free-to-grow results. Table 3 summarizes the area assessed by Domtar for free-to-grow status during the 6-year audit period.

The high rates of successful regeneration (94.6%) and silvicultural success (88.2%) indicate good effectiveness of past silvicultural treatments. The areas that were not declared free-to-grow had not achieved sufficient height growth or stocking to meet silvicultural standards and will be re-assessed by Domtar after a suitable period of time.

During the audit period, Domtar acquired large-scale photography for areas to be assessed for free-to-grow, and interpreted the imagery using a plot-based sampling approach to evaluate

conformance with the requirements of SGRs as per the Phase II FMP. Domtar and District MNR staff exchanged information on sample locations so that MNR ground assessments could serve as calibration data for the image interpretation. The large-scale imagery-based approach appears to work well, and has the advantage of capturing a permanent record of the sites at the time of assessment.

**Table 3.** Summary of free-to-grow assessment results for the Trout Lake Forest, 2009 to 2014.

Original Forest Unit	Area in Projected Forest Unit (ha)	Area in Other Forest Unit (ha)	Area Not Satisfactorily Regenerated (ha)	Total Area Successfully Regenerated (ha)	Total Area Assessed (ha)	Percent Successfully Regenerated	Percent Silvicultural Success
BWD	2	0	0	2	2	100.0%	100.0%
CMX	2,112	189	102	2,300	2,403	95.7%	87.9%
HMX	342	30	0	372	372	100.0%	91.8%
OCL	35	1	3	36	39	91.6%	88.0%
PJM	935	79	71	1,014	1,085	93.5%	86.2%
PJP	1,054	190	157	1,244	1,401	88.8%	75.3%
POA	458	230	0	688	688	100.0%	66.6%
SBL	618	8	184	627	810	77.3%	76.3%
SBM	1,790	144	15	1,934	1,948	99.3%	91.9%
SBP	4,947	88	261	5,035	5,296	95.1%	93.4%
SHA	928	0	15	928	943	98.4%	98.4%
Total	13,220	959	808	14,178	14,986	94.6%	88.2%

District MNR used the free growing well-spaced ground sampling method to evaluate Domtar's imagery-based free-to-grow results. Differences between the two methodologies makes it difficult to compare the results, however, there appeared to be a reasonable degree of congruence between the Domtar and MNR assessments in terms of species composition, height and density. However, the MNR surveys generally showed lower levels of stocking, and a trend towards higher levels of hardwoods in the species composition values compared with Domtar assessments.

There were separate District SEM Reports for each year, and each free-to-grow block assessed was reported separately. A combined database of assessment results was not available, making it difficult to determine trends. The District SEM information collected during the audit period would be of greater value if it were collated and summarized. **Recommendation # 12** is intended to address this gap.

The free-growing well-spaced methodology was originally developed for conifer plantations and does not address the assessment of hardwood forest units or mixed forest units with a hardwood component very well. The MNR is aware of these limitations of the method. A review of silvicultural policy for Ontario (including the provincial SEM program) has been ongoing since 2012 and is moving through review and approval stages. In implementing the revised silviculture policy direction, assessment methods and corresponding standards will need to be addressed. Standards for validating assessment methods based on imagery are also needed. MNR has indicated that these and other issues will be addressed through the implementation stages of the revised silvicultural policy once it is approved. In the meantime,

there has been little specific direction provided to the Districts from Corporate MNRF regarding these issues. **Recommendation # 13** is intended to address this issue.

Domtar's silvicultural and harvest mapping and record keeping, free-to-grow assessment data management, and inventory update process was reviewed and was found to be in conformance with FMPM and FIM requirements.

## **4.7 ACHIEVEMENT OF FOREST MANAGEMENT OBJECTIVES & SUSTAINABILITY**

### **4.7.1 Trend Analysis Report**

Consistent with the requirements of the IFAPP, Domtar prepared a Trend Analysis report for this IFA that provides an overview of trends in place on the Trout Lake Forest over the past three plan terms. The audit team reviewed the Trend Analysis and provided comments prior to the site visit portion of the audit. Domtar has not yet revised the report in response to the audit team's input.

The trend analysis provided useful discussions of key trends on the forest related to harvest area and volume and renewal and maintenance. The trends described in the report are consistent with those noted earlier in the report – with the generally declining proportion of planned harvest achieved, renewal and maintenance programs were conducted appropriately in proportion to the lower-than-planned harvest levels. Of particular value in the report were discussions of the recent large disturbances on forest and impacts on the caribou mosaic. Key conclusions of the document were that the modeling assumptions were sound, the plan's objectives were likely to be achieved (although see discussion in Sections 4.4.2. and **Recommendation # 8**) and that "there appears no reason to believe that the plan has deviated from the approved sustainable direction".

### **4.7.2 Assessment of Objective Achievement**

The audit team assessed the extent to which the objectives and targets of the 2008 FMP have been met to date (Appendix 2). In addition, Table AR-14 of the Trend Analysis provides the Company's assessment of FMP objective achievement. In general, most of the objectives identified in the FMP will likely be achieved. The notable exceptions to this are targets associated with harvest levels and mill utilization. In addition some targets associated with opportunities for Aboriginal Peoples will likely not be met because of the low level of involvement by First Nations communities as described in Section 4.2.3.

The general achievement of most objectives may seem at odds with concerns expressed in **Recommendation # 8** regarding the potential impacts of overly optimistic harvest projections and the impact on attainment of objectives. However the audit team notes that:

- The projection of attainment of some objectives related to forest structure and caribou habitat are predicated on implementation of the caribou mosaic based on current harvest projections. Given the consistent underachievement of harvest levels, attainment of the objectives will be contingent on the need to modify the mosaic in the future should low levels of harvest continue; and
- a high number of objectives in the FMP are related in one way or another to maintaining old-forest characteristics on the Forest – these will be attained in the absence of achieving planned harvest levels (providing that the actual harvest levels to not exceed those planned);

Finally, the audit team notes that a number of objectives related to maintenance of environmental quality were met as they are based on the Company's compliance performance. Given the good compliance record, those objectives were all obtained.

#### **4.7.3 Assessment of Sustainability**

A number of factors support a positive conclusion for this audit:

- Quality of Operations: The Company's operations were well implemented. The field observations made by the audit team, discussions with Company and MNR staff, and the excellent compliance record all contributed to a positive evaluation of operations.
- Harvest Level – notwithstanding concerns related to the differences between planned and actual harvest, the low level of harvest on the forest was well below that which can be sustained.
- Appropriate Yield Projections - The proportions of planned versus actual harvest were similar for volume as well as area metrics, suggesting that the yields used in the FMP are generally accurate.
- Level of Silviculture - All silvicultural activities were implemented at rates proportionately higher than the level of harvesting.
- Quality of Silviculture - The high rates of both regeneration success and silvicultural success indicate good effectiveness of silvicultural treatments.
- Protection of Values – Review of the AOC prescriptions found them to be appropriate for the values they are intended to protect and implementation of the prescriptions was excellent.
- Compliance performance – A very high number of compliance inspections were carried out on the forest and found a very good compliance rate.
- Planning – The requirements related to planning were generally well met.
- LCC – the Local Citizens Committee is well coordinated, functions well and provides good-quality advice to the MNR.

The audit team concludes that the Trout Lake Forest was managed sustainably during the review period.

As with all audits, this one identified ways in which management of the Forest could be improved. Particularly notable recommendations from this audit, because they will require a reasonable effort to address them, and because they have broader implications for the forest or for forest management in the province in general, include:

- MNR District in collaboration with Domtar shall engage the local tourism outfitters in efforts to develop a long-term strategy for the coexistence of tourism and forest management industries on the Trout Lake Forest;
- Corporate MNR shall consult with MNO, regarding the asserted Métis rights on the Trout Lake Forest and attempt to reach a common understanding regarding those rights;
- The Forest Industry Division of MNR and Domtar shall seek to increase the use of wood from the Trout Lake Forest, including making unused wood available to users who have not been traditional users of wood from the Forest; and
- Corporate MNR shall explore the value of engaging in a broader modeling exercise during forest management planning that includes scenarios based on maximum possible harvest rates, recent historic rates, and probable future rates to strengthen the basis for identifying objectives and planning for the future forest.

On the bright side, a number of recommendations should be fairly simple to deal with as they relate to improving documentation related to the plan, or planning process.

Overall the results of this audit are favourable. The audit team believes this is attributable to two main factors:

- the diligence of the staff of Domtar and the MNRF in working through times of challenging conditions and finding appropriate balance between the difficult economic circumstances and the imperative of continuing sound management on the forest; and
- the sound understanding of ecological relationships related to silviculture demonstrated by MNRF and Company staff and the manner in which the relationships relate to appropriate forest management practices.

#### **4.8 CONTRACTUAL OBLIGATIONS**

The SFL imposes a number of requirements on its holder, and Domtar's compliance with 16 requirements is described in detail in Appendix 3. Some notable aspects are described below.

Committed volumes of wood were not supplied to commitment holders for a variety of reasons. One commitment holder, L.K.G.H. Contracting, did not operate its sawmill during the audit period, and hence was unable to make use of the committed wood from the Forest. Another commitment holder, Ainsworth Lumber Co. Ltd., received some wood in 2010-11 but none thereafter, and is no longer a commitment holder. (Note the 2013-14 AR text states that Ainsworth received some wood from the Trout Lake Forest that year but the mill is not shown receiving wood in Table AR-2.) Lastly, separate commitments to Bowater and Abitibi-Consolidated, were not acted on – the companies merged in 2007, entered creditor protection in 2009, and re-emerged the next year to become Resolute Forest Products in 2011. When Domtar's Dryden mill became a conifer only mill, the Bowater and Abitibi commitments suddenly threatened to take a key part of Domtar's wood supply, and it took until 2014 for the issue to be resolved – during this period, no wood went to the mills identified in the commitments. Resolute no longer holds a commitment on the Trout Lake Forest.

The Company is fully up-to-date with stumpage payments of all types. As of March 31, 2015, there was no money owed by Domtar to the Forest Renewal Trust, Forestry Futures Trust, or for Ontario Crown charges.

The MNRF, rather than Domtar, has the lead responsibility for Aboriginal consultation however Domtar is required to assist in increasing the benefits provided to First Nations through forest management. During the audit period, MNRF made strong efforts to engage First Nations during the Phase II planning process, and was well supported by the Company. There are no First Nations communities located on the Trout Lake Forest, and some of those who have an interest on the Forest have stronger priorities elsewhere. As a result, the MNRF and Company had modest success in engaging the First Nations during Phase II planning, in spite of the efforts that were made. More recently, Domtar has been seeking to develop MOU's with several First Nations that would set out principles of mutual recognition and lay the groundwork for a better relationship. MNRF and Domtar are together supporting the development of a Natural Resources office at Wabauskang First Nation, and MNRF has moved to support a First Nations entrepreneur there who has a sawmill and logging company.

The SFL licence document was reviewed, and it is noted Domtar and the MNRF have recently agreed to update the company name and other licence details that are out of date.

## 4.9 CONCLUSIONS AND LICENCE EXTENSION RECOMMENDATION

This audit has reviewed the management of the Trout Lake Forest for the period April 1, 2009 to March 31, 2015, which covered the implementation of Phase I of the 2009 FMP and preparation of the Phase II operating plan. The quality of operations on the Forest is high, and the audit team appreciates that this is a substantial accomplishment, given the challenging economic times during most of the audit period. Sound management of the forest is attributable to the diligence of the staff of Domtar and the District MNRF. The LCC also functions at a high level.

While there are no dominant themes to emerge from this audit, it is notable that five of the 13 recommendations are directed in full or in part to Corporate MNRF. This portrays the fact there are significant needs and opportunities to address forest management issues which occurred on the Trout Lake Forest that also have broader implications for management of the Province's forests. Another factor contributing to the high proportion of recommendations directed to Corporate MNRF is that recent changes related to MNRF's Transformation Initiative still need some fine-tuning to provide consistent direction and support to forest managers.

In addition to the Recommendations, described in detail in Appendix 1, this audit identified a number of less important issues which present opportunities for improvement. These suggestions appear in a number of places in the audit report. To assist the MNRF and Company in considering them, they are summarized in Table 4. We note there is no requirement for the suggestions to be included in the Action Plan produced for this audit.

**Table 4.** Summary of suggestions made in the audit.

- |   |
|---|
| <ol style="list-style-type: none"> <li>1. The audit team encourages the MNRF to make a definitive effort to provide a seat for Domtar on the LCC.</li> <li>2. The audit team encourages the MNRF to consult the LCC regarding the provision of more training opportunities.</li> <li>3. The audit team encourages the MNRF to continue its efforts in getting meaningful First Nations representation on the LCC.</li> <li>4. The audit team suggests that MNRF consider making the use of an Annual Report table which summarizes the extent to which operations on caribou blocks are completed.</li> <li>5. The audit team suggests that MNRF and Domtar strongly consider using spatial planning in the development of the next FMP.</li> <li>6. The audit team suggests that in the development of the next FMPM (which will be developed to implement the provisions of Declaration Order 75) a requirement be incorporated that obliges forest managers to provide the rationale for extensions of an FMP in publically available documents, such as the FMP and annual work schedules.</li> <li>7. The audit team encourages the Company and the MNRF to be mindful of reporting timeline requirements for submission of FOIP reports.</li> </ol> |
|---|

The overall results of this audit are favourable. Management of the Trout Lake Forest as implemented by Domtar and Red Lake District MNRF is found by this audit to be sustainable.

**The audit team concludes that management of the Trout Lake Forest was generally in compliance with the legislation, regulations and policies that were in effect during the term covered by the audit, and the Forest was managed in compliance with the terms and**

**conditions of the Sustainable Forest Licence held by Domtar Inc. Forest sustainability is being achieved, as assessed through the Independent Forest Audit Process and Protocol. The audit team recommends the Minister extend the term of Sustainable Forest Licence 542461 for a further five years.**

## **APPENDIX 1 – AUDIT FINDINGS**



**Recommendation # 1**

**Principle 2: Public Consultation and Aboriginal Involvement**

**Procedure 2.2.1:** Review and assess whether the public consultation process for the plan and any amendments met the requirements of the applicable FMPM and whether the process was effective. Include the following: ...

- consider how public input was addressed by the MNR and/or the plan author during the plan production or processing of any amendments

**Procedure 2.3.1:** Examine and assess the approach used to resolve issues identified by the public. Include the following...

- examine how the issue was resolved, and if applicable how it was reflected in the final FMP, the minor or major amendment or contingency plan.

**Background Information and Summary of Evidence:** The Trout Lake Forest is of considerable value to the tourism industry. There is a recent history of discord between the forest industry and tourism industry on the Forest as evidenced by:

- two Issue Resolution requests and two Individual Environmental Assessment (IEA) initiatives related to the 2004 FMP and a series of consultation initiatives;
- a recommendation in the 2004 Independent Forest Audit related to an operation of contention to the tourism industry;
- Three IEA requests related to tourism in the preparation of the 2009 FMP Phase I;
- Inclusion of IEA requests as part of the rationale for a recommendation in the 2009 IFA to consider early plan renewal;
- One issue resolution request during the preparation of the 2014 Phase II FMP; and
- Correspondence to the audit team undertaking this audit from the tourism industry expressing ongoing concern regarding the potential impact of forest operations on the tourism industry.

**Discussion:** This is the third consecutive IFA in which the concerns of the tourism industry (which have mostly involved access management) have had some degree of prominence. The audit team recognizes the diligence with which Domtar has attempted to address the concerns and the fact that the MNR has followed due process for issue resolution during the development of the Phase II plan. Nonetheless the ongoing dissatisfaction and history of lack of resolution suggests that the issues are still not adequately addressed and that they will likely continue to pose challenges for the management of the Forest. The Forest Management Planning process has a number of mechanisms through which disputes can be addressed or avoided, including: normal stakeholder consultation, issue resolution and requests for individual environmental assessments; and development of Resource Stewardship Agreements. Although these processes exist (a small number of RSAs have been developed on the Forest), they can be time consuming and may not lead to long-term resolution of issues, leaving some concerns to simmer and be raised in successive Forest Management Plans, as has been the case on the Trout Lake Forest. Considerable effort has already been devoted by both Domtar and members of the tourism industry to developing a professional rapport, however effort beyond that already expended is required to result in stable and long-term resolution of issues. All parties have expressed a desire to work efficiently to develop a fair and stable solution providing a basis for optimism that a long-term solution can be reached.

**Conclusions:** A definitive process is needed to adequately address concerns of the tourism stakeholders and to avoid the persistent complications in the forest management planning process.

**Recommendation:** MNR District in collaboration with Domtar shall engage the local tourism outfitters in efforts to develop a long-term strategy for the coexistence of tourism and forest management industries on the Trout Lake Forest.

## Recommendation # 2

### Principle 2: Public Consultation and Aboriginal Involvement

**Procedure 2.5.1:** Review and assess whether reasonable efforts were made to engage each Aboriginal community in or adjacent to the management unit in forest management planning as provided by the applicable FMPM ...

**Background Information and Summary of Evidence:** The 2009 FMPM, which was the applicable FMPM for the preparation of the Phase II Planned operations, states that: *“For the purposes of this section, the reference to an Aboriginal community means an Aboriginal community in or adjacent to the management unit whose interests or traditional uses may be affected by forest management activities.”* Aboriginal communities are able to work with the District MNRF to develop community-specific consultation processes and must be offered representation on the Planning Team. The FMPM also states that the District Manager is required to make ongoing reasonable efforts to engage each Aboriginal community in the development of an agreed-upon consultation approach.

The 2011 Red Lake District Condition 34 report noted that two Northwest Ontario Métis Nation of Ontario (MNO) communities asserted an interest in the Trout Lake Forest. However, MNRF chose to not regard these communities as having Aboriginal rights on the Forest and the FMPM planning requirements for Aboriginal communities were not followed for Métis communities. While letters regarding Phase II planning were sent by the MNRF District to NWMNO on May 4, 2012, April 5, 2013, and March 10, 2014, they do not offer the required elements. Instead, the 2012 and 2013 letters express an interest in receiving information regarding Métis interests in this planning process.

It is not clear within MNRF where the decision was made that the Métis did not have an interest in the Forest and there was no requirement to engage them as an Aboriginal community. Regardless of where it was made, MNRF’s decision not to recognize Métis harvesting rights on the Trout Lake Forest was taken unilaterally. MNO informed the auditors that Métis certainly do have an interest (and asserted rights) in the Trout Lake Forest, which overlaps the regional rights-bearing Métis community’s traditional territories. MNO further stated that it completely rejects MNRF’s approach in unilaterally deciding that the Métis community does not have rights in this area.

**Discussion:** Two regional chapters of MNO have declared an interest in the Trout Lake Forest, and the 2004 Harvesting Rights Agreement between MNO and the province also recognizes Métis rights on a large part of the Trout Lake Forest. However, MNRF does not consider these rights to be credible and did not provide the opportunities afforded to these Métis communities to participate in forest planning. There has been considerable reluctance on the part of MNRF to explain the basis for the decision to not recognize the Métis rights on the Trout Lake Forest. To date, MNRF has declined to provide the relevant information to the auditors on the grounds that it is confidential.

**Conclusions:** The auditors conclude that the approach that was taken by MNRF to unilaterally withdraw recognition of Métis interest in the Trout Lake Forest does not reflect well on the Crown. Since MNO contests MNRF’s conclusions, it would be reasonable that the Crown and MNO should agree on the status of Métis interest in the Trout Lake Forest.

**Recommendation:** Corporate MNRF shall consult with the Métis Nation of Ontario regarding the asserted Métis rights on the Trout Lake Forest and attempt to reach a common understanding regarding those rights.

**Recommendation # 3**

**Principle 3: Forest Management Planning**

**Procedure 3.9.4.2:** Review the applicable FMPM requirements related to planned clearcuts that exceed 260 ha, and assess whether there is appropriate silvicultural or biological rationale for planned clearcuts that exceed 260 ha.

**Background Information and Summary of Evidence:** The text of the Phase II FMP reports that the largest planned clearcut is 57,154 ha, and Table FMP-12 reports the largest planned clearcut as 65,725 ha. The size of the largest clearcut increased significantly from the Phase I plan documentation. The 2012 fires may have been responsible for the apparent increase in the size of this large clearcut by removing the 200 m buffer between some harvest areas and therefore linking them up. However, the planned clearcut areas should not include the area of any natural disturbances and this may have inadvertently happened as the data for FMP-12 was assembled.

There are some other discrepancies regarding the total number of clearcuts and the average clearcut size data presented in Table FMP-12 of the Phase II FMP. Based on the data presented in Table FMP-12, the average planned clearcut size is approximately 2,245 ha, but the text in the plan gives the average planned clearcut size as 544 ha. There is also a note at the bottom of FMP-12 to the effect that the data in the table had not been updated since the Open House, and draft plan reviewer comments pointed out that FMP-12 needed to be updated before final plan submission. It is not clear whether this update took place.

**Discussion:** The Company shall review the Phase II plan text regarding clearcut size and Table FMP-12 and correct any errors in the text and table and amend the plan as necessary.

**Conclusions:** The table and text of the FMP need to be revised so that they are consistent and accurate.

**Recommendation:** The Company shall review the Phase II plan text regarding clearcut size and Table FMP-12 and correct any errors in the text and table and amend the plan as necessary.

**Recommendation # 4**

**Principle 3: Forest Management Planning**

**Criterion 3.5.1: FMP Areas Selected for Operations:** Areas are selected for harvest for the ten year period, normally equally balanced between the two five year terms; renewal and tending areas are identified; contingency area: minimum of one year, maximum of two years of harvest operations; bridging operations: 3 months of harvest operations in last AWS of the current approved FMP; second-pass harvest operations where only the first pass has occurred by expiry of the current FMP are identified ....

**Background Information and Summary of Evidence:** It was noted that, on average, the 2009-2019 FMP selected harvest area included younger stands than those selected by the model. Although divergence between modeled and planned harvest area by age class was generally not large, there were a few instances of significant difference particularly for some age classes in the SBM and SBP forest units.

Discussion with MNRF and Domtar staffs and a review of the inventory and selected harvest areas indicates that changes to the caribou mosaic and new reserves accounted for most of the age-class substitution that occurred in the 2009-2019 FMP. Areas not allocated in the 2009-2019 FMP also led to age-class substitution (i.e. some of the older wood in the model was actually in slivers and geographically isolated areas); under-allocation is discussed in next paragraph. There was a significant under-allocation (about 6,365 ha or 8% of the AHA) during the term of the FMP. There is very little discussion in the 2009-2019 FMP regarding the significant planned under-allocation during the term.

**Discussion:** It is common in Ontario to select younger stands than those selected by the model and, as noted, differentials in the 2009-2019 FMP were not large. However, according to the 2004-2024 FMP, this was not supposed to occur since younger stands had already been chosen for that plan. Figure 16 in the 2004-24 FMP shows the significant substitution for that plan mainly between the 81-100 and 121-140 year age classes

The discussion regarding the under-allocation is limited to noting that there were lots of slivers left behind in 'A' blocks and that there were geographically isolated stands as well as differences between modeled reserves versus actual reserves (e.g. some larger reserves resulted from agreements with stakeholders and reserves were added around new values). The 2004-24 FMP also noted issues regarding slivers, etc. Page 178 states: *"Prior to SFMM modeling for the next management plan, the assumptions concerning unavailable reserved area will be reviewed and inputs adjusted accordingly, possibly resulting in more unavailable area and less available land in the Trout Lake Forest"*.

**Conclusions:** Reclassification of of slivers and other unattainable areas during planning inventory development would remove these sources of under-allocation. More time should be taken to identify and re-classify slivers and other unattainable areas during development of the next planning inventory.

Since selecting younger stands was a concern highlighted in the 2004-2024 FMP, some deeper discussion of why older stands could not always be selected in the 2009-2019 FMP is warranted.

The level of under-allocation (~8%) in the 2009-2019 FMP justified an in-depth analysis of the affect on plan objectives, future wildlife habitat and sustainability with a detailed discussion of the results of the analysis in the FMP. Planning for surplus area or discussion in the FMP of why that would not be deemed necessary should also have occurred.

**Recommendation:** Domtar must ensure that a more thorough analysis and discussion is provided in the next FMP regarding any age-class substitution or under-allocation. The analysis and discussion should focus on the affect on plan objectives, future wildlife habitat and sustainability.

**NOTE** - As noted in Section 4.3.3 this recommendation was provided in the 2009 IFA report. It is carried forward here as it refers to the next FMP and has not yet been implemented. The text of write-up of Recommendation #3 is slightly abbreviated from the text in the 2009 IFA report, but otherwise reproduces the finding from the previous IFA.

<b>Recommendation # 5</b>
<p><b>Principle 3: Forest Management Planning</b></p> <p><b>Procedure 3.13.1:</b> Review the FMP or contingency plan amendment to assess whether adequate documentation existed for all amendments consistent with the applicable FMPM....</p>
<p><b>Background Information and Summary of Evidence:</b> Part C, Sections 2.7 and 2.8 of the 2009 FMPM outlines the documentation and availability requirements for amendments. The following shortfalls were noted in the amendments for Phase II.</p> <ul style="list-style-type: none"> <li>• Amendment 17 was missing a signed approval page;</li> <li>• Only 7 of 15 amendments were posted to the e-FMP website; and</li> <li>• Although MNRF staff verbally indicated that there was discussion at LCC meetings regarding the committee's discussion and approval of amendment categorization, there was no evidence on the MNRF amendment review and approval sheets, in planning team minutes or in LCC minutes to indicate comments on the amendment classification and MNRF decision were solicited from the LCC.</li> </ul> <p>In addition to the above, the amendment summary maintained by the MNRF does not meet the FMPM requirements of including the amendment number, reason for the amendment, amendment category and approval date. Also, the MNRF amendment summary is not posted on the e-FMP web site, contrary to requirements.</p>
<p><b>Discussion:</b> Although the amendment process is reasonably well managed and documented there were several administration and documentation issues that were not consistent with the 2009 FMPM requirements.</p>
<p><b>Conclusions:</b> The District MNRF needs to improve the manner in which amendments are documented and made available on the e-FMP web site.</p>
<p><b>Recommendation:</b> District MNRF shall ensure that: amendment documentation includes all approval pages, all amendments are posted to the e-FMP website, LCC input into the amendment categorization and approval is documented with the amendment package, and a complete amendment summary is maintained and available on the e-FMP website as per the requirements of the 2009 FMPM.</p>

**Recommendation # 6**

**Principle 5: Information Management Systems**

**Procedure 5.2.1:** Assess the organization’s information management system processes by considering:

- ...control and distribution of documents, both internally and externally;
- availability of a current version of the relevant documents at all locations where activities essential to the effective functioning of the sustainable forest management system are performed;
- Storing copies of all relevant documents in a central location for audit inspection...

**Background Information and Summary of Evidence:** Once AWS approval pages are signed by MNRF they are to be forwarded to the Company, and the MNRF and Company are required to maintain all signed approval pages on file in their offices since these are not part of the digital records. This is documented in the following sections of the 2009 FMPM: Section 2.3 to 2.6, page C8 to C11. Part C for amendments, Section 3.4, page D-17, Part D for AWSs, Section 3.5.1, page D-18, Part D for AWS revisions, and Section 2.1.1, page E-6, Part E for annual reports. The signed approval pages for the 2013-14 AWS, amendment #17, some AWS revisions, and the 2009-10, 2010-11 and 2012-13 annual reports could not be located.

**Discussion:** According to the 2009 FMPM signed approval pages are to remain on file in the office of the MNRF District and the sustainable forest licensee. Although not egregious, absence of these records is not in compliance with FMPM requirements and may lead to issues should appropriate documentation be needed to verify submission and content requirements.

**Conclusions:** The MNRF and company should comply with the FMPM requirements

**Recommendation:** The MNRF District and the Company shall ensure that all signed approval pages for relevant planning documents are kept on file in their respective offices.

**Recommendation # 7**

This recommendation falls within the purview provided by the IFAPP which permits auditors to develop recommendations related to forest management even though no non-conformance with law or policy has been observed.

**Background Information and Summary of Evidence:** During the audit period, the actual harvest declined precipitously from a level that had averaged 5,100 ha/year between 1999 and 2009 to roughly 40% of that during the audit period. At this time, a strong argument could be made that the harvest level may not fully return to those former levels, which means that wood could be available on the forest for other existing and potentially new industry participants who might be interested in using it.

One of the key challenges to estimating future wood use levels is the impact of the re-started Ear Falls mill, which currently remains at one shift with plans to add a second shift before long, depending on markets. The Ear Falls mill used 136,000 m<sup>3</sup> of SPF from the Trout Lake Forest in fiscal 2014-15, and it is on track to exceed that by some 10-20% in 2015-16 based on its current operating level. However, even if the harvest for Phase II reaches 75% of planned, only 50% of the planned harvest will have been taken at the end of the ten-year plan period, which is equivalent to leaving more than 5 million m<sup>3</sup> in the woods. This is a significant amount of wood.

One of the core principles of tenure modernization is that consistently unused available timber should be made available to other potential users. Domtar's Business Plan calls for it to actively market unused timber and MNRF, on other forests, has committed to continuously monitor wood utilization and maintain communications with the SFL holder regarding utilization levels and plans for future use of wood from the Forest.

Since 2011, MNRF has begun to produce regular reports showing the amount of timber by species that is considered to be available in the medium term. These Available Wood Reports are prepared on a forest-by-forest basis, and consider:

- Information from FMP's;
- wood supply commitments, recognized uses, and pending offers of wood supply made by the Ministry;
- new or proposed policy direction; and
- recommended actions identified in an IFA.

As of May 2015 on the Trout Lake Forest, almost no merchantable wood is considered to be available except minor amounts of birch and poplar. The projected demand for SPF exceeds the planned 10 year supply by some 5%, due in part to reductions in the Phase II planned harvest volume, as discussed in section 4.3.3.

**Discussion:** The Ontario forest industry has gradually begun to recover from the 2008-09 recession, however many mills have permanently closed or reduced their capacity. Domtar's Dryden mill is a case in point, as it ceased operating its two paper machines in 2009 and became strictly a pulp mill. At present, it is difficult to forecast with any certainty how active harvesting will be in the province or on any one forest – the one certainty is that the harvest will not be regaining its pre-2008 levels unless significant new capacity is constructed, which no one is expecting.

In this environment, it is important to be able to offer access to unused wood on short, medium and long-term bases, as opportunities present themselves. Industry has little incentive to support such processes, so it is up to MNRF to drive them. As indicated, the preparation of monthly Available Wood Reports is a fairly new initiative. It is intended to identify wood with medium-term availability. Both MNRF and the industry are on a learning curve regarding how they are being used and could be used. In part, the determination of the wood that is available depends on what is considered to be consistently and sufficiently used, a concept that has been the topic of extensive discussion between industry and MNRF.

For the MNRF, the main question in the determination of availability on the Trout Lake Forest would have been how much wood the Ear Falls mill could be expected to use. The mill was still in start-up mode at the time of the audit and so it is not yet possible to provide a conclusive answer. . Currently, Domtar's and

EACOM's facility business plans indicate that they anticipate utilizing all of the SPF fibre from the Forest, and Weyerhaeuser's business plan says the same regarding utilization of Po and Bw fibre from the forest. Furthermore, MNRF also expects EACOM's Ear Falls facility to use all of the SPF identified in their agreement with Domtar (i.e. 688,000 m<sup>3</sup>/year). While MNRF would not have wanted to jeopardize the re-start of the Ear Falls facility, the result was that over the time, wood was not being used that might have been of interest to other users, with the attendant socio-economic opportunity costs as well as impacts on the implementation of the DCHS that have been discussed throughout this audit report.

**Conclusions:** For all of the effort that MNRF has put into identifying available wood, it has been difficult to deal with situations like the Trout Forest, where a low level of harvest has the potential to increase but that potential has proven to be difficult to realize. MNRF, which will ultimately have to decide what wood is available, except where existing SFL-holders are actively marketing available wood on their own, needs to continue to work with industry to strike the right balance that allows a company leeway for fluctuations in the business and the demand for wood products, while at the same time providing opportunities to make use of existing wood. Based on the evidence reviewed, hindsight suggests that the MNRF has been overly cautious in declaring wood to be available on the Trout Lake Forest during the audit period. A less cautious approach may have better served the province.

**Recommendation:** The Forest Industry Division of MNRF and Domtar shall seek to increase the use of wood from the Trout Lake Forest, including making unused wood available to users who have not been traditional users of wood from the Forest.



## Recommendation # 8

### Principle 4: Plan Assessment and Implementation

**Procedure 4.1.1:** In the conduct of the field audit, examine areas of the FMP that can be assessed in the field and assess whether the FMP was appropriate in the circumstances, Including consideration of ...modelling assumptions ...

### Principle 7: Achievement of Management Objectives and Forest Sustainability

**Procedure 7.2.2:** In the audit report document the following... [evaluate attainment of objectives] and consider progress towards achievement of the selected management alternative/management strategy/LTMD.

**Background Information and Summary of Evidence:** The Trout Lake Forest has historically not achieved the planned harvest level. The percent of area actually harvested compared to that planned was 75% for the 1994 plan and has declined in each successive plan period, to a low of 28% for the most recent five year period. The very low level of achievement during the audit period is due to the closure of most of the regional mills for varying periods of time; the two paper machines at Domtar's Dryden facility were mothballed in 2009 and will not be re-started.

Although the Ear Falls sawmill started up again in July of 2014, it is unlikely that full utilization for the remainder of the FMP period will be achieved as the mill is still 'ramping up' and an area representing approximately 85% of the original Phase I ten-year harvest remains planned for Phase II.

The underachievement of harvest targets is common throughout Ontario's tenured forests (data available in the MNRF 2012 State of the Forests Report and annual reports on forest management), hence MNRF has been actively seeking mechanisms to make unused portions of the harvest more widely available. It is notable that the Trout Lake 2009 planning team set the ten-year planned level of harvest at 71,449 ha, equivalent to 86% of the AHA (i.e. 83,212 ha). Almost all other planning teams in the province set the planned harvest within a percentage point or two of the AHA level. While it is a positive step that the planning team made some movement towards a more realistic harvest, there remains a large difference planned and actual harvest levels, and a larger one between what is theoretically available from the forest (i.e. the AHA) and what was actually harvested.

**Discussion:** This issue of underachieving of planned harvests is relevant for achieving the desired completion of the open caribou blocks on schedule and more broadly for the achievement of FMP objectives related to a variety of operational levels and future forest structure. The implications of continual under-achievement of harvest targets include:

- the full suite of access management plans for the caribou blocks, as described in the FMP, will not be completed as scheduled if blocks are left open;
- forest succession intended to make large blocks of contiguous habitat available for caribou will not occur as planned;
- the planned schedule for harvests into the future will be affected;
- annual work schedules may be inaccurate and of diminished use; and
- future forests will not be as predicted according to the time-lines identified in the FMP and projected in modelling, affecting the attainment of a variety of objectives.

Lower-than-planned harvests will not affect the sustainability of the forest, although there may be negative repercussions if the result is that caribou blocks remain open longer than planned. The broader point is that the Forest Management Plan risks not presenting a reasonable projection of likely forest structure, management activities, and benefits (and impacts). In other words, the plan becomes of decreased utility if it does not portray a realistic level of activity.

**Conclusions:** Presenting an 'optimistic' scenario of the future, as current plans do, is useful in that it identifies a benchmark for planning. However it would also be of considerable utility to project a future forest based on a more realistic expectation of the level of operational activity. This would allow for a

reasonable range of objectives' targets to be identified, for planning to include contingencies based on realistic projections, and to manage expectations of forest users.

**Recommendation:** Corporate MNRF shall explore the value of engaging in a broader modeling exercise during forest management planning that includes scenarios based on maximum possible harvest rates, recent historic rates, and probable future rates to strengthen the basis for identifying objectives and planning for the future forest.

**Recommendation # 9**

**Principle 4: Plan Assessment and Implementation**

**Procedure 4.7.1:** Review and assess in the field the implementation of approved access activities. Including the following.... use management (maintenance, access control, any decommissioning or reclamation provisions).

**Background Information and Summary of Evidence:** Domtar has undertaken road decommissioning in two road networks (Sidace and Eagle Road/Camp Road) which it believes satisfy the requirements of the Road Decommissioning and Transfer Process it has in place with the MNRF. The decommissioning is described in Annual Reports, and has been discussed by Domtar and the MNRF. Upon completion of decommissioning the responsibility for roads is to be transferred from Domtar to the MNRF. In August of 2013 Domtar requested by letter that MNRF acknowledge that the roads are no longer Domtar's responsibility. MNRF has not responded to Domtar's request,

**Discussion:** Domtar believes it has decommissioned the roads as per the FMP's requirements and would like to have formal recognition that the decommissioned roads are no longer its responsibility. MNRF Red Lake District has stated that that it is 'not in a position to accept responsibility for any roads that have been decommissioned'<sup>2</sup> as it has not completed the field work to verify the state of the roads. MNRF's lack of action in this regard is inconsistent with the priority given to road decommissioning in MNRF Northwest Region's Forest Management Planning Directive of 2011, and the FMP.

**Conclusions:** MNRF should complete its inspections of the roads that Domtar has identified as decommissioned and respond to Domtar's request.

**Recommendation:** MNRF shall complete inspections of the roads that Domtar has identified as decommissioned and respond to Domtar's request for formal acknowledgement that the decommissioned roads are no longer the Company's responsibility.

<sup>2</sup> This response provided to the audit team by MNR District in the review of the Draft Report of this IFA

## Recommendation # 10

### Principle 5: System Support

**Procedure 5.1.1:** Review and assess, including through interviews, the organization's commitment to awareness, education and training programs and whether individuals involved in the SFM system are current with legislation, industry and government regulatory requirements and standards.... Include consideration of:

- ...adequacy and comprehensiveness of overall training program (i.e. planned training or ad hoc);
- nature, extent and periodicity of training courses and degree to which competence or knowledge is determined....

**Background Information and Summary of Evidence:** Recommendation #15 of the previous IFA directed Corporate MNRF to look at offering varied compliance inspection training options to allow for timely training of all parties required to have certified inspectors. The recommendation was related to difficulties in retention of certified compliance inspectors during the forest sector downturn due to losses of inspectors by attrition. During the audit term, MNRF Forest Policy Division in Sault Ste. Marie offered FOIP certification courses once every fall for about 40 inspectors via the Provincial Compliance Certification Committee. The certification course has been reduced from 5 to 3 days so it has less of a training function and more of a certification function. On-line training modules and supplemental training opportunities were also provided to help train district and company inspectors. Experienced District MNRF staff would provide mentoring training and utilize a mentoring guide and self study guides. It has been observed that in recent years MNRF and company staff have been arriving to the certification course without adequate training.

The Company used 10 certified inspectors during the audit term however a number are no longer working in that capacity. MNRF used three experienced certified inspectors during the audit period, all of whom are now retired. MNRF now has three inspectors with only one normally completing compliance inspections. MNRF also has five newly-hired staff who will be completing inspections that require certified inspector training and also need to take the FOIP certification course. Most MNRF Districts have lost experienced inspectors and now have new employees that need compliance training and certification. Experienced staff have often retired. Many companies will also need trained and certified compliance inspectors.

In the recent MNRF Transformation Initiative, responsibility for all training was transferred from Forest Policy Division in Sault Ste. Marie to the Regional Operations Division (Integration Branch, Program Coordination Section) in Peterborough. Almost all staff are new and in acting positions. The two former Forest Policy Branch compliance staff have been re assigned to their home positions.

In the new organizational structure the training support to be provided by Regional Operations Division is still being worked out. It appears Districts will be the lead for training and will be required to provide mentoring for new staff using experienced compliance inspectors prior to them taking the FOIP certification. However it is uncertain what role Corporate MNRF would play in providing formal training and what training tools and support would be available to Districts.

**Discussion:** Given that MNRF (and companies) have lost a significant number of experienced compliance inspectors their capacity to provide mentoring training at the district level has been adversely affected. With the number of new hires in entry level positions and a lack of experienced compliance inspectors there is a large current demand for compliance training. Regardless of the present number of compliance inspectors on the forests, there appears to be a current void in training owing to the transformation that could have detrimental impacts on compliance programs in the future.

**Conclusions:** Compliance monitoring is a complex task with a very broad scope. Given that compliance training needs to be a priority, MNRF Districts and companies could use immediate support and assistance in delivering training.

**Recommendation:** Corporate MNRF shall strongly consider retaining an active role in assisting MNRF Districts and companies in training compliance inspectors.

**Recommendation # 11**

**Principle 6: Monitoring**

**Procedure 6.1.1:** Review the MNRF District Compliance Plans in place during the term of the audit to determine how forest management activities were to be monitored for compliance by MNRF....

**Procedure 6.2.1:** Review the Ten Year Compliance Strategy (Plan) and the Annual Plans of Action. Determine whether...

- these plans are appropriate and sufficient to assess program compliance and effectiveness...

**Background Information and Summary of Evidence:** The Company is required to prepare a ten-year compliance strategy and annual compliance plans which are included in FMPs and AWSs. The Company updated the compliance strategy as per the 2010 Compliance Handbook as part of the Phase II FMP. This document serves a useful role in guiding the Company's compliance monitoring program. Annual compliance plans were included in each AWS and do not serve any useful purpose. They only briefly identify general compliance issues, roles and timing of inspections most of which is already outlined in the compliance strategy. MNRF did not prepare Annual Compliance Operating Plans (ACOPs) during the audit period which means there were no formal work targets and priorities for MNRF staff to implement compliance monitoring. Despite this, a good compliance monitoring program was delivered.

The 2014 Compliance Handbook outlines the need for adoption of a new risk management approach to compliance planning, which requires a risk analysis and management strategies to address specific compliance risks. This is not required until 2015 FMPs but there is an option to amend older FMPs to integrate the new approach.

Annual compliance plans are expected to address situations unique to the year's operations. The annual compliance plan requirements are not well defined in the 2010 and 2014 compliance handbooks or 2009 FMPM. More structure and direction would be very beneficial. Annual compliance plans for this forest range from generalized text to a planned schedule of operations that MNRF used to do a risk assessment. Neither were effective tools for planning inspections and priorities. An up-to-date block status report provided by the company was more accurate in monitoring operations status. The new risk management approach described in the 2014 Compliance Handbook is required for 2014 AWSs where provided for by the approved FMPs, which implies a revised 10 year compliance strategy is in place.

MNRF ACOPs are recommended but not required according to the 2010 and 2014 Forest Compliance Handbooks. MNRF District staff indicated they would be doing some form of ACOPs in future as part of the transformation.

**Discussion:** The Company's annual compliance plan should serve a more useful purpose. Corporate MNRF has adopted a new risk management approach to compliance planning that it has yet to roll out to districts. Corporate MNRF is working on risk assessment products and tools that are helpful in developing the new approach and compliance plans. It would be beneficial if MNRF District, Corporate MNRF and the company worked together to develop the new compliance plans applying the new approach.

**Conclusions:** MNRF is adopting a new approach to compliance planning, and MNRF and company compliance plans should be updated to reflect the new approach.

**Recommendation:** With the support of Corporate MNRF, the MNRF District and the Company shall consider making the appropriate adjustments to the annual compliance plans to adopt the new risk management approach to compliance planning based on risk analysis and management strategies.

**Recommendation # 12**

**Principle 6: Monitoring**

**Criterion 6.3.2:** Assess whether the management unit assessment program (SFL and District) is sufficient and whether it provides the required information to assess progress towards achieving the management strategy.

**Background Information and Summary of Evidence:** District MNRF met their silvicultural effectiveness monitoring obligations in terms of the total area assessed. However, multi-year summaries of the information have not been prepared, making it difficult to determine trends or draw conclusions. MNRF had completed surveys both on areas recently declared free-to-grow by Domtar, as well as on areas five years after declaration of free-to-grow status. Presumably the latter was intended to validate successional rules for forest modelling by assessing changes in stand development after free-to-grow. However, there was uncertainty as to how this latter information would be used in support of planning, and different opinions were expressed by those interviewed by the Audit Team regarding the question of how long after free-to-grow these surveys should be conducted.

**Discussion:** Development of appropriate summaries and analyses would help characterize the value of District SEM information for i) calibrating the interpretation of large-scale imagery, and validating free-to-grow assessments conducted by the Company, ii) determining trends to provide information for revising SGRs in future FMPs; and iii) provide guidance for evaluating successional rules for managed stands in forest modelling. The District should collate this information annually for internal use, ease of access, and to provide a District perspective to Regional analysis.

**Conclusions:** The District SEM information collected during the audit period would be of greater value if it were collated and summarized. Also, future surveys should be designed to provide information to address specific information needs related to planning, and there should be a clear understanding of how this will be accomplished.

**Recommendation:** MNRF shall collate and summarize SEM survey information related to free-to-grow assessments conducted both before and during the audit periods so that its value in supporting future planning requirements is optimized.

**Recommendation # 13**

**Principle 6: Monitoring**

**Criterion 6.3.2:** Assess whether the management unit assessment program (SFL and District) is sufficient and whether it provides the required information to assess progress towards achieving the management strategy.

**Background Information and Summary of Evidence:** The free-growing well-spaced methodology was originally developed for conifer plantations and does not address the assessment of hardwood forest units or mixed forest units with a hardwood component very well. The MNRF is aware of these limitations of the free-growing well-spaced methodology. District and Regional MNRF staff realized the limitations of the method in these situations and implemented several measures to assess areas with hardwood components. In some cases this involved using extensive survey methods which are less statistically defensible.

A review of silvicultural policy for Ontario (including the provincial SEM program) has been ongoing since 2012 and is moving through review and approval stages. In implementing the revised silviculture policy direction, assessment methods and corresponding standards will need to be addressed. Standards for validating assessment methods based on imagery are also needed. MNRF has indicated that these and other issues will be addressed through the implementation stages of the revised silvicultural policy once it is approved.

**Discussion:** There has been little specific direction provided to the Districts from corporate MNRF regarding how to address the issues described above. MNRF obligations regarding silvicultural effectiveness monitoring remain, and information will continue to be collected at the District level. The concern is that given the known limitations associated with existing methods, and given that there have been a number of recent staff changes at the District level, additional support to the District is needed to ensure that an appropriate SEM program is planned for and implemented.

**Conclusions:** The MNRF District requires technical support and appropriate direction to ensure that MNRF obligations regarding the implementation of a SEM program for the Trout Lake Forest are met.

**Recommendation:** Until appropriate standards, field methods and corresponding technical specifications for silvicultural effectiveness monitoring are developed, Corporate MNRF shall provide support to Red Lake District to ensure that an appropriate program for silvicultural effectiveness monitoring is implemented for the Trout Lake Forest.

## APPENDIX 2 – ACHIEVEMENT OF FMP MANAGEMENT OBJECTIVES

### Achievement to date of 2009 Trout Lake Forest FMP Objectives and Targets

Objective and Targets	Achievement	Explanation/Comments
<p><b>Objective 1:</b> Emulate Natural Disturbance Patterns</p> <p><b>Indicator:</b> Landscape Pattern</p> <p><b>Desired Level:</b> Landscape disturbances consistent with the frequency distribution by size class of the natural template (Table FMP-12)</p> <p><b>Target Level:</b> Movement towards disturbance size class and frequency distribution reflective of the natural template over the plan period (2009-2019)</p>	<p>The Trend Analysis reports:  <i>“The landscape pattern analysis including harvest allocation completed during the 2009 FMP showed that the desired level in respect to the natural disturbance pattern could not be achieved for 7 size classes within the 10 year time period of this plan. The landscape pattern for harvest is not changed from the FMP preparation, therefore it can be assumed that it is still tracking toward the template frequencies, albeit slowly due to the lack of harvest on the forest. When the 3 fires in 2010 are considered as disturbances that can be added to the disturbance, the forest moves closer to the natural disturbance template”</i></p> <p>Achievement of objective uncertain giving low rate of harvesting, although direction towards target exists.</p>	<p>The audit team agrees with the assessment in the Trend Analysis; progress towards achieving the objective is slower than anticipated due to lack of harvesting, but the desired direction is being achieved.</p>
<p><b>Objective 2:</b> Area by forest type and age</p> <p><b>Indicator:</b> Area by Forest type and age</p> <p><b>Desired level:</b> Maintain total productive forest area within -20%of the minimum and 20%of the maximum of the 100-year projection of the natural benchmark for all forest units except</p>	<p>The areas from the 2009 FMP are all comfortably within the benchmark range, with the exception of the PRW FU (which is discussed below).</p> <p>The movement of area in and out of the SHA unit would seem to be largely dependent on changes in areas already in the SHA FU,</p>	<p>The 2014-15 harvest area by forest unit and the areas declared FTG during the 2012-15 period were not available at the time of the audit. In addition, the 2011 fires burned large areas within the Trout Lake Forest and it is not clear what FU those areas will regenerate back into. These figures were not taken into consideration in the assessment of extent to</p>



Objective and Targets	Achievement	Explanation/Comments																																																				
<p>45% decrease acceptable for hardwood dominated forest unit (HMX) and infinite increase for PRW</p> <table border="1" data-bbox="191 427 747 841"> <thead> <tr> <th>FU</th> <th>2009<sup>1</sup></th> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>BWD</td> <td>2,625</td> <td>1,851 ha</td> <td>3,534</td> </tr> <tr> <td>CMX</td> <td>57,815</td> <td>40,616</td> <td>74,833</td> </tr> <tr> <td>HMX</td> <td>36,100</td> <td>12,961</td> <td>46,059</td> </tr> <tr> <td>OCL</td> <td>3,336</td> <td>2,715</td> <td>4,350</td> </tr> <tr> <td>PJM</td> <td>65,863</td> <td>56,135</td> <td>98,652</td> </tr> <tr> <td>PJP</td> <td>104,545</td> <td>90,177</td> <td>256,645</td> </tr> <tr> <td>POA</td> <td>15,990</td> <td>13,009</td> <td>24,297</td> </tr> <tr> <td>PRW</td> <td>11</td> <td>10</td> <td>infinite</td> </tr> <tr> <td>SBL</td> <td>151,672</td> <td>120,323</td> <td>180,762</td> </tr> <tr> <td>SBM</td> <td>78,712</td> <td>64,563</td> <td>104,049</td> </tr> <tr> <td>SBP</td> <td>210,211</td> <td>98,210</td> <td>261,886</td> </tr> <tr> <td>SHA</td> <td></td> <td>24,375</td> <td>36,563</td> </tr> </tbody> </table> <p><sup>1</sup> – 2009 Areas from Table FMP-4</p> <p><b>Target Levels:</b> Same as desired</p>	FU	2009 <sup>1</sup>	Min	Max	BWD	2,625	1,851 ha	3,534	CMX	57,815	40,616	74,833	HMX	36,100	12,961	46,059	OCL	3,336	2,715	4,350	PJM	65,863	56,135	98,652	PJP	104,545	90,177	256,645	POA	15,990	13,009	24,297	PRW	11	10	infinite	SBL	151,672	120,323	180,762	SBM	78,712	64,563	104,049	SBP	210,211	98,210	261,886	SHA		24,375	36,563	<p>since the SGR's do not have treatments that shift area from another FU into the SHA FU.</p> <p>When the area harvested by FU to the end of the 2013-14 FY is subtracted from the 2009 area, and the amount of area that became FTG is added in (available in a table in the text of the Year 3 AR), all of the FU areas remain within the desired area range.</p> <p>On track to meet target levels</p>	<p>which the company was on track to meet the FU area targets. Of these factors, the fires would seem to have associated with them the highest potential to throw the Company off its course for meeting these targets, however the impacts of the fires on forest composition cannot be assessed for some time.</p>
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<p><b>Objective 2:</b> Area by forest type and age</p> <p><b>Indicator:</b> Area by Forest type and age - PRW</p> <p><b>Desired level:</b> Maintain total productive forest area within -20%of the minimum and 20%of the maximum of the 100-year projection of the natural benchmark for all forest units except 45% decrease acceptable for hardwood dominated forest unit (HMX) and infinite increase for PRW.</p>	<p>At the start of the 2009 FMP, there were 10.2 ha of Crown productive area in the PRW FU. The target over the ten-year plan period is to increase the Crown productive PRW FU area to at least 100 ha by 2019.</p> <p>During the period April 1, 2009 to March 31, 2014, the Company has planted a total of 65.4 ha <del>has been planted</del> that is expected to be assigned to the PRW FU when it becomes FTG. This is based on AR reports of 25 ha planted in 2009, 7.7 ha in 2010, and 18.7 ha in 2012. In 2013, another 15 ha were planted which are expected to move into PRW forest</p>	<p>The key assumption here is that the planted areas will largely move into the PRW FU when they become FTG. However, it appears the company is on track to achieve the objective.</p>																																																				

Objective and Targets	Achievement	Explanation/Comments																										
	unit (which includes white pine) upon FTG assessment. The Company is well on track to meet the target of this part of objective 2.																											
<p><b>Objective 2:</b> Area by forest type and age</p> <p><b>Indicator:</b> Area of rare forest types</p> <p><b>Desired level:</b> Maintain or increase areas of rare forest types at or above plan start levels:</p> <ul style="list-style-type: none"> <li>• Cedar – 267 ha</li> <li>• Black Ash – 11 ha</li> <li>• White Spruce – 884 ha</li> <li>• White Pine – 11 ha</li> </ul> <p><b>Target level:</b> Same as desired</p>	<p>The Company has not allocated any areas within these four rare forest types. The Company has bolstered the white spruce component in the forest by planting 128,000 Sw seedlings during the first five years of the audit period. To increase the area of white spruce forest type, it will be necessary to ensure that these areas mostly remain in the Sw forest type,</p> <p>On track to meet target level.</p>	<p>In Yr 3 AR, Company states this objective could be partially assessed in the AR, and felt that it was on track to meet it, for the same reasons identified by the audit team.</p>																										
<p><b>Objective 2:</b> Area by forest type and age</p> <p><b>Indicator:</b> Area and Distribution of Old Growth</p> <p><b>Desired level:</b> as per table below</p> <table border="1" data-bbox="191 927 699 1341"> <thead> <tr> <th>FU</th> <th>Min % Old Growth</th> </tr> </thead> <tbody> <tr><td>BWD &gt; 90 years</td><td>6%</td></tr> <tr><td>CMX &gt; 120 y</td><td>10</td></tr> <tr><td>HMX &gt; 100 y</td><td>11</td></tr> <tr><td>OCL &gt; 140 y</td><td>10</td></tr> <tr><td>PJM &gt; 110 y</td><td>3</td></tr> <tr><td>PJP &gt; 110 y</td><td>3</td></tr> <tr><td>POA &gt; 100 y</td><td>2</td></tr> <tr><td>PRW &gt; 140 y</td><td>0</td></tr> <tr><td>SBL &gt; 120 y</td><td>10</td></tr> <tr><td>SBM &gt; 120 y</td><td>5</td></tr> <tr><td>SBP &gt; 120 y</td><td>5</td></tr> <tr><td>SHA &gt; 110 y</td><td>4</td></tr> </tbody> </table>	FU	Min % Old Growth	BWD > 90 years	6%	CMX > 120 y	10	HMX > 100 y	11	OCL > 140 y	10	PJM > 110 y	3	PJP > 110 y	3	POA > 100 y	2	PRW > 140 y	0	SBL > 120 y	10	SBM > 120 y	5	SBP > 120 y	5	SHA > 110 y	4	<p>Assessment of targets based on areas of total forest unit and old growth age classes in FMP 7, and the extent of harvesting which occurred during the first Phase of the FMP from AR-7 indicates that all targets are likely to be achieved.</p> <p>Targets likely to be achieved.</p>	<p>Underharvesting such as has taken place over the first FMP period will not threaten achievement of old growth targets.</p>
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Objective and Targets	Achievement	Explanation/Comments										
<p><b>Target Level:</b> same as desired</p> <p><b>Objective 3:</b> Maintain forest function for wildlife</p> <p><b>Indicator:</b> Area of habitat for forest-dependent wildlife species</p> <p><b>Desired Level:</b> maintain preferred habitat at -10% or higher of the minimum of the 100 year habitat projection of the natural benchmark</p> <table border="1" data-bbox="191 581 699 740"> <thead> <tr> <th>Species</th> <th>Desired Min. Preferred Habitat</th> </tr> </thead> <tbody> <tr> <td>Great Gray Owl</td> <td>141,416 ha</td> </tr> <tr> <td>Caribou</td> <td>450,084</td> </tr> <tr> <td>Caribou Winter</td> <td>85,114</td> </tr> </tbody> </table> <p><b>Target level:</b> same as desired</p>	Species	Desired Min. Preferred Habitat	Great Gray Owl	141,416 ha	Caribou	450,084	Caribou Winter	85,114	<p>Targets projected to be achieved, particularly given the lower than planned harvest levels and the fact that these species all prefer old forest habitat.</p> <p>Targets likely to be achieved.</p>	<p>Targets were developed based at least partly on the anticipated harvest levels, so achievement is somewhat axiomatic, particularly given the lower-than planned harvest levels.</p> <p>Targets, for caribou are likely to change significantly with the implementation of the boreal landscape guide and its mandatory indicator-based direction.</p>		
Species	Desired Min. Preferred Habitat											
Great Gray Owl	141,416 ha											
Caribou	450,084											
Caribou Winter	85,114											
<p><b>Objective 3:</b> Maintain forest function for wildlife</p> <p><b>Indicator:</b> Area of habitat for forest-dependent provincially featured species</p> <p><b>Desired Level:</b> maintain preferred habitat at -10% or higher of the minimum of the 100 year habitat projection of the natural benchmark (except -25% for PIWO)</p> <table border="1" data-bbox="191 1109 699 1295"> <thead> <tr> <th>Species</th> <th>Desired Min. Preferred Habitat</th> </tr> </thead> <tbody> <tr> <td>Marten</td> <td>146,668 ha</td> </tr> <tr> <td>Moose foraging</td> <td>107,867</td> </tr> <tr> <td>Moose winter</td> <td>293,650</td> </tr> <tr> <td>Pileated Woodp.</td> <td>8,344</td> </tr> </tbody> </table> <p><b>Target level:</b> same as desired</p>	Species	Desired Min. Preferred Habitat	Marten	146,668 ha	Moose foraging	107,867	Moose winter	293,650	Pileated Woodp.	8,344	<p>Targets projected to be achieved, particularly given the lower than planned harvest levels and the fact that most of these species prefer old forest habitat. The exception to that is moose foraging habitat. As moose prefer disturbed areas for browsing, that target may not be achieved</p> <p>With the exception of moose foraging, the targets are likely to be achieved.</p>	<p>Targets are likely to change significantly with the implementation of the boreal landscape guide.</p>
Species	Desired Min. Preferred Habitat											
Marten	146,668 ha											
Moose foraging	107,867											
Moose winter	293,650											
Pileated Woodp.	8,344											

Objective and Targets	Achievement	Explanation/Comments								
<p><b>Objective 3:</b> Maintain forest function for wildlife</p> <p><b>Indicator:</b> Compliance with prescriptions for the projection of forest habitat related to forest-dependent species-at-risk and locally rare species</p> <p><b>Desired level:</b> 100% compliance with AOC prescriptions annually</p> <p><b>Target level:</b> same as desired</p>	<p>There were no non-compliances associated with habitat for species at risk.</p> <p>Target likely to be achieved</p>	<p>Compliance on the forest was very good, as described in Section 4.6</p>								
<p><b>Objective 3:</b> Maintain forest function for wildlife</p> <p><b>Indicator:</b> Area of habitat for other selected species</p> <p><b>Desired Level:</b> maintain preferred habitat at - 10% or higher of the minimum of the 100 year habitat projection of the natural benchmark.</p> <table border="1" data-bbox="191 886 699 1105"> <thead> <tr> <th data-bbox="191 886 472 979">Species</th> <th data-bbox="472 886 699 979">Desired Min. Preferred Habitat</th> </tr> </thead> <tbody> <tr> <td data-bbox="191 979 472 1011">Black bear foraging</td> <td data-bbox="472 979 699 1011">132,635</td> </tr> <tr> <td data-bbox="191 1011 472 1044">Lynx denning</td> <td data-bbox="472 1011 699 1044">117,037</td> </tr> <tr> <td data-bbox="191 1044 472 1105">Black-backed woodpecker</td> <td data-bbox="472 1044 699 1105">149,570</td> </tr> </tbody> </table> <p><b>Target level:</b> same as desired</p>	Species	Desired Min. Preferred Habitat	Black bear foraging	132,635	Lynx denning	117,037	Black-backed woodpecker	149,570	<p>Targets projected to be achieved, particularly given the lower than planned harvest levels and the fact that these species all prefer old forest habitat.</p> <p>Targets likely to be achieved.</p>	<p>Targets were developed based at least partly on the anticipated harvest levels, so achievement is axiomatic, particularly given the lower-than planned harvest levels.</p> <p>Targets are likely to change significantly with the implementation of the boreal landscape guide.</p>
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Black bear foraging	132,635									
Lynx denning	117,037									
Black-backed woodpecker	149,570									
<p><b>Objective 3:</b> Maintain forest function for wildlife</p> <p><b>Indicator:</b> interior, caribou habitat</p> <p><b>Desired level:</b> 40% of caribou zone in suitable winter/refuge condition (on-line habitat tracts)</p>	<p>MNRF biologists assessed possible changes to state of caribou habitat after the 2011 fires. A detailed assessment is included with the Trend Analysis. Based on a detailed analysis, the conclusion is that <i>“the desired level of 40% of the caribou mosaic being online winter habitat has be met in all terms but the last one</i></p>	<p>Caribou habitat on the forest is likely not at risk, but the existing path to achievement of the objective may well need to be modified should harvest levels continue to be significant less than projected.</p> <p>Large fires actually had little impact on</p>								

<b>Objective and Targets</b>	<b>Achievement</b>	<b>Explanation/Comments</b>
<p><b>Target level:</b> same as desired</p>	<p><i>91-100 years in the future.”</i></p> <p>The audit team notes that the projection of attainment of this objective is predicated on implementation of the mosaic based on current harvest projections. Given the consistent underachievement of harvest levels, this conclusion may need to be constrained by the likely need to modify the mosaic in the future should low levels of harvest continue.</p>	<p>achievement of targets. in addition targets are likely to change significantly with the implementation of the boreal landscape guide.</p>
<p><b>Objective 3:</b> Maintain forest function for wildlife</p> <p><b>Indicator:</b> interior, marten core habitat</p> <p><b>Desired level:</b> 10-20% of capable marten area in suitable conditions in core areas of 3,000 to 5,000 ha containing 60-75% suitable areas</p> <p><b>Target level:</b> 10% of capable marten habitat area in suitable conditions in core areas of greater than 1,000 ha measured over next 60 years</p>	<p>Current (2009) area of cores is 24%. Under planned harvest scenario, projected achievement is 24% for years 1-10, 21% for years 11-30, 14% for years 31-50, and 11% for years 50-60.</p> <p>Target likely to be achieved.</p>	<p>Targets were developed in concert with harvesting schedule, so achievement of targets is expected. Underharvest should not affect achievement of targets assuming that harvesting remains in identified blocks (as marten cores are within caribou blocks to a large extent.</p>
<p><b>Objective 4:</b> Road-based access, land use and recreational opportunities</p> <p><b>Indicator:</b> km of road per km<sup>2</sup> of Crown forest</p> <p><b>Desired level:</b> forest access road density maintained below 0.40 km/km<sup>2</sup> Crown productive area</p> <p><b>Target level:</b> same as desired</p>	<p>Trend Analysis indicates that current road density on the forest is 0.21 km/km<sup>2</sup>. Over the audit period, 52.3 km of primary and branch road was constructed, which led to an increase of 0.056 km/km<sup>2</sup> (not taking into account decommissioning of Sidace road network).</p> <p>On track to achieve target level.</p>	<p>Targets were developed in concert with access management strategy, so achievement of targets is expected.</p>
<p><b>Objective 5:</b> Minimize negative impacts on all</p>	<p>A total of 662 inspections resulted in only 5</p>	<p>Target level will likely be achieved, desired</p>

Objective and Targets	Achievement	Explanation/Comments
<p>resource users and protect all identified values</p> <p><b>Indicator:</b> Non-compliance in forest operations (% of inspections in non-compliance)</p> <p><b>Desired level:</b> 0% of forest inspections reported annually in non-compliance</p> <p><b>Target level:</b> 0% of forest inspections in significant non-compliance (5% in minor or moderate non-compliance)</p>	<p>non-compliances representing less than 1% of all inspections during the audit period. All non-compliances were minor in nature.</p> <p>On track to achieve target level.</p>	<p>level of 0% non-compliance not achieved but likely impossible to achieve.</p>
<p><b>Objective 6:</b> Effective regeneration</p> <p><b>Indicator:</b> % of harvested forest area assessed as FTG</p> <p><b>Desired level:</b> 85% of harvest and salvage area by FU successfully regenerated according to standards in the SGRs.</p> <p><b>Target level:</b> 70% of harvest and salvage are by FU successfully regenerated according to standards in the SGRs</p>	<p>Of the area assessed for free-to-grow status during the audit period, 96.4% of the total area was reported as free-to-grow (regeneration success) and 88.2% of the area was determined to have met the silvicultural standards in the appropriate SGRs (silvicultural success).</p> <p>On track to achieve target level</p>	<p>The desired level for this indicator was achieved during the audit period.</p>
<p><b>Objective 7:</b> Minimize impact on non-timber resource users</p> <p><b>Indicator:</b> Compliance with prescriptions for protection of natural resource features, land uses or values dependent on forest cover.</p> <p><b>Desired Level:</b> 100% compliance annually with AOC prescriptions for the protection of natural resource features, land uses or values dependent on forest cover.</p> <p><b>Target level:</b> 95% compliance.</p>	<p>Compliance performance was very good on the forest, with only 5 non-compliances reported from 662 inspections. However two of the non-compliances were from trespass into an AOC and crossing an un-mapped stream. Therefore, although the desired level of 100% in-compliance is not achieved, the target level of 95% is achieved.</p> <p>On track to achieve target level</p>	<p>Compliance on the forest was very good, as described in Section 4.6</p>

Objective and Targets	Achievement	Explanation/Comments
<p><b>Objective 8:</b> Resource-based commercial businesses</p> <p><b>Indicator:</b> Compliance with prescriptions for the protection of resource-based tourism values</p> <p><b>Desired level:</b> 100% compliance annually with AOC prescriptions for the protection of cabins, recreational areas, tourism lakes and other non-timber resources</p> <p><b>Target level:</b> 98% compliance</p>	<p>In the Year 3 AR, Domtar reports that it has tightened its controls over harvesting as well as renewal operations, in order to reduce the likelihood of operators straying outside of the approved block boundaries.</p> <p>In 2011, there was an instance where a site preparation operator went into a cultural heritage AOC, leading to a reported non-compliance. Neither of the two other non-compliances reported during the audit period were associated with trespasses. With a total of 493 compliance reports submitted during the first five years of the FMP, the company has no reported non-compliance incidents of the type that would trigger a record under this objective.</p> <p>On track to achieve target level</p>	<p>In Yr 3 AR, Company states this objective can be assessed in the AR. Company reports zero non-compliance or non-fulfillment of prescriptions to protect tourism values.</p>
<p><b>Objective 9:</b> Predictable and continuous supply of wood products</p> <p><b>Indicator:</b> Short-term projected available harvest of SPF volume</p> <p><b>Desired level:</b> Term 1 SPF minimum volume of 885,000m<sup>3</sup>/yr</p> <p><b>Target level:</b> same as desired</p>	<p>The 2009 FMP stated that the short-term desired level of SPF supply was based on the current mill demand figure from the MNRF.</p> <p>Table FMP-10 shows that the plan does provide for an allowable harvest of an average of 885,000 m<sup>3</sup>/yr SPF for the ten-year period of the plan.</p> <p>Target level achieved</p>	<p>In Yr 3 AR, Company states this objective can be partially assessed in the AR. As is discussed further under some of the indicators associated with objective 9, after five years, the actual harvest volume was 26.4% of planned for all species, and 27.6% of planned for coniferous species.</p>
<p><b>Objective 9:</b> Predictable and continuous supply of wood products</p> <p><b>Indicator:</b> Long-term projected AHA and volume by species group.</p> <p><b>Desired level:</b> Maintain an average total</p>	<p>The 2009 FMP indicates that the objective and target relates to the available harvest area. Table FMP-9 shows that until year 2109, the projected average annual available harvest area is above 4,700 ha/yr. However, at 2109, the available harvest area dips to an average of 4,348 ha/yr, however this is so far</p>	<p>In Yr 3 AR, Company states this objective can be partially assessed in the AR.</p>

Objective and Targets	Achievement	Explanation/Comments
<p>harvest area above 4,700 ha/yr</p> <p><b>Target level:</b> same as desired</p>	<p>in the future it does not negate the conclusion that the Company has met this part of objective 9, and its associated target.</p> <p>On track to achieve target level</p>	
<p><b>Objective 9:</b> Predictable and continuous supply of wood products</p> <p><b>Indicator:</b> Long-term projected AHA and volume by species group.</p> <p><b>Desired level:</b></p> <ul style="list-style-type: none"> <li>• minimum harvest of SPF: 530,000 m<sup>3</sup>/yr;</li> <li>• min. harvest of Poplar: 30,000 m<sup>3</sup>/yr</li> </ul> <p><b>Target level:</b> Achieve highest long-term volumes by species while maintaining a balance of objective achievement.</p>	<p>Table FMP-9 shows that the AHA declines continuously from a high of 8,321 ha/yr in the first ten year period to 4,348 ha/yr in the 2109 period.</p> <p>Table FMP-10 shows that the SPF and Po harvest levels remain above the minimum levels set by the planning team.</p> <p>On track to achieve target level</p>	<p>These target levels appear to have been set after the LTMD was developed, since they are set at the minimum levels of the indicators</p>
<p><b>Objective 9:</b> Predictable and continuous supply of wood products</p> <p><b>Indicator:</b> Opportunities for volumes of incidental timber for personal (non-commercial uses).</p> <p><b>Desired level:</b> Allocation of one fuelwood collection area near Ear Falls and one near Red Lake (minimum)</p> <p><b>Target level:</b> same as desired</p>	<p>Page 37 of the Phase II FMP says that two areas of standing timber have been designated as fuelwood areas. One block is located close to Ear Falls and the second close to Red Lake. While the target for this indicator was met, it is interested to observe that the sites experienced less use than was anticipated by the Company.</p> <p>On track to achieve target level</p>	<p>In Yr 3 AR, Company states this objective can be partially assessed in the AR. Company felt it met this indicator, as two fuelwood areas were identified in the FMP, although it is not know how heavily they were used.</p>
<p><b>Objective 9:</b> Predictable and continuous supply of wood products</p> <p><b>Indicator:</b> Available, forecast and actual harvest area, by forest unit</p>	<p>The Company has harvested 26.4 % of the planned harvest volume, and of the major species, the one with the highest harvest as a proportion of planned is jack pine (36%).</p>	<p>Significant under-harvest relative to planned levels are a function of global economic slowdown, and are discussed at length in Section 4.4.1</p>



Objective and Targets	Achievement	Explanation/Comments
<p><b>Desired level:</b> 90% of the planned volume by species group actually harvested for each 5-year plan term.</p> <p><b>Target level:</b> minimum 70% of planned harvest volume by species group actually harvested for each 5-year plan term</p>	<p>The Company is not on track to meet this part of the objective for any species.</p>	
<p><b>Objective 9:</b> Predictable and continuous supply of wood products</p> <p><b>Indicator:</b> Percent of forecast volume utilized by mill.</p> <p><b>Desired level:</b> 80% of the harvest volumes projected to be delivered to each mill as forecast in Table FMP 19.</p> <p><b>Target level:</b> 80% of the harvest volumes projected to be delivered to each mill as forecast in Table FMP 19 measured at 2019.</p>	<p>The FMP indicates that this part of the objective is to be assessed at the end of the plan, as it applies over the full ten year term. During the first five years of the FMP, several of the intended destination mills have been closed, including Ear Falls and LKGH Contracting. No wood has gone to any Abitibi mills (now Resolute) either, and recently Domtar and Resolute agreed that Domtar no longer had a commitment to supply timber to Resolute from the Trout Forest.</p> <p>Of the mills that have taken wood, Weyerhaeuser has taken roughly 25% of the planned volume. Ainsworth was not forecast to take any wood in Table FMP-19, despite having a commitment (more recently revoked) – in the event, it took almost 10,000 m<sup>3</sup> in one year and none in other years, representing 11% of the committed amount. It is noted that the Year 3 AR states that Ainsworth received 93% of the planned volume, but it is not clear how the planned level was determined since it is zero in FMP-19.</p> <p>The intention was that SPF would first flow through the Ear Falls sawmill and the chips would come to Dryden, hence there was no</p>	<p>The amount of volume received by Domtar's Dryden mill averaged almost 280,000 m<sup>3</sup>/year during the first five years of the FMP. This represents 68% of the planned average annual five-year volume utilization amount of the Ear Falls mill.</p>

Objective and Targets	Achievement	Explanation/Comments
	<p>planned wood going to Dryden. When the Ear Falls facility was closed (and subsequently sold to another company, EACOM), SPF was chipped in the bush and taken to the Dryden mill directly. Now that Ear Falls has been re-started, sawlogs are moving from the trout to Ear Falls and chips are coming back to Dryden.</p> <p>The Company is not on track to meet this part of the objective for any of the planned recipient mills, although Domtar’s Dryden mill is receiving a substantial volume of timber from the Trout Lake Forest.</p>	
<p><b>Objective 10:</b> Maintenance of productivity</p> <p><b>Indicator:</b> Compliance with management practices that prevent, minimize or mitigate site damage</p> <p><b>Desired level:</b> 100% of inspections related to operational prescriptions to minimize site damage in compliance annually</p> <p><b>Target level:</b> 95% Of inspections related to operational prescriptions to minimize site damage in compliance annually measured at 2019</p>	<p>FOIP reports show that there were two occurrences of non-compliances related to site disturbance out of a total of 662 inspections conducted. These results also demonstrate an improvement since the previous audit period.</p> <p>Although there were a few minor occurrences of rutting on some sites in poorly drained pockets, the audit team did not identify any instances of significant site disturbance during field site visits.</p> <p>On track to achieve target level</p>	<p>The target level for this indicator was achieved during the audit period.</p>
<p><b>Objective 10:</b> Maintenance of productivity</p> <p><b>Indicator:</b> Compliance with prescriptions developed for the protection of water quality and fish habitat</p> <p><b>Desired level:</b> 100% of inspections related to water quality and fish habitat.</p>	<p>Compliance performance was very good on the forest, with only 5 non-compliances reported from 662 inspections. However two of the non-compliances were from trespass into a water-quality AOC and crossing an un-mapped stream.</p> <p>Therefore, although the desired level of 100%</p>	<p>Compliance on the forest was very good, as described in Section 4.6</p>

Objective and Targets	Achievement	Explanation/Comments
<p><b>Target level:</b> 95% of inspections related to water quality and fish habitat annually measured at 2019</p>	<p>in-compliance is not achieved, the target level of 95% is likely to be achieved.</p>	
<p><b>Objective 11:</b> Continuous benefits to society resulting from managed Crown forest</p> <p><b>Indicator:</b> Managed Crown timber available for timber production</p> <p><b>Desired level:</b> Maintain a minimum of 620,000 ha available forest through time</p> <p><b>Target level:</b> same as desired</p>	<p>This objective is related to some parts of objective #2. In 2009, the available harvest area was 730,641 ha, which is well above the minimum level specified as the desirable level. The Company's harvest and road building activities have not significantly changed the available area, and there have been no other factors that have done so since 2009.</p> <p>Hence the Company is on track to meet this objective by the end of the 2009 plan term.</p>	<p>In Yr 3 AR, Company states this objective is to be assessed at plan end.</p>
<p><b>Objective 12:</b> Enhance social and economic benefits for Aboriginal Peoples.</p> <p><b>Indicator:</b> Opportunities for involvement provided to, and involvement of, Aboriginal communities in plan development</p> <p><b>Desired level:</b> 100% of the five affected Aboriginal communities with representation on the planning team</p> <p><b>Target level:</b> 20% of the Aboriginal communities with representation on the planning team</p>	<p>The 2009 FMP lists the membership of the planning team, and reports that a representative of Lac Seul First Nation was a member of the team. Cat Lake First Nation did appoint a representative to the Planning Team for the Phase II FMP, but he attended only one PT meeting.</p> <p>The target for this objective has been met on a technical basis (one First Nation represented out of five that have an interest in the Forest) for the preparation of the 2009 FMP and for Phase II, however the intent was not really achieved since participation on the part of the Aboriginal rep was minimal.</p>	<p>Three of the First Nations communities with an interest in the Trout Lake Forest do not have all-weather road access, making it highly unlikely that they would be able to participate on the planning team even if they had wanted to (which is unknown at this point).</p>
<p><b>Objective 12:</b> Enhance social and economic benefits for Aboriginal Peoples.</p> <p><b>Indicator:</b> Opportunities for Aboriginal</p>	<p>There was essentially no participation in the development of the 2009 FMP by representatives from Pikangikum, New Slate Falls or Wabauskang First Nations.</p>	<p>Unfortunately, because the target is a numerical one based on the number of participating First Nations, the Company has not met it for the 2009 FMP.</p>

Objective and Targets	Achievement	Explanation/Comments
<p>communities to provide input on the Protection of Aboriginal Forest Values</p> <p><b>Desired level:</b> 80% of the affected Aboriginal communities review and provide input to Aboriginal background Information Report and Protection of Identified Aboriginal Values Report.</p> <p><b>Target level:</b> 60% of the affected Aboriginal communities review and provide input to Aboriginal background Information Report and Protection of Identified Aboriginal Values Report.</p>	<p>Community meetings were held at the Cat Lake and Lac Seul communities and a number of meetings were held with individual trappers.</p> <p>The 2009 FMP contains a single Aboriginal Background Information Report (ABIR) that covers all five First Nations with an interest in the Forest, and the ABIR was updated for Phase II, however it is unclear how much input there was from the affected First Nations directly. The interaction with Cat Lake led to the locations of a number of key values being identified and provision was made for these in the FMP.</p> <p>Target not met.</p>	
<p><b>Objective 13:</b> Plan and implement forest management in a manner that protects known Aboriginal Values</p> <p><b>indicator:</b> Compliance with prescriptions for the protection of Aboriginal and Cultural Heritage Values</p> <p><b>Desired level:</b> No incidences of non-compliance with associated AOC prescriptions for the protection of Aboriginal values</p> <p><b>Target level:</b> same as desired</p>	<p>In 2011, there was a non-compliance incident that occurred when a site prep operator strayed into an AOC around a site with High Potential Cultural Heritage Values. Although the investigation concluded that any values present had not been damaged, the non-compliance remained. As a result, the</p> <p>Company will not achieve the target and desired levels associated with this indicator.</p>	<p>The Company has set a target of 100 % compliance for this objective, and there has been one non-compliance. In response, the Company has tightened up its checks of information packages provided to contractors and improved its monitoring of where contractor machines travel. The auditors consider that the Company has essentially met the objective to date, despite the non-compliance that was issued.</p>
<p>Objective 14: LCC effectively participating in development of the management plan.</p> <p>indicator: LCC self-evaluation</p>	<p>The LCC Self evaluation report was completed during Phase I planning and was incorporated into the Phase I supplementary documentation.</p>	<p>Although the overall score from the LCC's self-evaluation was 8.0, the scores for the influence of the LCC was only 6.5, indicating less satisfaction with that aspect of the LCC. However, these scores were based on a</p>

<b>Objective and Targets</b>	<b>Achievement</b>	<b>Explanation/Comments</b>
<p>Desired level: Effectiveness survey results indicate at least 80% effectiveness in the development of the management plan.</p> <p>Target level: Effectiveness survey results indicate at least 60% effectiveness in the development of the management plan.</p>	<p>The average score across all LCC respondents regarding all questions related to the committees activities was 8.0 \10. So the desired and target levels are met.</p>	<p>survey conducted in Phase I. Performance and satisfaction of the committee in Phase II is not appraised by a self-evaluation survey, but the audit team finds the LCC to be an effective and well-run body, as described in Section 4.2.2</p>

### APPENDIX 3 - COMPLIANCE WITH CONTRACTUAL OBLIGATIONS

Licence Condition	Licence Holder Performance
Payment of Forest Renewal Trust, Forestry Futures and Ontario Crown charges	Domtar is fully up-to-date with stumpage payments of all types. As of March 31, 2015, there was no money owed by Domtar to the Forest Renewal Trust, Forestry Futures Trust, or for Ontario Crown charges.
Wood supply commitments, MOAs, sharing arrangements, special conditions	<p>The SFL list four wood supply commitments associated with the Trout Lake Forest. One of these was with L.K.G.H. Contracting for their sawmill in Red Lake – the sawmill was closed throughout the audit period. The second commitment is to Ainsworth Lumber, which received 9,927 m<sup>3</sup> of poplar in the 2010-11 year, but none at any other time. The mill operated throughout the audit period, however the mill is closer to other forests hence the relatively low use of wood from the Trout Lake Forest is not surprising. The working draft of the Available Wood Report (AWR) dated May 22, 2015, indicates that Ainsworth no longer has a commitment on the Trout Lake Forest.</p> <p>The other two commitments listed are joint commitments from the Trout Lake and Wabigoon Forests, both of which are licensed to Domtar. One commitment is to Bowater to supply its Thunder Bay complex and the second to Abitibi Consolidated to supply its mills in Kenora and Fort Frances. The Kenora mill was closed in late 2005 and subsequently demolished. Abitibi and Bowater announced a merger in January 2007, and became AbitibiBowater. The company was forced to seek creditor protection in 2009 and emerged in December 2010, changing its name to Resolute Forest Products in 2011. Resolute closed the Fort Frances mill in 2014.</p> <p>As a result of all of these changes, the two commitments both effectively have the potential to supply the Resolute mill in Thunder Bay. However, when the Dryden mill switched to an exclusive conifer mix, Resolute and Domtar became embroiled in a dispute over who had the rights, and the issue was settled such that Resolute no longer has a commitment for wood from the Trout Lake Forest. During the period of the dispute, Resolute did not receive any timber from the Trout Lake Forest. Because the situation is resolved, no recommendation has been issued.</p> <p>The May 22, 2015 draft AWR, indicates that Weyerhaeuser has a conditional Ministerial wood supply commitment for 50,000 m<sup>3</sup>/yr of poplar and a provincial wood supply competition offer for an additional 7,000 m<sup>3</sup>/yr poplar and 5,000 m<sup>3</sup>/yr of birch. Weyerhaeuser has been a steady user of poplar, averaging about 8,400 m<sup>3</sup> per year during the first five years of the audit period. The AWR also shows that there is a roundwood for chips agreement with the Ear Falls sawmill, with Domtar getting the chips.</p>
Conduct inventories, surveys, tests and studies; provision and collection of information in accordance	The Company has a comprehensive program for silvicultural effectiveness monitoring in place to support its field operations, which includes assessments to determine treatment needs, quality, and effectiveness. Formal and informal surveys conducted include crop tree survival and vegetation condition surveys, which are done the same year as tree planting or seeding treatments, regeneration condition surveys, which are done from 2 to 10 years post-

Licence Condition	Licence Holder Performance
with FIM	<p>establishment, depending on the treatment type, quality assessment programs for site preparation and tree planting, tending needs and tending effectiveness surveys for chemical tending treatments, and finally free-to-grow surveys.</p> <p>Silvicultural operations monitoring by MNRF under the District's SEM program on tree plants, mechanical site preparation, and aerial tending was very good, and was reported through the normal compliance program. No issues of quality or effectiveness were identified by these assessments. The District also met its obligations with regard to validating free-to-grow assessments reported on by Domtar during the audit period.</p> <p>During the 2009-2014 FMP term, the Company completed the assessment of a total area of 15,370 ha for free-to-grow status, of which 14,986 ha has been reported to date in ARs. This effort represented 102.4% of the 5-year forecast area of 15,012 ha. In the year 2009-2010 AR, an additional 13,497 ha of free-to-grow areas that were assessed in the previous FMP term were reported on. In the first year of the Phase II 2014-2019 FMP term, an additional 1,717 ha were assessed.</p> <p>The free-to-grow assessment program is keeping pace with harvesting and renewal activities such that there is effectively no backlog of sites needing assessment. The company does a good job of inventory updating in preparation for forest management planning, including the data management of harvesting, silvicultural and free-to-grow records. During the audit period, digital maps and associated information on silvicultural treatments and free-to-grow assessments were provided to MNRF in accordance with the appropriate FIM standards.</p> <p>Digital imagery to be used in the production of an updated eFRI was acquired by MNRF in the years 2009 and 2010. In 2010, District MNRF and the Company received a complete set of this imagery for use in operational planning. The eFRI is presently undergoing the final processes for quality assurance, and delivery of the completed eFRI is imminent.</p>
Wasteful practices not to be committed	<p>The Company met this requirement of its SFL during the audit period. There were two non-compliances issued during the audit period, both in 2009, that occurred after the Ear Falls mill shutdown. The two non-compliances were 1) 500 m<sup>3</sup> of sawlogs plus treelength left at roadside and 2) 1000 m<sup>3</sup> sawlogs left at roadside. Both of these incidents arose because the market for the wood disappeared with the mill closure. The auditors found that utilization of harvested wood was thorough during the audit period, especially as the majority of the harvest was chipped at roadside during the period.</p>
Natural disturbance and salvage SFL conditions must be followed	<p>Salvage harvesting was undertaken on the Trout Lake Forest during 2011-12, 2012-13, and 2013-14. The salvage areas during these years had been burned by Red Lake Fire 26 in 2010. The salvage harvest volumes in each of the three years were 14,567 m<sup>3</sup>, 6,290 m<sup>3</sup> and 3,588 m<sup>3</sup> – salvage opportunities were limited because the Dryden pulp mill is very sensitive to the presence of char in its furnish, hence only parts of the burn where the trees were killed but not burned so as to leave char could be salvaged.</p>
Protection of the licence	<p>In the year 2009, an outbreak of jack pine budworm caused significant defoliation and some mortality of jack pine,</p>

Licence Condition	Licence Holder Performance
area from pest damage, participation in pest control programs	mostly in the northwest corner of the Trout Lake Forest. The outbreak abated the following year, and no insect pest control was conducted. For the remainder of the audit period insect pest control was neither required nor implemented.
Audit action plan and status report	A District Action Plan was prepared for the recommendations from the 2009 IFA. The final audit report was received by MNRF and the Company on March 22, 2010, the Action Plan was submitted by the District Manager on Oct 22, 2010 and approved on Nov 12, 2010. , The Status Report has Company and District MNRF signatures on it from December 6 and December 7, 2012, respectively, and MNRF Regional approval on December 10, 2012. The SFL requires that the Action Plan be submitted by the District Manager within two months of the receipt of the final IFA report, hence it was five months late. However the Status Report was produced in a more timely manner, being submitted roughly three weeks after it was scheduled for submission (i.e. two years after approval of the Action Plan).
Forest Renewal Trust eligible silviculture work	Auditors reviewed in the field a total of 1,653 ha (32.1%) of eligible silviculture work that was charged to the Forest Renewal Trust for the year 2013-2014. All treatments were in place as reported, and were observed to be of good quality and appropriate to the site conditions. There were no free-to-grow surveys completed in the year 2013-2014.
Forest Renewal Trust forest renewal charge analysis	<p>During the audit period, the Forest Renewal Trust forest renewal charge analyses were completed annually by Domtar and the MNRF District Forester. At various times during the audit period, changes were made to the rates applicable to the hemlock and cedar; spruce jack pine, balsam fir, and larch; and poplar and white birch categories. At the end of the audit period (March 31, 2015), renewal rates for these species categories were at higher levels than in the previous three years.</p> <p>The initial analyses of renewal rates submitted by Domtar to District MNRF did not address all of the requirements of the SFL as specified in Section 12.3. Specifically, the licensee's past reimbursements for eligible silviculture work on the Licence Area, consideration of previous shortfalls in harvest revenues, and consideration of any implications of Domtar's direct payments made outside of the Forest Renewal Trust for eligible silvicultural expenses were not addressed.</p> <p>The District Forester's subsequent reviews of Domtar's submission and Domtar's own analyses did address the missing elements listed above, and also assessed risk based on best estimates of harvest projections and the mill situation at the time. Further consideration of rates based on this are documented in MNRF file memos and in records of discussions between District MNRF/Domtar for each year. Thus all required elements of the licence were ultimately considered in making the final rate recommendations.</p> <p>Through the audit period, the approach to the analysis and review of renewal rates in the Northwest Region has varied considerably from one management unit to another. Beginning in 2015-2016, all renewal charge analyses done for Northwest Region management units were completed by the SFLs with MNRF review. The template provided by MNRF for this purpose included all of the requirements of the SFL (Section 12.3) as a minimum, and</p>



Licence Condition	Licence Holder Performance
	<p>addresses any extra payments made to the Forest Renewal Trust by the company.</p> <p>The renewal rates that were in place during the audit period were insufficient to implement the silviculture program required to address the renewal and maintenance of all eligible silvicultural areas. This is because the actual harvest areas were lower than forecast in the renewal rate analyses due to the rapidly changing mill situation at the time, resulting in reduced revenues from harvesting to the Forest Renewal Trust. The situation was exacerbated by the fact that eligible area had been carried forward from previous years, especially from the years immediately preceding the recession, when harvest levels were higher than during the audit period. To address this issue, Domtar took the approach of paying for eligible silvicultural work directly, outside of the Forest Renewal Trust. Domtar has been tracking these direct payments made for silvicultural expenses separately so that the total cost of silviculture can be accurately determined for planning purposes in the future. However, another option that was available to the company would have been to make payments to the Forest Renewal Trust, as was done in 2009-2010, timed to fund the silvicultural work being done each year, in order to meet licence obligations regarding maintaining the minimum balance and to have a complete and accurate record of silvicultural expenses for the Trout Lake Forest.</p> <p>While the approach of paying directly for silvicultural expenses ensured that the necessary work was completed, it leads to a lack of transparency regarding the reporting of the actual costs of silviculture for the Trout Lake Forest. The silvicultural expenses reported in annual reports (Table AR-4), for example, include only expenses charged to the Forest Renewal Trust and do not include eligible expenses paid for directly by Domtar. However, total areas of silvicultural activities reported in annual reports included all areas treated regardless of payment method.</p> <p>Direct payments for eligible silvicultural work were made by Domtar in the last 5 years of the audit period. The amounts of these payments gradually declined, and the company has indicated that starting in 2015-2016, no further direct payments will be necessary, since all eligible area originating from previous FMP terms has now been treated. The company has also indicated their intent to build up a greater surplus in the Forest Renewal Trust as a hedge against any future market turndowns, as harvest levels and associated revenues permit.</p> <p>No recommendation has been made since the revised rate review process that has been implemented for 2015-2016 will address the issues identified above from this point forward.</p>
Forest Renewal Trust account minimum balance	<p>As stated in the 2009 IFA Report, the minimum balance was not met on March 31, 2009, immediately before this audit period. Poor market conditions following the global recession had resulted in greatly reduced revenues to the Forest Renewal Trust due to the low level of harvesting, but areas eligible for silviculture treatment were carried forward from pre-recession years when the harvest levels on the Trout Lake Forest were higher. Given this situation, it became apparent that there would not be adequate funds in the Forest Renewal Trust to implement the planned silviculture program and ensure the minimum balance at March 21, 2010. Following discussions with</p>

Licence Condition	Licence Holder Performance
	<p>MNRF, Domtar made a direct payment of approximately \$911,000 to the Forest Renewal Trust in July, 2009 to address the March, 2009 shortfall in minimum balance.</p> <p>The minimum balance requirement was met for all but one of the six years of the audit period. The minimum balance requirement was met at March 31, 2011, 2012, and 2013, however at March 2014 there was a shortfall of \$232,523 in the Forest Renewal Trust Account. The reasons for the shortfall were that harvest revenues for January and February 2014 had not yet been processed, but silvicultural expenses from 2013 were paid in the same two months, including charges for seedling purchase, cone collection, and slash pile burning. The account for the Trout Lake Forest was brought above minimum balance in April 2014 once the January and February harvest revenues were credited to the account. At March 2015, the minimum balance requirement was again met.</p> <p>The discussion of renewal rate analysis (see above) describes the reasons for the shortfalls in minimum balance during the audit period, the measures taken by Domtar to address the issue, and the implications of the approach that was taken.</p>
<p>Silviculture standards and assessment program</p>	<p>For the 2008-2012 FMP term, the total renewal effort on the forest was 18,483 ha. This represented 61.1% of the planned five-year effort, based on the FMP forecast area of 30,265 ha. However, the actual area harvested during the 2008-2012 FMP term was only 24.9% of the planned area, thus an area equivalent to the 5-year harvest area was treated, plus an additional 7,418 ha. The additional area consisted of treatments that were implemented on areas carried over from previous FMP terms. At the end of the audit period, all eligible silvicultural areas that were carried forward from previous FMP terms had been treated.</p> <p>The audit team’s review of a sample of silviculture treatments indicated that the silvicultural prescriptions implemented by the Company were appropriate for the site conditions, were generally of good quality, and appeared to have been effective. There are no outstanding silvicultural treatment or survey obligations with respect to Category 2 (i.e., Class B and D) Lands on the Trout Lake Forest.</p> <p>For the above reasons, the auditors believe that the Company has met its contractual obligations with regard to the silvicultural standards and assessment program.</p>
<p>Aboriginal opportunities</p>	<p>The SFL requires the SFL-holder to work co-operatively with local Aboriginal communities and MNRF to identify and implement ways of achieving more equal participation by Aboriginal communities in the benefits provided through forest management planning. There are no First Nations communities located on the Trout Lake Forest, however there are five communities that have expressed an interest in the forest. Three of these are located to the north – Pikangikum, Cat Lake and New Slate Falls – and the other two are located east (Lac Seul) and west (Wabauskang), respectively. Pikangikum is primarily concerned with managing the Whitefeather Forest and the Lac Seul First Nation is focused on the Lac Seul Forest. Considerable Aboriginal harvesting took place on the Forest during the audit period, with Makoose Wood Innovations, holding an overlapping license on the Trout Lake Forest to harvest</p>

Licence Condition	Licence Holder Performance
	<p>hardwood and deliver to Weyerhaeuser in Kenora (26,238 m<sup>3</sup> in 2010-11, 0 in 2011-12 and no other identified harvest subsequently). Makoose did deliver a minor amount of wood from the Trout Forest to its sawmill in Wabauskang (63 m<sup>3</sup> in 2010-11).</p> <p>During the development of the Phase II Planned Operations, the District MNRF made a concerted effort to involve the First Nations mentioned above. Of these, Lac Seul First Nation was perhaps the most active participant, with there being numerous phone calls and e-mails between MNRF and the First Nation reps. An Information Open House to review planned operations was held at Lac Seul on June 11, 2013, with approximately 25 attendees, including the Chief and most of Council. A second open house was held in the community on July 8, 2014.</p> <p>Wabauskang First Nation's involvement was of a similar degree. There was considerable telephone and e-mail traffic, and five meetings during the 32-month long process, including an Open House at the community on January 17, 2013. Cat Lake First Nation had a more moderate level of participation, with there being two in-person meetings. An effort to organize a community meeting was unsuccessful. Cat Lake did name a representative for the Planning Team but he attended only one meeting by teleconference. Little involvement occurred on the part of the Pikangikum or Slate Falls First Nations.</p> <p>The Condition 34 reports mention that each year Domtar encourages their tree plant contractors to approach local Aboriginal communities to work for the summer. In 2010 and 2011, the Condition 34 reports stated that based on estimated figures provided by silvicultural companies involved in planting and tending activities on the Trout and Red Lake Forest, 15-20 Ontario Aboriginal people were employed in silvicultural activities. Additionally Domtar invite First Nation band councils to give them names of interested students for a First Nation summer program that Domtar sponsors through Confederation College.</p> <p>Wabigoon Anishinaabe Gitigewin Corporation, a Wabigoon First Nation community-based tree stock producer, supplied 2 million seedlings for Domtar's reforestation program on the Trout Lake Forest for 2011, 2.2 million seedlings in 2012.</p> <p>Most recently, the Company and MNRF have been working with Wabauskang and Doug Riffel, a community entrepreneur who operates a sawmill in the community. He now has a licence to harvest up 32,000 m<sup>3</sup> of conifer from the Trout Lake Forest plus the incidental hardwood, and MNRF has taken the unusual step of directly issuing him a Forest Resource Licence, rather than an Overlapping Licence under the SFL. MNRF and the Company have both committed to support the establishment of a Lands and Resources office at Wabauskang that is intended to act as the first window for resource-related consultation. The Company has also initiated discussions with Cat Lake, Slate Falls, and Wabauskang regarding the development of an MOU governing the manner of relations. There has been no response yet to this initiative from either Pikangikum or La Seul First Nation.</p> <p>In conclusion, throughout most of the audit period, there seems to have been a modest level of participation on the part of First Nations in the benefits of forest management. In some cases (e.g. Pikangikum), the result reflects a</p>

Licence Condition	Licence Holder Performance
	<p>greater interest on the part of the First Nation in another forest (e.g. Whitefeather Forest). MNRF, with support from Domtar, made a strong effort to secure Aboriginal involvement in the development of the Phase II Operational Plan, with mixed success (reflective more of varying levels of interest on the part of First Nations). The most recent efforts by Domtar and MNRF are very promising, especially with regard to Wabauskang), and as a result, the audit team considers this condition to have been met with respect to First Nations.</p> <p>It is a different story with respect to the Métis. The 2011 Condition 34 report notes that two Northwest Ontario Métis Nation of Ontario (MNO) communities asserted an interest in the Trout Lake Forest, however MNRF has taken the position that the Métis asserted rights are not valid. MNO contests this determination of MNRF's, and also disagrees with MNRF's unilateral approach. <b>Recommendation # 2</b> has been issued.</p>
<p>Preparation of the FMP, AWS and reports; abiding by the FMP, and all requirements of the FMPM &amp; CFSA.</p>	<p>During the audit period the Phase II FMP, AWSs and ARs were all prepared and approved by the required deadlines according to the FMPM. Planning and reporting met the FMPM and CFSA requirements. This contractual obligation was met.</p>
<p>Preparation of compliance plan</p>	<p>The 10 year compliance strategy was updated as part of the Phase II FMP. Annual compliance plans were included in each AWS. This contractual obligation was met.</p>
<p>Internal compliance prevention/ education program</p>	<p>Contractors, overlapping licensees and operators are trained in their required FMP and CFSA obligations using a variety of means including: annual contractor training covering the Company's Environmental Management System (EMS), certification and health and safety. The Company's EMS is designed to ensure compliance with the CFSA and FMP and includes specific work instructions for each task. Recent training was provided for species at risk, pit rehabilitation, wildlife trees and the stream protocol. Detailed harvest pre-work reports document in detail the requirements for each harvest block that are reviewed and signed off prior to block start-up. Bi-annual EMS, certification and other audits help monitor and correct non-conformances with the EMS, FMPM and CFSA. Domtar maintains training records for their staff. Stand and Site guide training was also recently provided. The company and MNRF hold regular compliance meetings, joint field trips and compliance inspections, and organize specialized training as required. Overall a good internal compliance education and prevention program is in place.</p>
<p>Compliance inspections and reporting; compliance with compliance plan</p>	<p>A huge number of compliance reports are being completed by the company (and MNRF) with a very low number of non-compliances. There is a good compliance program in place. The 10 year compliance strategy is being followed. Annual compliance plans are of little value and this addressed in Recommendation # 11. Although Compliance reporting timelines are not always being met a recommendation is not warranted.</p>
<p>SFL forestry operations on mining claims</p>	<p>This audit procedure was determined to be low risk and was not audited.</p>

## Review of Previous Audit's Recommendations

The following table summarizes the recommendations of the previous IFA, which covered the term April 1, 2004 - March 31, 2009.

Recommendation Subject	Addressed to:	Status
1. Update LCC TOR	MNRF District	Completed
2. Consider early plan renewal (Planning)	MNRF District & Company	Partially addressed – see discussion below
3. Analyze and discuss age class substitution in next FMP	Company	Carried forward – see discussion below
4. Amend FMP regarding utilization standards	Company	Not complete – see discussion below
5. Improve performance regarding bypass	Company	Complete
6. Leave sufficient large-diameter trees post-harvest	Company	Complete
7. Develop and implement strategy to address waste amended in FMP	MNRF District & Company	Objective achieved but plan not amended, see discussion below
8. Reduce site disturbance	Company	Complete
9. Reduce loss of productive land to slash and chipper debris	Company	Complete
10. Repair Water Crossing WC6	Company	Complete
11. Improve performance regarding drainage pipes	Company	Complete
12. Rehabilitate gravel pits appropriately	Company	Complete
13. Improve LCC minutes	MNRF District	Complete
14. Resolve compliance interpretation inconsistencies	MNRF District & Company	Complete
15. Improve compliance inspection training	MNRF Corporate	Partially addressed, see discussion below
16. Ensure compliance monitoring requirements are met	Company	Complete
17. Submit FTG records appropriately	Company	Complete
18. Address inaccurate Annual Reports	Company	Intended outcome achieved – see discussion below
19. Ensure that enhanced Annual Reports are completed appropriately	Company	Intended outcome not achieved – see discussion below
20. Report on spatially planned vs. actual caribou harvest block achievements	MNRF Corporate	Not addressed – see discussion below

As the above table shows, most of the recommendations of the previous audit were addressed. The following recommendations merit additional discussion:

**Recommendation #2:** *The audit team recommends that a joint MNRF and Company team be created to consider the following elements in preparation of the Year Three Annual Report to determine if early plan renewal is warranted: i) implications of IEA request conditions; ii) consider the merits of enhanced spatial planning (e.g. PATCHWORKS) to assess if mitigation of conflicting values by adjusting the caribou mosaic is possible; iii) complete a comprehensive road planning exercise consistent with the life cycle of the mosaic and the intent of the caribou guidelines; and, iv) consider enhanced stakeholder engagement”.*

The conclusion of the MNRF's and Company's efforts was that early plan renewal was not required. The IEA requests to which part i) of the recommendation refers relate to requests submitted from LCC members regarding tourism operations; there is overlap between this portion of the recommendation and item iv) which advocated enhanced stakeholder consultation. The ongoing issues that exist between tourism operations are discussed in Section 4.2.1 of this report and the audit team has provided **Recommendation # 1** to address them. The audit team believes that spatial planning (which would figure into items ii and iii in the recommendation) would be an asset to future management of the forest as discussed in Section 4.4.2.

*Recommendation #3: "Domtar must ensure that a more thorough analysis and discussion is provided in the next FMP regarding any age-class substitution or under-allocation. The analysis and discussion should focus on the affect on plan objectives, future wildlife habitat and sustainability".*

As this recommendation refers to the next FMP (i.e. the 2019-2029 FMP), it could not be evaluated by this IFA and so is carried forward to the next audit and is presented here as **Recommendation # 4**.

*Recommendation #4: "Domtar must amend the 2009-2019 FMP to include consistent and clear utilization direction. Furthermore, if a change to utilization standards occurs, the FMP must be amended appropriately."*

This recommendation arose because the 2009 IFA found that in one place, the 2009 FMP said that all merchantable material would be taken from a harvest block while in a second location, the plan stated that incidental species that were not marketable would be left. The recommendation was intended to clarify the direction in the FMP. The Action Plan called for an amendment to be submitted, and the Status Report provided an update that the draft amendment was being reviewed and revised by Domtar and MNRF. However, the amendment was never submitted. The Status Report also noted that after 2009, all conifer was chipped in the bush (this continued until the Ear Falls mill restarted) so that there was no need to change the FMP. It was also felt that it was an unnecessary use of time to make the plan revision, although it seems to the audit team that a considerable amount of work had already been undertaken when the decision was made not to proceed with the amendment.

The audit team concludes that the recommendation was not acted on as it was written, however the Phase II plan write-up is improved and consistent. In addition, utilization during the audit period was good – the only non-compliances associated with utilization occurred in 2009 and were related to the Ear Falls mill closure, and the field inspections of the audit team found no utilization issues.

*Recommendation #7: "Domtar and District MNRF must develop and implement a strategy to address the waste of merchantable wood on the Forest. The strategy must be amended to the 2009-2019 FMP."*

The 2009 auditors observed that there was a considerable amount of merchantable wood left at roadside during the final two years of their audit term, which sparked this recommendation. In 2009, all conifer harvested on the Trout Lake Forest went to in-bush chipping, and it stayed that way until the Ear Falls sawmill re-opened in August

2014. In-bush chipping improved utilization of conifer and so it was decided that a strategy and an amendment were not necessary.

The audit team concludes that the shift to in-bush chipping essentially eliminated the waste problem identified by the 2009 auditors.

*Recommendation # 15: Corporate MNRF must look at offering varied compliance inspection training options to allow for timely training of all parties required to have certified inspectors.*

This recommendation was related to difficulties in retention of certified compliance inspectors during the forest downturn due to losses of certified compliance inspectors due to attrition. During the audit term corporate MNRF offered FOIP certification courses once every fall for about 40 inspectors. The company used 10 certified inspectors during the audit term. MNRF used three certified inspectors who are no longer there and now have three certified inspectors and 5 new staff that likely require certified inspector training and need to take the FOIP certification course. Districts are required to provide mentoring for new staff using experienced compliance inspectors prior to them taking the FOIP certification however there are no formal training plans in place which is addressed by **Recommendation # 10**.

*Recommendation #18: “Domtar Senior Management and District MNRF must determine why annual reports still contain inaccuracies and ensure that future annual reporting is complete, accurate, and understandable.”*

The quality of Annual Reports was high during the audit period, and all were reviewed by MNRF District staff and comments provided to the Company. The number of comments was quite low where records were available, however MNRF does not as a rule keep copies of the review comments. While the desired outcome of the recommendation was achieved, it is noted that the process embodied in the recommendation was not followed, as the Company recognized that it needed to put more attention to the quality of the submissions.

*Recommendation #19: “Domtar and MNRF District must ensure that enhanced Annual Reports meet all of the requirements of the FMPM.”*

This recommendation was triggered by deficiencies associated with the Year 10 AR prepared for the 2003-04 fiscal year. The Action Plan and Status Report focused on ensuring that the Year 5 AR for the 2008-09 fiscal year was complete and met all FMPM requirements. The Status Report states that the draft report was submitted on time (Nov 15, 2009) and reviewed by MNRF staff. Following the revisions made by the Company in response to MNRF’s review comments, the AR was accepted. The problem is that the AR for the last year of an FMP is required to be a Year 10 AR. Line 24 on page E-4 of the 2009 FMPM states that “For the management unit report for the last year of implementation of a forest management plan, the requirements for the Year 10 annual report (Part E Section 4) apply. The text of the 2008 AR states that the AR was prepared according to the 2009 FMPM, and so a Year 10 AR should have been prepared. At this time, there is no value in requiring any revisions.

The Year 3 AR report was the only other enhanced Annual Report product prepared during the audit period and it was found to contain all of the required sections and tables. The analysis and discussion was well-written and thorough.

Recommendation #20: “*Corporate MNRF must consider mechanisms to report spatially on planned vs. actual caribou block harvest achievement*”.

The auditors who undertook the 2009 IFA had in mind that there could be the preparation of planned completion dates for the caribou blocks and then, in the annual reports, an update on harvest progress by caribou block. Moreover, the 2009 auditors were seeking a spatial update. The Provincial Level Action Plan reports that the 2009 FMP and 2009 FIM require annual submission of information that would enable someone to track block completion spatially, should they wish. MNRF noted further that the Year 10 AR includes an assessment of the degree to which landscape pattern targets were achieved. There was no mention of requirements to publish planned milestone dates for open caribou blocks. There was no further information added in the Provincial Status Report.

The recommendation was partially addressed however the notion of providing a forecast of milestone dates for each caribou block and tracking progress in a readily accessible manner was not addressed. This audit team agrees that there is a need for better planning and tracking of progress regarding individual caribou blocks and suggests that Corporate MNRF incorporate this into requirements for forest operations which occur in the caribou zone.



## APPENDIX 4 – AUDIT PROCESS

### Overview

The Crown Forest Sustainability Act (CFSA) directs the Minister of Natural Resources and Forests to conduct a review of each tenure-holder every five years to ensure that the licensee has complied with the terms and conditions of its licence. The Independent Forest Audit (IFA) contributes to this mandate, as well as complying with the direction to the Ministry laid out in the 1994 Class EA decision, subsequently confirmed in the 2003 Declaration Order<sup>3</sup>. Regulation 160/04 under the CFSA prescribes the minimum qualifications required by the audit team and sets out direction related to the timing and conduct of IFA's, the audit process and reporting.

The Independent Forest Audit Process and Protocol (IFAPP) sets out in detail the scope and process requirements of an IFA, and contains approximately 190 individual audit procedures. The IFAPP, which is reviewed and updated annually by the MNR, states that the purpose of the audits is to:

- *“assess to what extent forest management planning activities comply with the Forest Management Planning Manual and the [Crown Forest Sustainability] Act;*
- *assess to what extent forest management planning activities comply with the Act and with the forest management plans, the manuals approved under the Act, and the applicable guides;*
- *assess the effectiveness of forest management activities in meeting the forest management objectives set out in the forest management plan, as measured in relation to the criteria established for the audit;*
- *compare the forest management activities carried out with those that were planned;*
- *assess the effectiveness of any action plans implemented to remedy shortcomings revealed by a previous audit;*
- *review and assess a licensee's compliance with the terms and conditions of the forest resources licence; and*
- *provide a conclusion regarding the sustainability of the Crown forest”*

There are two key types of audit findings – recommendations and best practices. A recommendation is explained in the IFAPP as: *“a high level directional approach to addressing [a] non-conformance. In most cases, recommendations follow from the observation of material non-conformances. In some instances, however, auditors may develop recommendations to address situations where they perceive a critical lack of effectiveness in forest management activities, even though no non-conformance with law or policy has been observed.”*

Recommendations can be directed towards the Company and/or at the appropriate administrative level of the Ministry of Natural Resources (District, Region or Corporate). Auditees must address all recommendations through follow-up actions.

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<sup>3</sup> Declaration Order regarding MNR's Class Environmental Assessment Approval for Forest Management on Crown Lands in Ontario, approved by Order in Council 1389/03 on June 25, 2003.

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

### **Audit Procedures and Sampling**

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

The IFAPP segregates the procedures into three classes based on the risk to forest sustainability should the management aspect covered by the procedure not be achieved:

- “low risk” – procedure is strictly administrative in nature;
- “moderate risk” – procedure has an administrative component but also a bearing on sustainability; and
- “high risk” – procedure is related to sustainable forest management.

For each principle, the audit team is required to sample 20 – 30% of the procedures identified as low risk, 50 – 75% of the procedures considered to be moderate risk and all the procedures identified as high risk. This risk-based approach is intended to reduce the auditor and auditee workload and focus the audit on more significant issues. The table below identifies, for each principle, the number of procedures in each risk class, the number audited, and the proportion that were audited. Because the Trout Lake Forest has been certified to a third-party certification standard, the IFAPP does not require the IFA to assess compliance with Principle #1 (commitment) and the Human Resources part of Principle 5 (System Support).

The audit commenced with the preparation of a detailed audit plan<sup>4</sup>, which described the procedures to be used during the audit and assigned responsibilities to members of the Audit Team. A pre-audit meeting was held in Dryden between the lead auditor, the Company and the MNRF. The primary purposes of the meeting were to familiarize the auditees with the audit process, review the Audit Plan, and make a preliminary selection of sites to inspect in the field during the audit. Subsequently, some adjustments were made to the selected sites due to access issues, to improve the balance of operations and sites, and attain an appropriate proportional representation of sites related to the extent of operations.

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<sup>4</sup> ArborVitae Environmental Services Ltd. Trout Lake Forest Audit Plan, April 17, 2015.

**Table 5.** Audit procedures by principle and risk category.

Procedures Audited, by Risk Category								
Principle	Low Risk			Medium Risk			High Risk	Comments
	Applicable (#)	Selected (#)	% Audited	Applicable (#)	Selected (#)	% Audited	Audited (#) (100% Audited)	
<b>1. Commitment</b>	0	N/A	0	2	N/A	0	0	This principle was not audited because the Forest has been certified to a third-party standard.
<b>2. Public Consultation and Aboriginal Involvement</b>	0	N/A	N/A	7	6	86	2	We opted not to assess whether public notices of inspections were issued, since MNRF usually ensures that this is done properly. All aspects of Aboriginal Involvement were audited.
<b>3. Forest Management Planning</b>	4	2	50	9	5	55	14	Many procedures in this principle were not relevant as they apply only to Phase I FMPs. Low risk procedures regarding the SEV briefing note and the plan contributors' page were not assessed. Medium risk procedures not assessed related to certification, amendment documentation, and changes to AOC's and FOP's made during FMP implementation.
<b>4. Plan Assessment &amp; Implementation</b>	1	0	0	1	1	100	9	All procedures under this principle except for the low risk procedure were audited.
<b>5. System Support</b>	0	N/A	N/A	1	1	100	1	Although it is not required to audit Criterion 5.1 because the forest is certified to a third-party standard, an issue related to training became apparent during the audit and so has been included in this audit.
<b>6. Monitoring</b>	2	1	50	5	4	80	11	One low risk procedure related to submission of FOIP reports was not audited. Medium risk procedures not audited related to internal compliance/education plans and methodology for field collection of indicator data.
<b>7. Achievement of Objectives and Forest Sustainability</b>	0	N/A	N/A	0	N/A	N/A	15	All procedures are high risk and so were addressed.
<b>8. Contractual Obligations</b>	0	N/A	N/A	6	4	67	14	Two medium risk procedures on lands withdrawn from the licence and forestry operations on mining claims were not assessed.
<b>Totals</b>	7	3	43	31	21	66	66	

The focus of the audit was an intensive five-day site visit (June 22-26, 2015), which included document review, interviews and inspections of a variety of sites throughout the Forest where activities had been undertaken during the audit period. There was a reasonable amount of follow up during the preparation of the draft audit report. After the draft report was submitted and reviewed by audit participants, a key conference call was held to go over the comments and provide an opportunity for discussion and debate. The lead auditor also presented the draft findings to the LCC. The draft final report was submitted and was again reviewed, although there were far fewer comments this time. Based on these comments, the final audit report was prepared.

### ***Sampling and Sample Intensity***

The IFAPP requires that at least 10% of each major activity be sampled. **Table 6** shows the total amount of each key activity that took place during the audit period, and the sample size and sampling intensity in the IFA. Most sites were pre-selected during the pre-audit meeting although a small number were added ad hoc during the field visits.

For all entries or area managed in the table, the data are extrapolated to six years, as only five years of information are available, given that the annual report for the final year of the audit has not yet been produced, consistent with the mandated schedule for its production. The audit exceeded the minimum sample size specified in the IFAPP for all activities, with the overall level of sampling ranging from 13.8 to 43.7% for key activities.

The IFAPP directs the auditors to verify in the field at least 10% of the areas reviewed in a specified procedures assessment undertaken by KPMG for the 2013/14 fiscal year. We verified in the field 25.5% of the eligible silvicultural activities undertaken by Domtar and its contractors.

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

**Table 6.** Sampling intensity of the field operations, by key feature investigated.

<b>Feature</b>	<b>Total in Audit Period</b>	<b>Total Sampled</b>	<b>Sample Intensity %</b>
Harvest (ha)	11,893	5,196	43.7
Natural Regeneration (ha)	2,599	412	15.8
Mech Site Preparation (ha)	8,155	2,334	28.6
Planting (ha)	14,102	4,378	31.0
Seeding (ha)	3,064	545	17.8
Aerial Tending (ha)	3,721	514	13.8
Free-to-Grow Assess (ha)	14,986	2,670	17.8
2013/2014 FRT Areas (ha)	5,687	1,653	25.5
AOCs <sup>†</sup>	56	12	21.4

<sup>†</sup> – refers to types of AOCs inspected not actual number of AOCs inspected

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

## **Input to the Audit from Aboriginal Communities**

The audit team contacted all five First Nations identified as being interested in the Forest by letter followed up by phone calls and e-mails. This effort yielded only one substantive response, which was to say that there was no relationship in place between Domtar and the First Nation. This seems like a somewhat exaggerated description of the situation, given that there have been meetings between this First Nation and Domtar, as well as MNRF, on various issues. However, the comment may well reflect the First Nation's perspective that the relationship is not well developed; since the audit period ended, it is noted that Domtar has begun to approach First Nations as the start of an initiative to develop more active relationships.

Métis Nation of Ontario (MNO) was also contacted and stated that Métis do have rights on a large part of the Trout Lake Forest. This was agreed with Ontario in a 2004 harvesting agreement between MNO and the provincial government. This forest overlaps the regional rights-bearing Métis community's traditional territories (including the Treaty 3 boundary, and the community also asserts treaty rights associated with the Treaty 3 Adhesion).

## **Input to the Audit from LCC members**

Six members of the LCC were interviewed either over the phone prior to the week of the site visit, or on site during the audit week. In addition one LCC member participated in the field inspections, and the audit team held a meeting with the committee during the week of site visit in which a variety of topics were discussed. In general comments regarding the quality of forest management and support from the MNRF and company were positive. All interviewed members commented that the LCC was well run with effective leadership.

A number of specific comments were provided, all of which were considered during the course of the audit. Comments included:

- more training should be provided to LCC members;
- representation of local interests is well balanced on the LCC;
- lack of First Nations representation on the LCC is notable, but MNRF makes strong efforts to address this;
- managing for caribou is too dominant a feature in shaping the forest;
- concerns regarding the interests of the tourism industry too often take a back seat to forest management;
- tourism operations have too many privileges;
- road maintenance is not adequate;

- terminology and language used during LCC meetings by MNRF and company staff makes it difficult to participate and follow discussions;
- there is too much regulation in the forest industry;
- levels of silviculture and slash management are good

### **Input through Public Comment**

Two pieces of correspondence were received by the audit team in addition to the comments provided by the LCC. One response raised concerns regarding the management of access in light of tourism operator concerns and another expressed support for the company and MNRF in their management of the forest. Both comments were considered in reviewing forest management during the audit term.

### **Input from MNRF**

The audit team had many discussions and interviews with staff of the MNRF. Topics raised by MNRF staff included:

- Management collaboration between the MNRF and Domtar;
- The low levels of forestry operations over the term of the audit;
- Incorporation of tourism issues into forest management operations;
- Management of caribou and timing issues related to caribou mosaic blocks;
- The solid performance by the LCC over the term of the audit;
- Evolution of AOC prescriptions through the Stand and Site Guide
- Challenges associated with entraining First Nations participation;
- Staff turnover within the MNRF;
- The history of IEA and issue resolution topics;
- Values updates;
- Responsibility for road management following decommissioning
- Commentary on many of the individual issues raised during the audit.

### **Input from Domtar**

Staff from Domtar were very involved in the audit with MNRF as hosts for the audit team during most of the audit week and serving as guides during the field inspections. Over the course many discussions were held with Domtar staff some of the key topics included:

- the state of the forest industry given the economic downturn and ongoing recovery;
- levels of harvesting and silviculture over the audit term;
- silviculture treatments for different forest units;
- rapport with the tourism industry;
- membership on the LCC;
- road management and transfer of responsibility to the MNRF for some roads;
- forest modeling in light of uncertain/reduced levels of operations;
- harvest projections;
- status of previous audit's recommendations;
- management implications of the caribou mosaic,
- updating of values information;
- state of the company's GIS system and;
- Commentary on many of the individual issues raised during the audit.

## APPENDIX 5 – LIST OF ACRONYMS

### Add forest unit abbreviations

ABIR	Aboriginal Background Information Report
ACOP	Annual Compliance Operations Plan
AHA	Allowable Harvest Area
AOC	Area of Concern
AR	Annual Report
AVES	ArborVitae Environmental Services Ltd
AWS	Annual Work Schedule
BWD	Birch Dominated Forest Unit
CCP	Caribou Conservation Plan
CFSA	Crown Forest Sustainability Act
Class EA	Class Environmental Assessment for Timber Management on Crown Lands in Ontario
CMX	Mixed Conifer Forest Unit
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
CRO	Conditions on Regular Operations
DCHS	Dynamic Caribou Habitat Schedule
eFMP	Electronic Forest Management Plan
eFRI	Enhanced Forest Resource Inventory
EMS	Environmental Management System
ENGO	Environmental Non-Government Organization
ESA	Endangered Species Act
FIM	Forest Information Manual
FMP	Forest Management Plan
FOIP	Forest Operations Inspection Program
FOP	Forest Operations Prescription
FRI	Forest Resource Inventory
FTG	Free-to-Grow
FRT	Forest Renewal Trust
ha	hectares
HMX	Hardwood Mixed Forest Unit
km	kilometres
IEA	Individual Environmental Assessment
IFA	Independent Forest Audit
IFAPP	Independent Forest Audit Process and Protocol
LCC	Local Citizens Committee
LTMD	Long-Term Management Direction
m <sup>3</sup>	cubic meters
MOE	Ministry of the Environment
MNO	Métis Nation of Ontario
MNRF	Ontario Ministry of Natural Resources and Forests
MOA	Memorandum of Agreement
OCL	Other Conifer Lowland Forest Unit
OLL	Overlapping Licensee
PCT	Pre-commercial thinning
PJM	Jack Pine Mix Forest Unit

PJP	Jack Pine Productive Forest Unit
POA	Poplar All Forest Unit
PRW	Red Pine Mix Forest Unit
RD	Regional Director
RLDRMAC	Red Lake District Resource Management Advisory Committee
RPF	Registered Professional Forester
SBL	Spruce Lowland Forest Unit
SBP	Spruce Productive Forest Unit
SEM	Silvicultural Effectiveness Monitoring
SFL	Sustainable Forestry Licence
SFMM	Strategic Forest Management Model
SGR	Silvicultural Ground Rules
SHA	Shallow All Forest Unit



## APPENDIX 6 – AUDIT TEAM MEMBERS AND QUALIFICATIONS

Auditor	Role	Responsibilities	Credentials
Mr. Chris Wedeles	Lead Auditor and Wildlife and Roads Auditor	<ul style="list-style-type: none"> <li>• overall audit coordination;</li> <li>• oversee activities of other team members;</li> <li>• liaise with Company &amp; MNRF;</li> <li>• review and inspect Areas of Concern Documentation and Practices;</li> <li>• review and inspect aspects of forest management related to environmental practices and wildlife management integration;</li> <li>• review and inspect access and water crossings</li> </ul>	B.Sc., M.Sc. (Wildlife Biology); 25 years wildlife and forest ecology and experience in Ontario; completed 38 previous independent forest audits; certified as an auditor by the Quality Management Institute.
Dr. Jeremy Williams	Harvest and Wood Supply Auditor	<ul style="list-style-type: none"> <li>• review and inspect harvesting records and practices;</li> <li>• review aspects of forest management related to forest economics and social impacts;</li> <li>• reviews FMP modeling inputs and activities</li> </ul>	B.Sc.F., Ph.D. (Forest Economics), R.P.F. More than 22 years consulting experience in Ontario related to forest management, planning, wood supply modeling, and forest economics; participated in 24 previous IFA assignments; certified as an auditor by the Quality Management Institute.
Mr. Rob Arnup, M.Sc.	Silvicultural Auditor	<ul style="list-style-type: none"> <li>• Review and inspect silvicultural practices and related documentation;</li> <li>• review and inspects selected environmental aspects of forest management.</li> </ul>	B.Sc. Senior forest ecologist with 33 years' experience in silviculture, forest management applications and environmental consulting in boreal Canada and elsewhere. Completed 26 IFAs. .
Mr. Mark Fleming	Planning Auditor	<ul style="list-style-type: none"> <li>• review FMP and related documents to ensure compliance with FMPM and other regulations;</li> <li>• review plan development process for conformity with FMPM;</li> <li>• review compliance monitoring program</li> </ul>	Hon. B.Sc.F., R.P.F. 26 years experience in forest management in Ontario as a consultant, working as a regional MNRF planning specialist, and operations forester with industry. Completed over 42 IFA, FSC, ISO 14001 audits.